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CAPITAL STRUCTURE DECISIONS, BOARD CHARACTERISTICS AND FINANCIAL SOUNDNESS OF NON-FINANCIAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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Abstract

The study sought to assess capital structure, board characteristics and financial soundness of non-financial firms listed in Nairobi Securities Exchange (NSE). The specific objectives of the study were; to determine the effect of capital structure decisions on financial soundness of non-financial firms listed in Nairobi Securities Exchange, to assess the effect of board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange and to determine the joint effect of capital structure and board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The study was guided by Modigliani and Miller Theory and Stewardship Theory. The study adopted descriptive research design and the population of the study comprised of all non-financial companies listed in the Nairobi Securities Exchange (NSE). The proposed study target population comprise of all the 47 non-financial firms listed in NSE. The study did census survey. The study used secondary data, collected from respective non-financial firms audited annual published financial statement covering a period of 5 years that is 2017 to 2021. The information was codified and entered into a spread sheet and analyzed using SPSS (Statistical Package for Social Sciences) and analyzed using inferential statistical methods. The study concludes that equity structure and financial leverage were the main determinants of the capital structure. The study also concluded that capital structure has positive and insignificant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The study also concludes board characteristics have a positive significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange. This study recommends that government should lower cost associated with borrowing by coming up with various monetary and fiscal policies due to the fact that many companies depends on external sources to fund their operations.

Keywords: *Capital Structure Decisions, Board Characteristics, Financial Soundness, Non-Financial Firms*

INTRODUCTION

The capital structure of a firm is defined as the permanent financing represented by long-term debt, preferred stock and shareholder equity (Bernanke & Gertler, 2015). Capital structure choice has been and will continue to be a very vital management decision of firms. Hence the managers

need to pay much attention on the optimal capital structure failure to which, firms may not be able to economically use the available resources. A firm's capital structure is a set or mix of securities by which it fulfills its financing needs. Capital structure is comprised of debt, equity or a mix of both. As such the capital structure therefore comprises of project finance, dividend policy, issuing of long term debts, buyouts, financing of mergers among others. On the other hand, the optimal capital structure is defined as the mix of debt and equity that is obtained at the minimal cost and yields the maximum shareholders' wealth. The proxy used for calculating capital structure is debt to equity ratio (Arimi, 2010). Evidence indicates that capital structure of a firm is determined by both firm specific variables as well as external macroeconomic variables.
From the financial literature, there are two main sources of financing available for any corporate, mainly: debt financing and equity financing. Therefore in determining the optimal capital structure, the corporate tries to balance the composition of equity vis-a-vis that of debt financing. However, each of these financing options has its own merits and demerits. First looking at debt financing we can site the two main advantages of employing more debt than equity. First, the interest will be deducted from the tax base and thus reduce the real cost of debt; the second, the creditors provide a good return, thus during periods when the company's profits are increasing they do not share with the firm's partners (Flannery & Rangan 2006). However, debt financing suffers from two disadvantages of this mixed debt capital: First, the debt ratio would increase the risk of the firm and the firm's interest burden will rise higher (Kimando & Kihoro, 2012). As a result, the debt capital during good days pushes the partners to the corner, and during bad days would bring them a hefty bill. It's therefore clear that the disadvantages of debt financing are the advantages of equity financing thus the dilemma in choosing the correct capital mix.
A corporate board is delegated with the task of monitoring the performance, and activities of the top management to ensure that latter acts in the best interests of all the shareholders. The relationship between various board characteristics such as the board size, composition and firm performance has been of enormous interest to some researchers for the past decades. Evidence points much to the thinking that the failure of financial services entities to meet stakeholders' expectations is due to poor governance. While studies Luigi and Sorin, (2007) consider a broad variety of matters in corporate management, some process such as exposes, rights of voting, rules among others, this study gives an attention on the several features of the executives including ownership, board expertise, board diligence, size of board and gender about financial soundness of firms under study.
The accounting literature review has shown that board size plays a significant role in the directors' ability to control the managers and to supervise the accounting and financial process (Kisgen, 2006). Indeed, large boards generally constitute effective supervisors of the reporting process for investors and creditors through the improvement of the transparency and reliability level in the financial statements. Thus, board size will promote improving the quality of the accounting information through more conservative methods and less manipulation and adjustment of accounting numbers. The audit committee plays an important role in ensuring greater transparency in the disclosure through the communication of relevant and credible information to the stakeholders. Indeed, the audit committee is responsible for the independent monitoring and control of the accounting process in order to provide reliable and credible information to various users (Klein, 2012). The accounting literature review has shown that the existence of an independent audit committee enhances financial reporting quality and represents a good corporate governance mechanism (Remo, 2018).

Financial soundness refers to the strengths and vulnerabilities of financial systems. It is used to denote how likely a firm could go through financial distress and eventually bankruptcy. Therefore it is imperative to note that financial soundness is the ease with which investors will use to determine the level of performance on their investment portfolio in a firm. It can also be defined as the risk of financial failure arising from lack of liquidity, management problems or volatile earnings. It measures the overall financial health of a firm over a given period of time (Olatunji, 2014).

Financial soundness is concerned with the long term financial viability of the corporation (Moorhouse, 2004). Over the past two decades, the world has with devastating effects witnessed numerous cases of failure among globally reputable corporations. These entities that include: General Motors (2009), Swissair (2001), The CIT Group (2009), Conseco (2002), Pacific Gas & Electric Ltd (2001), Delta Air lines (2005), Parmalat (2003), Enron (2001) and WorldCom (2002) represented the icons of corporate financial stability prior to filing for bankruptcy. Their collapse therefore came with tremendous surprise to researchers, analysts, and industry practitioners. On the local front, Kenya has since independence also experienced many instances of corporate bankruptcy among listed companies. Examples of such firms include: Uchumi Super Markets (2006), KPCU (2009), East African Packaging (2003), Dunlop Kenya, Regent Undervalued Assets Ltd (2001), Lonhro EA Ltd (2001) and Theta Group (2001) just to mention a few (Kalani & Waweru, 2007). This has seen many of these firms being placed under receivership, undertaking financial restructuring or even being delisted from the NSE. The situation has not only resulted to loss of shareholders' wealth but has also significantly eroded investors' confidence in the stock market. This undesirable phenomenon has motivated research aimed at examining the underlying cause of firm failure.

The Nairobi Securities Exchange (NSE) remains as the main securities exchange of Kenya and also the leading securities exchange within the East African countries; this makes it able to offer platforms for the issuance and trading of debt and equity securities. The NSE is a body corporate established under the Companies act (CAP 486) of the Kenyan law and comprise of all licensed stock brokers as the shareholders (Mwangi & Kosimbei, 2014). The capital markets authority of Kenya regulates the exchange and its main function is to provide a stock market where shares are bought and sold (Olang, 2017). The Nairobi Securities Exchange (NSE) focuses on helping the trade clearance arrangement of equities, debt derivatives and other related financial tools. Notably all companies in the securities exchange are mandated to be listed as this enables the investors to buy and sell securities of a company therefore it is connected to the soundness of Securities Exchange (Magara, 2012). The NSE is a market for stocks that is characterized with lowly beginnings and it has eventually grown greatly over the period. There are 47 non-financial companies highlighted in NSE under the following sectors: Commercial and services, agriculture, industrial and linked telecommunication and technology, investment, automobiles and accessories, energy and petroleum sectors.

Statement of the Problem

The value of a firm is maximized when a firm chooses an optimal capital structure that minimizes its weighted average cost of capital. Most of the firms in Kenya however do not have optimal capital structure since a bigger proportion of their activities are financed by equity securities as compared to debt. Between 2018 and 2019, listed firms in Kenya financed their operation with 76% of equity as compared to 24% of debt (NSE 2019). Such a skewed structure can expose them to financial risks which could adversely affect their financial soundness. Capital structure has overtime intrigued business practitioners, researchers and scholars alike and

numerous in-depth studies have been undertaken overtime. The sector has recently faced performance issues as evidenced by the collapse of Uchumi, Mumias Sugar and the struggles being faced by Unga Group and Kenya Airways. Gichuhi (2016) discovered an unsubstantial correlation between the capital structure and financial performance choice of listed Kenyan companies. Mawih (2014) discovered a negative association between capital structure and companies in the construction and allied sector that are listed on the NSE profitability. Ogutu, (2015) confirmed this result when conducting an investigation of capital structure choice and performance. The findings contrasted those of Njeri and Kagiri (2015) found capital structure to have a positive relation to financial performance of listed commercial banks. Mawih (2014) using ordinary least squares concluded that leverage has a substantial negative influence on ROA. From the preceding, it is apparent that previous studies in this area have arrived at contradicting findings. The previous studies have also used various methodologies to achieve their objectives and this might explain the differences in findings. Different contextual backgrounds might also explain the differences. The lack of agreement among prior researchers, both internationally and locally, is motivation enough to pursue additional research in this field. In light of this, it is therefore imperative to undertake an in depth study investigating the capital structure, board characteristics and financial soundness of non-financial firms listed in NSE.

Research Hypotheses

The null hypotheses in this study were;

$H_0$1: There is no effect of capital structure decisions on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

$H_0$2: There is no effect of board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

$H_0$3: There is no joint effect of capital structure and board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange

LITERATURE REVIEW

Theoretical Framework

This study was guided by the Modigliani and Miller Theory, which explores the impact of capital structure on a firm's value, and Stewardship Theory, which emphasizes the role of managers as stewards whose goals align with the interests of shareholders. Together, these theories provide a comprehensive understanding of how financial decisions and management practices influence organizational outcomes.

Modigliani and Miller Theory

The foundation of the current capital structure literature is based on the Modigliani and Miller (1958) in their paper: "The Cost of Capital, Corporation Finance and the Theory of Investment". This formed the capital structure irrelevance proposition that argues under perfect markets, the total value of the firm should not be affected by its capital structure. Modigliani and Miller argued that in the real world there exist taxes; therefore they developed a model which took into account the existence of taxes. This model is known as MM proposition II with corporate taxes. By including the taxes in their model, firms take advantage of debt that has a tax shied and hence a firm taking on debt will be more worthy than an identical firm that is unlevered. The tax shield is realized since an interest payment is a tax deductible expense, unlike the dividend payments which are made after payment of taxes.

The MM irrelevance proposition has been hard to verify. With the presence of debt and the value of a firm both internally controlled and may be affected by other factors such as, asset tangibility, profitability and growth prospects, and the theory's structural test done through the regression of

debt value cannot be established. Modigliani and Miller theory fails to give a realistic explanation on how firms fund their investments but provide a means of finding reasons why financing is of essence and this study sought to assess the capital structure decisions, board characteristics and financial soundness of non-financial firms listed at the Nairobi securities exchange.

Stewardship Theory

Stewardship Theory, developed by Donaldson and Davis (1991) explains the relationships between ownership and management of the firm. This theory arises as an important counterweight to Agency Theory. Though this theory addresses some of the reductionist assumptions of Agency Theory, it suffers from being static as it considers the relationship of principal agent at a single point in time and assumes no learning of individuals as a result of their interactions. Stewardship theory holds that performance variations arise from whether the structural situation in which the executive is located facilitates effective action by the executive. The issue becomes whether or not the organization structure helps the executive to formulate and implement plans for high corporate performance (DeAngelo & Masulis 2010).

Implicit in stewardship theory is the understanding that the owners (principals) are prepared to take risks on how managers will run their business and provide a return on their investment, indicating a level of trust that is absent in agency theory. The study sought to determine how capital structure decisions and board characteristics influence the financial soundness of non-financial firms listed at the Nairobi securities exchange.

Empirical Literature Review

Mutegi (2016) assessed the effects of capital structure on the financial performance of firms listed at the Nairobi securities exchange. Numerous research studies indicates that a firm with high degree of financial leverage seem to have an optimal capital structure and thus it leads to better financial performance while others such as seminar paper of the Modigliani-Miller argues that it has no influence on the firms value. The research period was between 2011 to 2015 and during this research period, numerous companies listed at NSE had embarked on massive debt acquisition to finance their development projects. The study population constituted of all the 47 non-financial firms listed at NSE. Secondary data utilized was obtained from the audited financial statements obtained from the company website and NSE Handbook covering the period from 2011 to 2015. The research findings obtained showed that capital structure has an inverse influence on the financial performance of firms listed at NSE. The findings pointed out that, financial performance decreases with the increase in the debt ratio in the capital structure, which supports the need for capital injection instead of borrowing because debt financing results in costs such as interest rates which exceed the benefits of debt financing. The research study recommended that firms should decrease the amount of the financial leverage in their capital structure in order to enhance the financial performance and create huge value to its shareholders.

Karani (2015) assessed the effect of capital structure decisions on financial performance of firms listed under energy and petroleum sector at the Nairobi securities exchange. The study used a descriptive survey design. Energy and petroleum firms listed in the NSE formed the population of this study and were considered as a representative of other firms in Kenya. The study population consisted of five firms listed in the NSE. The whole population of firms listed on the Energy and petroleum sector was considered for the study. Secondary data on capital structure decisions on financial performance of firms listed under energy and petroleum sector at the Nairobi securities exchange was collected for the study period of 2004 to 2014. Data was analyzed using regression analysis. Debt ratio and firm size had a positive relationship whereas

liquidity had a negative relationship to the firms in the Energy and petroleum sector listed in the NSE. Since the study findings on returns of firms in the Energy and petroleum sector listed at the NSE contradicts some of those done by earlier researchers who had established that liquidity does have a significant positive association with financial performance of firms. They also found that commercial banks that are more capital-intensive have lower financial performance. Further studies should be done to establish the cause of such discrepancy.

Pouraghajan and Malekian (2012) conducted a study whose objective was to establish the impact of capital structure on financial performance of companies listed in the Tehran Stock Exchange. They studied and tested a sample of 400 firms in the form of 12 industrial groups during the years 2006 to 2010. The results suggest that there is a significant negative relationship between debt ratio and financial performance of companies. The result also shows that by reducing debt ratio, management can increase the company's profitability and thus the amount of the company's financial performance measures.

Muigai (2016) did a study on equity structure effect on financial soundness of non-financial companies listed in Kenya. Subsequent investigation reports by government agencies have attributed this undesirable phenomenon to the tendency by listed corporations to employ aggressive financing strategy resulting to over-gearing. Empirical studies have however shown that use of borrowed capital is not singularly detrimental to firms. Considering the dichotomous modes of corporate financing (debt and equity), there is need to investigate how equity financing influences corporate financial soundness. A census of the 40 non-financial companies listed as at 31st December 2013 was taken. The study used secondary data extracted from the published financial statements of listed non-financial companies over the 10 year period from 2004 to 2013. On the basis of these empirical revelations, the study recommended that managers of listed non-financial companies should embrace use of internal equity in financing their firms and employ external equity sparingly in an effort to promote the level of financial soundness.

Qadorah (2018) did a study to assess the Effect of Board Independence and Board Meeting on Firm Performance; Evidence from Jordan. The purpose of this study to examine the relationship between the internal corporate governance mechanisms related to the board of directors' characteristics namely (board independence and frequency of board meetings) and firm performance in Jordanian listed firms. The study used Cross-sectional data for the year 2013, with a sample of 64 industrial firms listed in the Amman Stock Exchange. These results indicate that the monitoring role of the more independent board could have a significant influence on firm performance. Contradictory to expectation, the result of this study reveals that the frequency of board meetings does not determine the performance of industrial Jordanian firms. Further, Current study findings provide the idea to future researchers for further empirically explore the importance of the board of director's characteristics in Jordan. This study provides several important implications for the theory, regulatory authorities and policy makers and academia and researchers.

Conceptual Framework

The study conceptual framework is based on the capital structure theories which indicate that the mix of capital structure in the firm can have an influence on the financial soundness. The independent variables are; capital structure which will be proxied by equity to total assets ratio and the debt to equity ratio. The second independent variable is board characteristic proxied by board size, board independence, board composition and board gender diversity which will be measured using the natural logs. The dependent variable is financial soundness proxied by the Z-score index which is a ratio.

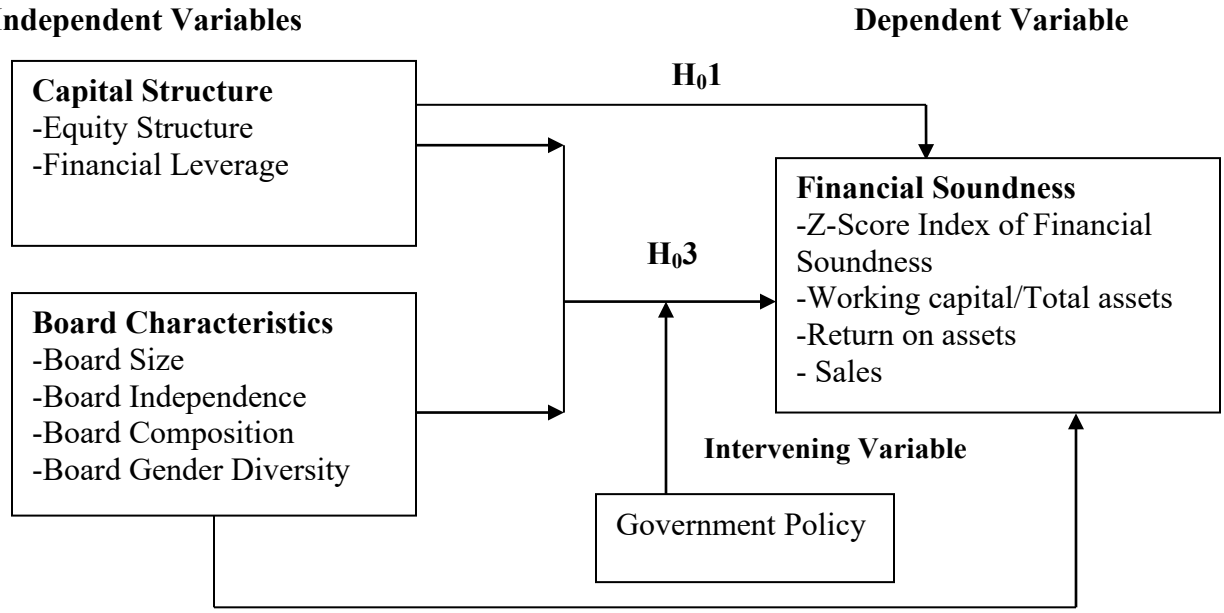

Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

The research was conducted using a descriptive research design which gives a description of phenomenon, characteristics and association of the research variables. The research design employed secondary quantitative data which was obtained from the financial statements of non-financial listed firms at NSE Kenya for a five year period (2017-2021). The population of the study comprised all non-financial companies listed in the Nairobi Securities Exchange (NSE). The study target population comprised of all the 47 non-financial firms listed in NSE. Since the target population is small and heterogeneous, census survey was adopted where the 47 non-financial firms in NSE are studied.

The study used secondary data, collected from respective non-financial firms audited annual published financial statement covering a period of 5 years that is 2017 to 2021. The data was obtained from respective non-financial firms and NSE websites. The study used quantitative method to analyze data. The information was codified and entered into a spread sheet and analyzed using SPSS (statistical package for social sciences). Quantitative data was analyzed using descriptive statistical method; the statistical tools such as mean, mode and standard deviation were used. Inferential statistic such as multiple regression model was used. Tables and bar charts were used to present the data for easy understanding and analysis. Multiple regression analysis was employed to test the hypothesis. Pearson Product-Moment correlation was used to test the hypothesis between capital structure and financial soundness of non financial firms listed in NSE. Hypotheses were tested at 5% significance level.

The regression equation of the study is shown below.

The regression equation for objective one was;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where; Y is the dependent variable (Financial soundness)

β_0= constant

$\beta_1, \beta_2, \beta_3$ are beta coefficients

X_1= Equity Structure

X_2= Financial Leverage
e = the error of prediction.

The regression equation for objective two is as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where; Y is the dependent variable (Financial Soundness)
β_0= constant
$\beta_1, \beta_2, \beta_3$ are the beta coefficients
X_1= Board size
X_2= Board Independence
X_3= Board composition
X_4= Board gender Diversity
e = the error of prediction.

The multiple regression equations for the joint objective is as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where;
Y is the dependent variable (Financial Soundness)
β_0 is the regression intercept
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ are the beta coefficients
The independent variables are;
X_1= Equity to total assets
X_2= Debt to equity ratio
X_3= Board size
X_4= Board Independence
X_5= Board composition
X_6= Board Gender Diversity
e is Error term

The source for the model is Beaver (1960). The model predicted a company's financial health based on a discriminant function of the form:

$$Z= 0.012X_1+0.014X_2+0.033X_3+0.006X_4+ 0.999X_5$$

Where: Z = score
X_1= Working capital/total assets
X_2= retained earnings/total assets
X_3=earnings before interest and taxes/total assets
X_4=Book value of capital/book value of total liabilities
X_5 = sales/total assets

RESULTS

Correlation Analysis

Pearson product-moment correlation coefficient was used to explore relationships between the variables, specifically to assess both the direction and strength. A positive correlation means that as one variable increases, the other increases, whereas a negative correlation means that when one variable increases, the other decreases. A statistically significant correlation is indicated by a probability value of less than 0.05 (Saunders & Cornett , 2003).

Table 1: Correlation Coefficient Matrix

		Financial Soundness	Capital Structure	Board Characteristics
Financial Soundness	Pearson Correlation	1	.414**	.554**
	Sig. (2-tailed)		.003	.000
	N	48	48	48
Capital Structure	Pearson Correlation	.414**	1	.426**
	Sig. (2-tailed)	.003		.003
	N	48	48	48
Board Characteristics	Pearson Correlation	.554**	.426**	1
	Sig. (2-tailed)	.000	.003	
	N	48	48	48

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

Correlation results showed that relationship between capital structure and financial soundness was positive and insignificant ($r=0.414$, $p>0.05$), board characteristics and financial soundness was positive and insignificant ($r=0.554$, $p<0.05$). The correlation between the variables was weak and strong respectively.

Regression Analysis

This study used the Adjusted R-Square to show the goodness of fit of the regression model; this is because it only increases if the new term added improves the model by being relevant to the study, and decreases when the added predictor adds no relevance to the study. The coefficient of determination (R-Square) was not used as it shows some bias between the variables; it continually increases when new variables are added to the model with disregard of the relevance of those variables to the study.

Capital Structure Decisions and Financial Soundness

The first objective was to establish the effect of capital structure decisions on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The finding is summarized using the regression model in tables below.

Table 2: Model Summary-Capital Structure Decisions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.453[a]	.205	.170	.72761

a. Predictors: (Constant), Financial leverage, Equity structure

b. Dependent Variable: Financial Soundness

Research findings on table above shows R squared was 0.205 and it shows that the total variation 20.5 % in financial soundness can be explained by financial leverage and equity structure. This means that other factors not included in the study accounted for 79.5%. The study also found a weak relationship between the financial leverage, equity structure and financial soundness as depicted by coefficient of correlation of 0.453, which is less than 0.5 thresholds.

Table 3: ANOVA-Capital Structure Decisions

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.155	2	3.078	5.813	.006[b]
	Residual	23.824	45	.529		
	Total	29.979	47			

a. Dependent Variable: Financial Soundness

b. Predictors: (Constant), Financial leverage, Equity structure

The ANOVA (Analysis of Variance) results on Table 3 shows that the F value of 5.813 was statistically significant at 0.006, which was lower than 0.05. This depicts a linear relationship among the variables under study and that the model had lower than 0.05 likelihood of giving a wrong prediction. The above results also show that the independent variables (Financial leverage and Equity structure) used was statistically significant in predicting the financial soundness at 95% significance level as depicted by the sig value of 0.006.

Table 4: Coefficients-Capital Structure Decisions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.061	.436		7.021	.000
Equity structure	.033	.152	.048	.219	.828
Financial leverage	.299	.157	.414	1.901	.064

a. Dependent Variable: Financial Soundness

Derived multiple regression equation from the data in the Table 4 was:

$$Y = 3.061 + 0.033X_1 + 0.299X_2$$

Holding equity structure and financial leverage constant the financial soundness will be 3.061, also a unit increase in equity structure the financial soundness will increase by 0.033 units, and a unit increase in financial leverage, the financial soundness will increase by 0.299 units. This implies there is a positive relationship between the equity structure and financial leverage and financial soundness as shown by beta values. The study sought to determine the null hypothesis that there is no effect of capital structure decisions on financial soundness of non-financial firms listed in Nairobi Securities Exchange. From the above findings the capital structure has positive and significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange F value of 5.813 and sig value of 0.006 at minimum of 95% confidence level. The above results thus leads to rejecting the null Hypothesis $H_0$1 that there is no effect of capital structure decisions on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

Board characteristics and financial soundness

The second objective of the study assessed the effect of board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

Table 5: Model Summary - Board Characteristics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.608[a]	.370	.311	.66285

a. Predictors: (Constant), Board Gender Diversity, Board Composition, Board Independence, Board Size

b. Dependent Variable: Financial Soundness

Research findings on Table 5 shows R squared was 0.370 and it shows that the total variation of 37% in financial soundness can be explained by variation in board gender diversity, board composition, board independence, board size. This means that other factors not included in the study accounted for 63%. The study also found a strong relationship between the board gender diversity, board composition, board independence, board size and financial soundness as depicted by beta value of 0.608.

Table 6: ANOVA - Board Characteristics

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.086	4	2.772	6.308	.000[b]
	Residual	18.893	43	.439		
	Total	29.979	47			

a. Dependent Variable: Financial Soundness

b. Predictors: (Constant), Board Gender Diversity, Board Composition, Board Independence, Board Size

The ANOVA (Analysis of Variance) results on Table 6 shows that the F value of 6.308 was statistically significant at 0.000, which was lower than 0.05. This depicts a linear relationship among the variables under study and that the model had lower than 0.05 likelihood of giving a wrong prediction. The above results also show that the independent variables (Board Characteristics) used was statistically significant in predicting the financial soundness at 95% significance level.

Table 7: Coefficients- Board Characteristics

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.781	.415		6.693	.000
Board Size	.257	.224	.355	1.145	.259
Board Independence	.467	.174	.684	2.679	.010
Board Composition	-.101	.181	-.141	-.556	.581
Board Gender Diversity	-.225	.289	-.298	-.778	.441

a. Dependent Variable: Financial Soundness

Derived multiple regression equation from the data in the Table 7 was:

$$Y = 2.781 + 0.257X_1 + 0.467X_2 - 0.101X_3 - 0.225X_4$$

Holding board size, board independence, board composition and board gender diversity constant the financial soundness would be 2.781 units, a unit increase in board size will lead to an increase in financial soundness by 0.257 units. Also a unit increase in board independence, board composition and board gender diversity will lead to an increase and decrease of financial soundness by 0.467, 0.101 and 0.225 respectively. The second hypothesis assessed that there is no effect of board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange. As presented in table above, from the above findings, the study found out board characteristics has a positive significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange**.** The F value was 6.308 and p value was 0.000 at minimum of 95% confidence level. The above results thus lead to rejecting the null Hypothesis $H_0$2 that there is no effect of board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

Capital Structure, Board Characteristics and Financial Soundness

The joint effect of capital structure and board characteristics on financial soundness of non financial firms listed in Nairobi Securities Exchange.

Table 8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.610[a]	.373	.281	.67733

a. Predictors: (Constant), Board Gender Diversity, Equity structure, Board Composition, Financial leverage, Board Independence, Board Size

Model summary in Table 8 shows the output for model fitness and value of R squared was 0.373. This shows that the variables (Board Gender Diversity, Equity structure, Board Composition, Financial leverage, Board Independence, Board Size) tested had a variation 37.3% on the financial soundness at 95% confidence interval. The above independent variables that were studied, explain only 37.3% of the effect of capital structure, board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange (NSE) as represented by the R2. This therefore means that other factors not accounted in this study contribute 62.7%. R is the correlation coefficient which shows the relationship between the study variables. The findings show that there was a strong positive relationship between the study variables as shown by R which is the correlation coefficient of 0.610.

Table 9: ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.169	6	1.862	4.058	.003[b]
	Residual	18.810	41	.459		
	Total	29.979	47			

a. Dependent Variable: Financial Soundness

b. Predictors: (Constant), Board Gender Diversity, Equity structure, Board Composition, Financial leverage, Board Independence, Board Size

The ANOVA (Analysis of Variance) results on Table 9 shows that the F value of 4.058 was statistically significant at 0.003, which was lower than 0.05. This depicts a linear relationship among the variables under study and also that the model had lower than 0.05 likelihood of giving a wrong prediction. The above results also show that the independent variables (Board Gender Diversity, Equity structure, Board Composition, Financial leverage, Board Independence, Board Size) used was statistically significant in predicting the financial soundness at 95% significance level.

Table 10: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.801	.436		6.425	.000
Equity structure	.062	.150	.089	.414	.681
Financial leverage	.056	.192	.078	.294	.770
Board Size	.254	.229	.352	1.107	.275
Board Independence	.472	.183	.691	2.574	.014
Board Composition	.084	.190	.117	.440	.662
Board Gender Diversity	-.244	.317	-.324	-.771	.445

a. Dependent Variable: Financial Soundness

The coefficients or beta weights for each variable allowed the researcher to compare the relative importance of each independent variable. The beta values indicate the direction of the relationship. A positive sign indicates a positive relationship while a negative sign indicates a negative relationship. In this study the unstandardized coefficients and standardized coefficients are given for the multiple regression equations. However discussions are based on the unstandardized coefficients. In testing the hypothesis, a regression equation model was used in the form of:

$$Y = 2.801 + 0.062X1 + 0.056X2 + 0.254X3 + 0.472X4 + 0.084X5 - 0.244X6$$

The regression equation above has established that holding independent variables (Equity structure, financial leverage, Board Size, Board Independence, Board Composition and Board Gender Diversity) to be constant financial soundness will be 2.801. Equity structure had positive coefficients of 0.062, financial leverage had a beta value of 0.056, board size had 0.254, board independence registered a value of 0.472, board composition had a value of 0.084 and board gender diversity had a beta value of -0.244. The study assessed that there is no joint effect of capital structure and board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange. As it presented in table above, joint effect of capital structure and board characteristics have positive and significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange with F value of 4.058 and p=0.003 a minimum of 95% confidence level. The above results thus lead to rejecting the null Hypothesis $H_0$3; there is no joint effect of capital structure and board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

Conclusion and Recommendations

Conclusion

The study sought to determine the effect of capital structure decisions on financial soundness of non financial firms listed in Nairobi Securities Exchange. The study concludes that equity structure and financial leverage were the main determinants of the capital structure. The study also concluded that capital structure has positive and significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The above results thus leads to rejecting the null Hypothesis $H_0$1 that there is no effect of capital structure decisions on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

The second objective assessed the effect of board characteristics on financial soundness of non financial firms listed in Nairobi Securities Exchange. The study concluded that board characteristics of the firms are not consisted all the time. The study also concludes board characteristics have a positive significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The above results thus leads to rejecting the null Hypothesis $H_0$2 that there is no effect of board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The survey also showed a statistically significant impact on management efficiency on financial performance and suggested that management efficiency is significantly affecting the performance of the companies examined. Furthermore, business size has a favorable but modest financial impact, meaning that corporate size isn't a big predictor of financial performance.

The study also assessed the joint effect of capital structure and board characteristics on financial soundness of non financial firms listed in Nairobi Securities Exchange. The study conclude the capital structure and board characteristics have positive but and significant effect on financial soundness of non-financial firms listed in Nairobi Securities Exchange. The above results thus lead to rejecting the null Hypothesis $H_0$3; there is no joint effect of capital structure and board characteristics on financial soundness of non-financial firms listed in Nairobi Securities Exchange.

Recommendations

This study recommends that government should lower cost associated with borrowing by coming up with various monetary and fiscal policies due to the fact that many companies depends on external sources to fund their operations. If measures are not taken soon, this is bound to hamper growth in this sector due to the high interest rate in Kenya which is not also in line with the Vision 2030.

The study recommends that the managers should combine varied proportion of debt, retained earnings and preferred share capital as it can bring out the best synergetic capital components combination for predictable positive results. In addition, it is recommended that firms maintain low proportion of ordinary share capital which proved to be antagonistic to financial sustainability.

This also need to be done with a consideration of selecting a more productive members of the board and improve the image of the firm. Frequency of board meetings despite requiring more resources may give directors enough time to deliberate on various aspects effecting firms and thus provide solid and valid conclusions that may impact on the financial soundness of the firms under commercial and service sector.

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