Analysis of the Role of Corporate Governance on Listed Firm's Capital Structure: The East African Stock Markets Perspective

Erick Lusekelo Mwambuli

Faculty of Accounting, Banking and Finance

Institute of Finance Management (IFM)

No. 5 Shaaban Robert Street, P.O. BOX 3918

Dar Es Salaam, Tanzania

E-mail: erick.mwambuli@ifm.ac.tz

Abstract

This paper examine the role of corporate governance on listed firm's capital structure decisions in developing economies, East African stock markets. To achieve the objective of this paper, we used a strongly balanced panel dataset of 320 observations (i.e. a sample of 32 non-financial listed firms in East African region from 2006-2015. Measures for capital structure decisions were short term debt ratio (STDR),long term debt ratio (LTDR) and total debt ratio (TDR) as dependent variables and explanatory (independent) variable was corporate governance practices measured by researcher-constructed index consisting of 28 corporate governance provisions ;thus the corporate governance practices index (CGPI). Furthermore, the effects of control variable such as firm size (SIZ), the level of economic development (GDP) and industry dummies were also examined. The panel corrected standard errors (PCSEs) regression model was employed for corporate governance practices and capital structure decisions to analyze the data. Our results indicate a statistically significant negative effect of corporate governance practices on capital structure decisions at 5% significance level. Our paper contributes to both literature and the practical implications, because our paper provides a first insight of the corporate governance practices and its effects on capital structure decisions for the East African regional stock markets. The paper recommends to securities markets regulatory authorities in East African region such as East

African member states securities regulatory authority (EASRA) and their respective countries securities markets regulatory authorities to stimulates new efforts towards better corporate governance practices to listed firms in the regional bloc due to its statistically significant effects on capital structure decisions and future study can be extended after considering external corporate governance mechanisms.

Keywords: Corporate governance practices, Capital structure decisions, Panel data, Developing economies, East African stock markets

1. Introduction

Over the last two decades, the concept of corporate governance has been a hot debate in many scholarly papers that have been published in academic journals due to various reasons. According to Becht et al. (2002), this increase in attention as due to widespread of capitalism in today's world and privatization policies; the growth in firm size; deregulation and the capital market integration and globalization; reform of pension fund and the growth of private savings; shareholder activism; the East Asian crisis 1998 and a series of the USA scandals and corporate failures of late, e.g. WorldCom and Enron. The issue relating to capital structure of the firm has been in discussion since the first work of Modigliani and Miller (1958), then after many other researchers become interested on how the firm managers make this crucial financing decision. For years now, capital structure has been define by different researchers. In general terms, capital structure is just a combination of debt and equity used to finance corporate operations and growth. The idea behind of been interested with capital structure decisions (CSD) is to find a mix financial resources that minimize the firm cost of capital and maximize the shareholders wealth. This task is key responsibilities of firm's management, thus it's upon firm managers to manage and decide the optimal capital structure of the firm. For that case, CSD is very critical decision of a firm and this financing decision might lead to the continuity of the firm's operations if they make an optimal capital structure decisions or the collapse of a firm if it's not an optimal capital structure decision. Morever, corporate governance practices (CGP) are mechanism which will help financiers of the company to be assured for their investment. A sound corporate governance mechanism on the other hand will help a firm to access the capital markets on favorable terms and hence the cost of capital will be reduced. According to Core et al., (1999) firms with poor governance practices will always face more agency problems as managers of those firms will usually obtain private benefits as a result of poor corporate governance structure. The idea under CGP is to minimize the conflicts between principal and agent (Kararti, 2014).

The East African Community (EAC) is a regional intergovernmental organization in East African region with its headquarters in Arusha, Tanzania. The EAC is a unique reginal entity that was Established through Treaty for the establishment of the East African Community that was signed in 1999 and come into force in 2000.The EAC currently comprises of six (6) Partners States (Kenya, Tanzania, Uganda, Rwanda, Burundi and South Sudan) (Note 1) with other potential partner states indicating willingness to join the regional bloc (Note 2).The EAC is the largest regional economic bloc and the largest single markets in Africa with a total population of about 150 million. The EAC the world's fastest reforming region with stable

economic and political environment ;harmonized tariff ; great market access to all regions in Africa, Middle East and Asia and preferential market access to the USA,EU and some other developed countries (Note 3).

In the EAC context, the CGP challenges has been addressed by privatization policy and capital market authorities ,However, in the worldwide context the CGP challenges has been addressed by different organizations including the OECD and CACG which have led to the development of effective corporate governance principles. According to World Bank (2000) report, governance crises caused by factors including the weak legal and regulatory systems, inconsistent accounting and auditing standards, poor banking practices, thin and poorly regulated capital markets, ineffective oversight of the BOD and little regards for the rights of minority shareholders. In recent years, many researchers have been investigating the influence of corporate governance on capital structure of a firm. The increase of these studies relating to corporate governance and firm decisions is not surprising as the days going on and these is due to the following facts; the firms are increases in size (become multinational firms);growing business complexities, bankruptcy and collapse of firms; financial crises (like Asian economic crisis etc.) and frauds and earning management

However, despite the substantial prior empirical evidences on the relationship between corporate governance and capital structure decisions but still it's a researchable and puzzling issue in corporate finance literature and this is due to the following facts. *First,* No study on the effects of corporate governance practices on capital structure decision has focused on EAC context, despite this regional bloc is now become the fastest growing region in Sub Saharan African for the past 10 years (effective from 2005) with an average GDP growth of 6.2 percent on 2015, simply put EAC context interesting and very important. Therefore, leaving significant doubt about the applicability of previous empirical evidences in East African region business environment. *Second*, majority of prior empirical studies were considering the developed economies with very few studies which focused on developing economies, despite those prior studies still there is shortcomings due to the followings facts (i) Developed economies and developing economies differs as business environment is concern so we cannot rely from the developed economies findings and conclusions to conclude about the firm behavior in EAC context, Hove (1986 & 1990) *a*sserted the important role played by political, economic and social systems in corporate decision. (ii) Many studies from other developing economies were utilized small samples (one stock market or industry), few variables on measuring the corporate governance and the capital structure of a firm and considered a very short period of time (less than 10 years). *Third,* Inconclusive (mixed) empirical evidence, however, still the results from prior studies cannot be generalized as the effect of corporate governance practices on capital structure decision is concerned due to mixed results. Other empirical studies found a positive effects of corporate governance of capital structure decisions but other studies found a negative effects and others found no effect at all of corporate governance on capital structure.

In this research, the main objective was to investigate the effects of corporate governance practices on capital structure decisions of listed firms in East African stock markets context. Our results from this study have important implications for managers of listed firms in East

African regional bloc, investors (both private individuals investors and institutional investors), regulatory authorities in the East African regional bloc (Including CMA in Kenya, CMSA in Tanzania, CMA in Uganda, CMA in Rwanda and EASRA), board of directors (BOD) of listed firms in the East African region and debt holders (like Commercial banks).

2. Literature Review

Agency theory (AT) presents agency costs as a key determinant of CS that arises from a divergence of stakeholders' interest. Jensen and Meckling (1976) developed the AT and argue that optimal CS of a firm can be achieved by trading off the agency costs against the benefits of debt. Furthermore, AT predict that firms can choose between debt and equity by trading off agency costs of equity and debt.

According to Jensen and Meckling (1976), AT underlying assumption is the fact that debt financing can be affected by agency costs such as monitoring and bonding expenditures, residual loss and bankruptcy costs.AT assumes that all these costs are derived by conflict of interest, either between firm managers and shareholders or between shareholders and debt holders.

The first agency problem arises when firm managers' stake in the residual claim is smaller than that of shareholders. Under this situation, managers of the firm are expected to be engaging in excessive perquisite consumption in order to increase their wealth at shareholder's expense.AT offers two ways to minimize this problem; first, to motivate managers by increasing the percentage of equity owned by firm managers in the firm in order to align self - managerial interests with shareholders' interest, especially those relating to investment decisions. Second, the use debt financing; the argument of using debt financing is to mitigate the agency problems and reducing the agency costs, and this will be attained in the following two ways; (I) As proposed by Grossman and Hart (1982) that the use of debt increases the risk of bankruptcy. From this additional risk, firms' managers will be motivated to maximize shareholders' interests so as to reduce their employment risk. (II) As proposed by Jensen (1986) that debt financing can be used as a CGP to mitigate such conflicts. This implied that when a firm has a high level of debts on its capital structure then less free cash will be available for managers to control because they are supposed to pay a fixed interest as a result of debt commitment.

Unlike other theories, AT shows that CGP is a key determinant of CSD. Furthermore, Jensen (1986) introduced a key concept that links CGP and CSD. According to his assumptions firm managers will prefer to sub optimal levels of leverage in order to expropriate wealth from shareholders because by having more debt it imposes constraints on their managerial discretion. According to Jiraporn et al (2012) the use of sub-optimal level of leverage by firm managers is resulted from the strength of firm CGP, and this is due to fact that CGP have been designed to minimize agency conflicts. According to AT managers in poor CGP firms will suffer more from agency problems so they will be motivated to employ sub-optimal levels of leverage so as to benefit from free cash flow. It has been suggested that higher levels of leverage can act as a good substitute for weaker governance mechanisms. For this case, leverage and governance quality are inversely related where by firms with poor CGP are

more in need of using high levels of leverage so as to eliminate the agency costs and align firm managers' interests with shareholders' interests.

Moreover, from debt financing the second type of agency problem will arise. This type of agency problem happens when shareholders expropriate wealth from firm debt holders simply by investing in very risky investments (projects) with high expected returns. According to Jensen and Meckling (1976), from this kind of investments diversified shareholders will capture most of the gains and debt holders will borne the costs. In this case, debt holders will need to protect themselves through very restrictive covenants and monitoring devices and by so doing the agency cost of debt will be created (Smith and Warner,1979)**.**

It has been suggested from literature that CGP can reduce the agency costs related to equity and agency cost related to debt, however its impact on equity financing is more direct as compared to its impact on debt financing for the several reasons (Mande et al., 2012). (I) According to Jensen and Meckling (1976) effective CGP can better protect shareholders' interests from opportunistic actions taken by firm managers. (II) According to Ajinkya et al., (2005) CGP reduces the related with providing credible financial information to firm equity holders. (III) According to Chava et al., (2010) debt holders have effective protective devices in order to protect their interest, by so doing their not in need of CGP as much as shareholders. In general speaking, CGP minimize the agency costs to the extent that firms prefers equity financing over debt financing (Mande et al., 2012).

It's widely noted that firms with poor corporate governance practices such as ineffective board structure characteristics, ownership structure and transparency, disclosure and auditing are more in need of adopting high levels of debt so as to mitigate agency costs and align firms managers interests with owners interests, hence the jointly board structure characteristics, ownership structure and transparency, disclosure and auditing had a negative effect on CSD.

H1a: There is a statistically significant negative influence of jointly board structure characteristics, ownership structure and transparency, disclosure and auditing on short term debt.

H1b: There is a statistically significant negative influence of jointly board structure characteristics, ownership structure and transparency, disclosure and auditing on long term debt.

H1c: There is a statistically significant negative influence of jointly board structure characteristics, ownership structure and transparency, disclosure and auditing on total debt.

3. Research Methodology

Our research use all publicly listed firms on East African stock markets during the period of 2006-2015. East African region bloc currently comprises of six (6) Partner States such as Kenya, Tanzania, Uganda, Rwanda, Burundi and South Sudan. We excluded three (3) Partner States such Rwanda, Burundi and South Sudan in our research for several reasons. Rwanda was excluded because in Rwanda there is only one principal stock market (RSE), RSE was

incorporated on 7th October 2005 but was officially launched on January 31st 2011and for this reason the financial and corporate governance data from RSE will not fulfill the requirements of our research time frame (i.e. ten (10) years period) Both Burundi and South Sudan we are also excluded in our research because to date (As at 31st December,2016) there is no any stock/security market in both Burundi and South Sudan .Therefore, the population for our research comprises of three (3) countries only such as Tanzania, Kenya and Uganda and the research used financial and corporate governance data for firms listed in, NSE (Kenya) , DSE (Tanzania) and USE (Uganda) for the whole study period of ten (10) years (i.e. 2006-2015).

3.1 Data Sources

Our research used two (2) types of data: financial data and corporate governance data. Using a content analysis approach, our current research manually extracted both financial and corporate governance data from listed firm's annual reports. The listed firms annual reports were collected from various sources: the main source was OSIRIS database and supplemented with East African stock market's websites and firm's websites. Furthermore, the IMF and World Bank websites were also used to collect macroeconomic data for the EAC.Finally, in our current research we made a critical review of academic literature from financial journals, books and articles to form a foundation of the research.

3.2 Corporate Governance Practices and Capital Structure Decisions Variables Measurements and References

Our research used capital structure decisions (CSD) as dependent variable and the corporate governance practices indices (CGPI) as independent variable while firm size, level of economic development and industry dummies were also considered as control variables on analyzing the effects of corporate governance practices on capital structure decision in East African stock market context. This Subsection discusses variables measurements (proxies) with their respective references.

3.2.1 Dependent Variables

As mentioned earlier, the dependent variable in our research is CSD.

Table 1. Summary of dependent variables

Variable	Indicators	Measurement	Reference
Capital Structure Decision	Short Term Debt Ratio	$\dfrac{Current\ Liabilities}{Total\ Assets}$	(e.g. Mwambuli, 2016a ; Vinasithamy , 2014 ; Bevan and Danbolt , 2002)
	Long Term Debt Ratio	$\dfrac{Non\ Current\ Liabilities}{Total\ Assets}$	(e.g. Mwambuli, 2016a ; Vinasithamy , 2014 ; Bevan and Danbolt ,

			2002)
Total Ratio	Debt	$\dfrac{Total\ Liabilities}{Total\ Assets}$	(e.g. Mwambuli, 2016a ; Vinasithamy , 2014 ; Bevan and Danbolt , 2002)

Source: Researcher (2017)

3.2.2 Independent Variables

As discussed earlier in introduction part, the current research main objective is to examine the effects of corporate governance practices on capital structure decision in the East African stock market. Thus, the independent variable in our current research is the constructed corporate governance practices indices (CGPI) as a measure of corporate governance practices among the listed East African firms.

The current research constructs the corporate governance indices in order to perform its empirical part. The CGPI consists of 28 corporate governance practices that were adopted from the prior study of Black et al., (2006) but with major modifications in a line with the East African code of good CGP, covering three (3) broad topics: (I) Board structure characteristics; (II) Ownership structure and (III) Transparency, disclosure and auditing. Using East African code of good CGP as a data source in line with Black et al., (2006) prior study in constructing the CGP indices ; Some provisions from Black et al., (2006) study were eliminated in order to achieve a very comprehensive CGPI and that fit with East African regional bloc code of good CGP. Thus, our research constructs an appropriate CGPI in order to evaluate the quality of CGP for listed firms in East African stock markets.

Our current research includes 28 provisions under three sections: (I) Board of directors characteristics; (II) Ownership structure and (III) Transparency, disclosure and auditing. This researcher-constructed CGPI was based on a total of 28 provisions (See Table 2. Corporate Governance Practices Index -CGPI) applied to East African stock market listed firms).We choose only 28 provisions because those provisions with their respective indices are highly correlated with capital structure decisions. According to Monda and Giorgino (2013) it's not suggested to choose complex indices with provisions which are not highly correlated with study matter, because it will lead to wrong measures of the quality of firm corporate governance and also while using them will attract firms to adopt a counter-productive corporate governance practices.

Table 2. Corporate Governance Practices Index (CGPI) provisions applied to East African stock market listed firms

Board Structure Characteristics

1. Is the board size between 6 and 9 members?

2. Is the role and functions of the board stated?

3. Are the Chairman of the board and the CEO not the same person?

4. Is there information about independent directors?

5. Is there board meeting attendance?

6. Is outside directors' attendance in meetings?

7. Is there existence of the position of CFO?

8. Do directors representing minority shareholders?

9. Is there biography of the board members?

10. Is changes in the board structure indicated?

Ownership Structure

11. Is there presence of block holders (more than 10%)?

12. Do CEO owns shares?

13. Are directors block holders (director's ownership) other than Chairman and CEO?

14. Is Chairman or CEO block holder?

15. Is there concentration of ownership (top five)?

16. Is there a dividend policy?

17. Is there disclosure of staff benefits other than wages and salaries?

18. Is there disclosure of company secretary in annual report with description of duties and roles?

Transparency, Disclosures and Auditing

19. Does the company have full disclosure of corporate governance practices?

20. Is there disclosure of payments to auditors for consulting and other work?

21. Is there an internal audit committee?
22. Is there board of directors and executive staff member's remuneration?
23. Is there annual report of share ownership?
24. Is there employee ownership?
25. Is there auditor appointment and rotation?
26. Is annual reports through internet?
27. Is there disclosure of other events in the internet?
28. Is there a Chairman's statement?

Source: Researcher (2017)

3.2.3 Control Variables

In line with prior capital structure studies, which found that capital structure decisions is influenced with some firm characteristics and external factors (e.g. macroeconomic indicators) , the current research includes a number of control variables. This is expected to mitigate potential statistical problems related to omitted variables, such as endogeneity problems. These control variables include firm size, level of economic development and industry dummy (See Table 3 Summary of Control Variables). The selection of these control variables in our current research was based on theoretical predictions, prior capital structure studies and the availability of data. The next paragraphs explain in detailed the central theoretical arguments and the extant empirical literature around firm size, level of economic development and industry dummies and its relationship with capital structure decisions respectively

Table 3. Summary of control variables

Variable	Indicators	Measurement	Reference
Control	Firm size	Natural logarithm of total assets	Mwambuli (2016b), Smith et al., (2012), Dewalheyns and Van Hule (2012) and Ebaid (2009))
	Level of economic	*Annual real GDP growth*	Srairi (2015)

development

Industry dummies(Note 4)	DI = "1", If the observation belongs to manufacturing and allied industry and "O" otherwise.	Mwambuli (2017a)
	D2 = "1", If the observation belongs construction and allied industry and "O" otherwise.	
	D3 = "1", If the observation belongs to commercial and services industry and "O" otherwise.	
	D4 = "1", If the observation belongs to agricultural industry and "O" otherwise.	
	D5 = "1", If the observation belongs to energy and petroleum industry and "O" otherwise.	

Source: Researcher (2017)

3.3 Data Analysis and Model Specifications

The financial data and corporate governance data obtained for listed firm on East African stock was analyzed using descriptive and inferential statistics. Descriptive statistics of variables were calculated for the whole period of study (from 2006-2015), then correlation analysis was employed to measure the extent of relationship among variables used in this study and panel multiple regression models to identify the most significant and influential independent variables on dependent variable. The panel methodology was done by using E-VIEWS 8 and STATA 10 statistical packages and our panel dataset comprises of 320 observations.

Model 1. Corporate Governance Practices and Capital Structure Decisions

$$\text{STDR}_{it} = \beta_0 + \beta_1 \text{CGPI} + \sum_{i=1}^{n} (\beta_i \ CONTROLS) + \varepsilon_{it}$$

$$\text{LTDR}_{it} = \beta_0 + \beta_1 \text{CGPI} + \sum_{i=1}^{n} (\beta_i \ CONTROLS) + \varepsilon_{it}$$

$$\text{TDR}_{it} = \beta_0 + \beta_1 \text{CGPI} + \sum_{i=1}^{n} (\beta_i \ CONTROLS) + \varepsilon_{it}$$

Where

$STDR_{it}$ Short term debt ratio of firm i at time t

$LTDR_{it}$ Long term debt ratio of firm i at time t

TDR_{it} Total debt ratio of firm i at time t

β_0 Intercept coefficient

β_1 Coefficient of the concerned independent variable

CGPI   Corporate Governance Practices Index

β_i Coefficient of the control variable

CONTROLS   Control variables for firm size, level of economic development and industry dummies

ε_{it} Error term of firm i at time t

4. Discussion of Results

4.1 Descriptive Analysis

Table 4 presents the descriptive statistics for the dependent variable, independent variable and control variable. It shows that the total debt ratio (TDR) for East African listed firm's ranges from a minimum of 12.2% to a maximum of 205.2%, with an average total debt ratio of 54.2% for the period 2006 to 2015.This indicates that East African listed firms are highly leverage, which is in line with the same results reported by Mwambuli (2016a). The higher average value of the total debt suggests that East African firms depend much on debt financing than equity financing. Furthermore, the long term debt ratio (LTDR) for East African listed firm's ranges from a minimum of 0% to a maximum of 102.6% ,with an average long term debt ratio of 23.3% for the period 2006 to 2015 while the short term debt ratio (STDR) ranges from a minimum of 4.0% to a maximum of 102.6%,with an average short term debt ratio of 30.9% for the period of 2006 to 2015.This indicates that, the corporate debt structure for East African regional bloc listed firms is highly depending on short term financing (like Bank borrowings) than long term financing. Such managerial preference for East African listed firms to depending much on debt financing and especially short term sources of finances might be contributed by several reasons ; (I) Less developed capital markets in the East African region bloc that make firms to depend much from banks and financial institutions rather than capital markets ; (II) East African listed firms with large block holders in their ownership structure, might tend to use debt financing as a corporate governance practice in order to discipline firm managers. However, the standard deviation for total debt ratio, long term debt ratio and short term debt ratio are 31.1%,19.5% and 18.8% respectively, indicating that there is a small variation in the total debt ratio, long term debt ratio and short term debt ratio among the East African regional bloc listed firms.

In addition, Table 4 show the corporate governance practices index (CGPI) ranges from a minimum score of 4 governance practices to a maximum score of 26 governance practices, with an average score of 19 governance practices for the period of 2006 to 2015.This indicates that East African listed firms are at medium level of compliance for corporate governance practices. Moreover, the range of 4 scores to 26 scores of governance practices suggests that our constructed CGPI is adequately selected to reach a sufficiently wide distribution. Finally, the firm size (SIZ) measured as natural logarithm of total assets is 23, this indicates that East African listed firms are large firms in average as measured in terms of total assets.

Table 4. Descriptive statistics

		Mean	Median	Maximum	Minimum	Standard Deviation	Number of Observations
Panel A-Dependent Variables	TDR	0.542	0.509	2.0516	0.122	0.311	320
	LTDR	0.233	0.181	1.026	0.000	0.195	320
	STDR	0.309	0.272	1.025	0.040	0.188	320
Panel B-Independent Variables	CGPI	17.338	19.000	26.000	4.000	4.919	320
Panel C-Control Variable	SIZ	22.536	22.556	25.939	15.431	1.423	320

4.2 Regression Results

Table 5 presents the regression results from the Panel Corrected Standard Errors (PCSEs) for Model 1a-STDR.The results indicates that corporate governance practices index (CGPI) has a statistically significant effect on capital structure decision of East African listed firms as measured by short term debt ratio (STDR) at 5% significance level. The coefficient and p value of the CGPI are -0.010 and 0.002 respectively. This results suggesting that the CGP is negatively related to CSD (short term debt) for East African region bloc listed firms and the results are statistically significant. Our results are consistency with the agency theory (AT) which suggested that the firms with better corporate governance practices will opt a low debt policy in their capital structure. Furthermore, our empirical results indicate a statistically significant effects of firm size (SIZ) and statistically insignificant of annual real gross domestic product (GDP) growth (i.e. control variables) on CSD (short term debt) at 5%

significance level .The coefficients of SIZ and GDP are -0.015 and -0.763 respectively and their p-values are 0.033 and 0.203 for SIZ and GDP respectively. This results suggesting that larger firms in East African regional bloc adopt a low level of short term debt in their capital structure and the reason behind this situation might be due to several reason and one of the major reason is the fact that larger firms may easily obtained long term funds from lenders or issuing equity at a lowest cost due to their good credit ratings, and the annual real GDP growth is negative related to CSD (short term debt) although the results are statistically insignificant. Table 5 also indicates the firm's industrial effect on CSD (short term debt) is statistically significant but the coefficients of industry variable are not reported. Finally, Table 5 reported the prob>chi2 of 0.000 at 5% significance level, suggesting that our model 1a-STDR is statistically significant. Our empirical results are consistent with AT, therefore, we accepted the hypothesis H1a

Table 5. Panel Corrected Standard Errors (PCSEs) model results-model 1a

Model 1a : STDR				
Variable	**Coefficient**	**Std.Error**	**t-statistics**	**Probability**
Intercept	0.902	0.169	5.34	0.000
CGPI	-0.010	0.003	-3.05	0.002
SIZE	-0.015	0.007	-2.13	0.033
GDP	-0.763	0.600	-1.27	0.203
Industry Fixed Effects	Yes			
Number of Observations	320			
R-squared	0.319			
F-statistics	1256.570			
Probability (F-statistics)	0.000			

Source: STATA 10 Analysis of Data

Table 6 presents the regression results from the Panel Corrected Standard Errors (PCSEs) for Model 1b-LTDR.The results indicates that corporate governance practices index (CGPI) has a statistically significant effect on capital structure decision of East African listed firms as measured by long term debt ratio (LTDR) at 5% significance level. The coefficient and p value of the CGPI are -0.008 and 0.001 respectively. This results suggesting that the CGP is

negatively related to CSD (long term debt) for East African region bloc listed firms and the results are statistically significant. Our results are consistency with the agency theory (AT) which suggested that the firms with better corporate governance practices will opt a low debt policy in their capital structure. Furthermore, our empirical results indicate a statistically insignificant effects of both firm size (SIZ) and annual real gross domestic product (GDP) growth (i.e. control variables) on CSD (long term debt) at 5% significance level .The coefficients of SIZ and GDP are +0.015 and -0.291 respectively and their p-values are 0.096 and 0.531 for SIZ and GDP respectively. This results suggesting that size of firms in East African regional bloc is positively related to CSD (long term debt) although its effects is statistically insignificant and the country annual real GDP growth is negatively related with CSD (long term debt) but its effects is also statistically insignificant. Table 6 also indicates the firm's industrial effect on CSD (long term debt) is statistically significant but the coefficients of industry variable are not reported. Finally, Table 6 reported the prob>chi2 of 0.000 at 5% significance level, suggesting that our model 1b-LTDR is statistically significant. Our empirical results are consistent with AT, therefore, we accepted the hypothesis H1b.

Table 6. Panel Corrected Standard Errors (PCSEs) model results-Model 1b

Model 1b : LTDR

Variable	Coefficient	Std.Error	t-statistics	Probability
Intercept	-0.116	0.193	-0.60	0.547
CGPI	-0.008	0.003	-3.21	0.001
SIZE	0.015	0.009	1.67	0.096
GDP	-0.291	0.464	-0.63	0.531
Industry Fixed Effects	Yes			
Number of Observations	320			
R-squared	0.119			
F-statistics	422.150			
Probability (F-statistics)	0.000			

Source: STATA 10 Analysis of Data

Table 7 presents the regression results from the Panel Corrected Standard Errors (PCSEs) for Model 1c-TDR.The results indicates that corporate governance practices index (CGPI) has a

statistically significant effect on capital structure decision of East African listed firms as measured by total debt ratio (TDR) at 5% significance level. The coefficient and p value of the CGPI are -0.018 and 0.001 respectively. This results suggesting that the CGP is negatively related to CSD (total debt) for East African region bloc listed firms and the results are statistically significant. Our results are consistency with the agency theory (AT) which suggested that the firms with better corporate governance practices will opt a low debt policy in their capital structure. Furthermore, our empirical results indicate a statistically insignificant effects of both firm size (SIZ) and annual real gross domestic product (GDP) growth (i.e. control variables) on CSD (total debt) at 5% significance level .The coefficients of SIZ and GDP are -0.000 and -1.054 respectively and their p-values are 0.998 and 0.260 for SIZ and GDP respectively. This results suggesting that size of firms in East African regional bloc is negatively related to CSD (total debt) although its effects is statistically insignificant and the country annual real GDP growth is negatively related with CSD (total debt) but its effects is also statistically insignificant. Table 7 also indicates the firm's industrial effect on CSD (total debt) is statistically significant but the coefficients of industry variable are not reported. Finally, Table 7 reported the prob>chi2 of 0.000 at 5% significance level, suggesting that our model 1c-TDR is statistically significant. Our empirical results are consistent with AT, therefore, we accepted the hypothesis H1c.

Table 7. Panel Corrected Standard Errors (PCSEs) model results-model 1c

Model 1c : TDR

Variable	Coefficient	Std.Error	t-statistics	Probability
Intercept	0.786	0.339	2.32	0.021
CGPI	-0.018	0.005	-3.45	0.001
SIZE	-0.000	0.015	-0.00	0.998
GDP	-1.054	0.935	-1.13	0.260
Industry Fixed Effects	Yes			
Number of Observations	320			
R-squared	0.220			
F-statistics	1101.070			
Probability (F-statistics)	0.000			

Source: STATA 10 Analysis of Data

4.3 Summary of Research Findings

The summary of research findings are shown in Table 8. Our research interpretations have been made as per theoretical and empirical literature, together with statistical knowledge.

Table 8. Summary of study objectives, hypotheses and our test results

Study Objectives	Hypotheses	Test Results
To establish the jointly effect of board structure, ownership structure and transparency, disclosure and auditing on capital structure decisions of listed firms in East African stock markets.	There is a statistically significant negative influence of jointly board structure, ownership structure and transparency, disclosure and auditing on debt (i.e. short term debt, long term debt and total debt)	Confirmed

Source: Researcher (2017)

5. Conclusions and Recommendations

5.1 Conclusions

The current research reported the statistically significant negatively effects of corporate governance practices (CGP) on capital structure decision (CSD) for listed firms in East African stock markets, thus better-governed East African listed firms tend to employ lower levels of debt in their capital structures compared to poorly-governed listed firms.

Specifically, the hypothesis 1a, we tested the statistically significant negative effects of jointly board structure characteristics, ownership structure and transparency, disclosure and auditing on short term debt ratio (STDR).The results indicated that there is a significant negative effects of CGP on STDR. Our results indicated that an increase in 1 score of the corporate governance practices index (CGPI) will lead to a decrease of 1 percent in the use of short term debt in financing firm's operations, quantitatively, holding all other variables within the regression model constant. Theoretically, this negative relationship between the CGP and STDR is similar with the prediction of agency theory that poorly-governed firms tends to employ a higher levels of debt as a substitute for corporate governance, to ensure firm managers managed the firm for the best interest of shareholders. Our empirical results are consistent with prior admittedly limited empirical studies (e.g. Rijal and Bahadur, 2010; Haque et al., 2011; Jiraporn et al., 2012) on the association between the firm level capital structure and jointly board structure characteristics, ownership structure and transparency, disclosure and auditing. *We accepted H1a.*

An examination of hypothesis 1b, we tested the statistically significant negative effects of jointly board structure characteristics, ownership structure and transparency, disclosure and auditing on long term debt ratio (LTDR).The results indicated that there is a significant negative effect of CGP on LTDR. Our results indicated that an increase in 1 score of the

corporate governance practices index (CGPI) will lead to a decrease of 0.8 percent in the use of long term debt in financing firm's operations, quantitatively, holding all other variables within the regression model constant. Theoretically, this negative relationship between the CGP and LTDR is similar with the prediction of agency theory that poorly-governed firms tends to employ a higher levels of debt as a substitute for corporate governance, to ensure firm managers managed the firm for the best interest of shareholders. Our empirical results are consistent with prior admittedly limited empirical studies (e.g. Rijal and Bahadur, 2010; Haque et al., 2011; Jiraporn et al., 2012) on the association between the firm level capital structure and jointly board structure characteristics, ownership structure and transparency, disclosure and auditing. *We accepted H1b.*

The hypothesis 1c, we tested the statistically significant negative effects of jointly board structure characteristics, ownership structure and transparency, disclosure and auditing on total debt ratio (TDR).The results indicated that there is a significant negative effects of CGP on TDR. Our results indicated that an increase in 1 score of the corporate governance practices index (CGPI) will lead to a decrease of 1.8 percent in the use of total debt in financing firm's operations, quantitatively, holding all other variables within the regression model constant. Theoretically, this negative relationship between the CGP and TDR is similar with the prediction of agency theory that poorly-governed firms tends to employ a higher levels of debt as a substitute for corporate governance, to ensure firm managers managed the firm for the best interest of shareholders. Our empirical results are consistent with prior admittedly limited empirical studies (e.g. Rijal and Bahadur, 2010; Haque et al., 2011; Jiraporn et al., 2012) on the association between the firm level capital structure and jointly board structure characteristics, ownership structure and transparency, disclosure and auditing. *We accepted H1c.*

5.2 Recommendations and Policy Implications

The current research suggested that capital structure decisions are driven by corporate governance practices. The results indicates that firm-level corporate governance practices (such as board structure characteristics, ownership structure and transparency, disclosure and auditing) are statistically significant determinants of capital structure decisions. The empirical results suggest recommendations and policy implications.

The results indicated that listed firms in East African regional bloc with better CGP do not use debt financing as a corporate governance mechanism against agency problem, than poorly governed firms. Furthermore, the CGP has a statistically significant effects on financing decisions, thus better-governed firms tend to use lower levels of debt compared to poorly governed firms. This indicates that listed firms with poor CGP are not attractive to potential investors because of higher cost of capital which has been resulted by the higher agency costs. Therefore listed firms should implement the effective corporate governance structures in order to easily access the equity capital markets by weighing up all the costs involved. The East African regional bloc policy makers (Including CMA in Kenya, CMSA in Tanzania, CMA in Uganda, CMA in Rwanda and EASRA),should encouraged the listed firms in the region to keep improving their corporate governance practices.

5.3 Limitations of the Research

Although the current research empirical results are fairly and important, limitations of the research need to be identified. *First*, our current research used East African listed firms, therefore our empirical results might not be generalized to small and non-listed firms.

Secondly, the development of capital market in the East African regional bloc is not at the same level. Kenya is more advanced compared to other East African Partner States (i.e. Tanzania, Uganda, Rwanda, Burundi and South Sudan), so this might affect the level of corporate governance practices among the listed firms in the East African regional bloc but also the financing behavior of the listed firms among the East African regional bloc.

Despite the limitations identified above, the quality of this current research was not compromised. The current research has made contribution to the existing corporate governance and capital structure literature by filling the gap, especially in developing economies and more specifically to the East African region bloc which has not been investigated.

5.4 Suggestions for Further Research

The current research used firm level corporate governance practices, then further research in this area may also include external corporate governance practices in order to assess the overall effects of corporate governance practices on capital structure decisions, this will help to generalize the effects of CGP on CSD. Furthermore, the future study may include both listed and unlisted firms in the East African regional bloc in order to improve the results of current study. Finally using only quantitative research methodology to perform study analysis may affect the ability to interpret the empirical results, the future study may use both qualitative and quantitative methodologies in order to help to overcome current research problem. The future study may use other sources of information such as reports of analyst in order to complement firms' annual reports, this will help increase the data source

References

Ajinkya, B., Bhojraj, S., & Sengupta, P. (2005). The Association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of Accounting Research Empirical Finance*, *43*(3), 343-346.

Becht, M., Bolton, P., & Rosell, A. (2002). Corporate governance and control. *National Bureau of Economic Research*. Cambridge.

Bevan, A., & Danbolt, J. (2002). Capital structure and its determinants in the United Kingdom – a decomposition analysis. *Applied Financial Economics, 20*(3), 159-170.

Black, B. S., Jang, H., & Kim, W. (2006). Does Corporate Governance Predict Firms' Market Values?. *Journal of Law, Economics and Organization, 22*.

Capital Market and Security Authority in Tanzania. (n.d.). Retrieved 22 November 2015, from http://www.cmsa.go.tz

Capital Market Authority in Kenya. (n.d.). Retrieved 15 December 2015, from http://www.cma.or.ke

Capital Market Authority in Uganda. (n.d.). Retrieved 4 November 2015, from http://www.cmauganda.co.ug

Chava, S., Kumar, P., & Warga, A. (2010). Managerial agency and bond covenants. *The Review of Financial Studies*, *23*(3), 1120-1148.

Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation and firm performance. *Journal of Financial Economics, 51*(3), 371-406.

Dar es Salaam Stock Exchange (DSE) in Tanzania. (n.d.). Retrieved from http://www.dse.co.tz

Dewaelheyns, N., & Van Hulle, C. (2012). Capital structure adjustments in private business group companies. *Applied Financial Economics, 22*(15), 1275-1288.

East African Community (EAC). (n.d.). Retrieved from http://www.eac.int

Ebaid, I. E. (2009). The impact of capital-structure choice on firm performance: Empirical evidence from Egypt. *Journal of Risk Finance, 10*(5), 477-487.

Grossman, S., & Hart, O. (1982). Corporate financial structure and managerial incentives. In McCall, J. (Ed.), *The Economics of Information and Uncertainty*. University of Chicago Press, Chicago, United States of America.

Haque, F., Arun, T., & Kirkpatrick, C. (2004).Corporate governance and capital structure in developing economies: A case study of Bangladesh. *Applied Economics, 43*, 673-681.

Hove, M. (1986). Accounting practices in developing countries: Colonialism's legacy of inappropriate technologies. *International Journal of Accounting Education and Research*, *22*(1), 81-100.

Hove, M. (1990). The Anglo-American influence on international accounting standards: The case of the disclosure standards of the international accounting standards committee. *Research in Third World Accounting*, *1*, 55-66.

International Monetary Fund (IMF). Retrieved from http://www.imf.org

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review, 76*, 323-329.

Jensen, M. C., & Meckling, H. W. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics Review, 3*, 305-360.

Jiraporn, P. C., Kim, J., Kim, Y. S., & Kitsabunnarat, P. (2012). Capital structure and corporate governance quality: Evidence from the institutional shareholder services (ISS). *International Review of Economics and Finance*, *22*(1), 208-221.

Kararti, T. (2014). Impact of ownership structure on leverage of non-financial firms in developing countries. *International Research Journal of York University, 1*(1), 16-46.

Mande, V., Park, Y. K., & Son, M. (2012). Equity or debt financing: Does good corporate governance matter?. *Corporate Governance: An International Review*, *20*(2), 195-211.

Modigliani, F., & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review, 48*, 261-275.

Monda, B., & Giorgino, M. (2013). Corporate governance and shareholder value in listed firms: An empirical analysis in five countries (France, Italy, Japan, UK and USA). DIG, Politecnico di Milano, *MPRA Paper No.45429*.

Mwambuli, E. L. (2015). What determine corporate capital structure in developing economies? Evidence from East African stock markets. *Research Journal of Finance and Accounting*, *6*(12), 221-239.

Mwambuli, E. L. (2016a). Does corporate capital structure influence corporate financial performance in developing economies? Evidence from East African stock markets. *International Finance and Banking, 3*(1), 97-123.

Mwambuli, E. L. (2016b). The effects of board structure characteristics on corporate financial performance in developing economies: Evidence from East African stock markets. *European Journal of Business and Management*, *8*(30), 126-138.

Mwambuli, E. L. (2017a). Does ownership structure matters on capital structure decision in developing economies? Evidence from East African stock markets. *International Journal of Accounting and Financial Reporting*, *7*(1), 160-184.

Nairobi Securities Exchange (NSE) in Kenya. Retrieved from http://www.nse.co.ke

Nivorozhkin, E. (2002). Capital structures in emerging stock markets: The case of Hungary. *The Developing Economies, 40*(2), 166-187.

Osiris DataStream. (n.d.). Retrieved from http://www.bvdinfo.com

Rwanda Stock Exchange (RSE) in Rwanda. (n.d.). Retrieved from http://www.rse.rw

Smith, C. W., & Warner, J. B. (1979). On financial contracting: An analysis of bond covenants. *Journal of Financial Economics*, *7*(2), 117-161.

Smith, D. J., Chen, J. G., & Anderson, H. D (2012). The relationship between capital Structure and product markets: Evidence from New Zealand. *Review of Quantitative Finance and Accounting*, *38*(1), 1-24.

Srairi, S. (2015). Corporate governance disclosure practices and performance of Islamic banks in GCC countries. *Journal of Islamic*, *4*(2), 1-17.

Uganda Securities Exchange (USE) in Uganda. (n.d.). Retrieved from http://www.use.or.ug

Vinasithamby, S. (2014). Determinants of capital structure-A study of listed banks finance

and insurance companies in Colombo stock exchange in Sri Lanka. *International Journal of Economics, Commerce and Management*, *11*, 1-18.

World Bank (WB). (n.d.). Retrieved from http://www.worldbank.org

World Bank. (2000). Corporate governance: A framework for Implementation. *A World Bank Country Study*. Washington.

Notes

Note 1. The EAC was established in 2000 by Kenya, Tanzania and Uganda; Rwanda and Burundi joined in 2007 and later in 2016 South Sudan joined the EAC.

Note 2. The Communique of the 13th Summit of EAC Heads of State itemized receipt of applications from Sudan, South Sudan and Somalia.

Note 3. East African Community Vision 2050 –The Region Vision for Social-Economic Transformation and Development (February, 2016)

Note 4. Accessories and Automobile industry has been considered as base industry.

Copyright Disclaimer