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Effect of Financial Expertise of the Directors on Capital Structure of Firms Listed in the Nairobi Securities Exchange, Kenya

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Abstract

Capital structure is the way a firm raises capital to support its operations and future growth by using composition of debt and equity. Therefore, capital Structure is the proportion or mix of securities used to finance a firm consisting of Debt (borrowed) capital and equity (ownership) capital. The choice of capital structure is critical for the firm’s financial decision makers since it affects earnings and leads to change in market value of the firm and share value. The successful selection and use of capital is one of the key elements of the firms’ financial strategy. The current study thus sought to establish the effect of financial expertise of board of directors on capital structure of firms listed in the Nairobi Securities Exchange. The study was guided Agency theory. Explanatory research design was used to target 5 year data of 68 firms listed in the Nairobi Securities Exchange from which 340 observations were derived. Secondary data was collected and analyzed using descriptive and inferential statistics which includes frequencies, percentages and means while inferential statistics was correlation and multiple regressions. Analyzed data were presented in form of tables. The study results revealed that financial expertise of board of directors has a positive and significant effect on capital structure of firms ($\beta= 0.428, p<0.05$). The study findings revealed that working experience of board of directors helps to gain skills and capabilities that can help them to improve the performance of a firm. Firms with more financial expertise based on education level among independent directors perform better during capital crisis. The study recommended that diversity of experience should be given equal weight to other considerations when composing a successful board of directors in firms. The policy makers and stakeholders should come up with policies that ensure appointment of directors with different ethnic and gender backgrounds as well as bases of expertise to their boards.

Introduction

Capital structure is the way a firm raises capital to support its operations and future growth by using composition of debt and equity (Zhang, 2013). Therefore, capital Structure is the proportion or mix of securities used to finance a firm consisting of Debt (borrowed) capital and equity (ownership) capital as defined by (Horne, 2011). The capital structure of the firm can either be a high percentage of equity or a composition of both Equity and Long-term Debt or a high percentage of Long-term debt. Debt can be classified as long term debt and short term debt, long term debt includes bonds, long term loan and long-term notes payable. Components of long-term debt include: Medium/long term bank loans and Debentures. Short term debt consist short term bank loan and account payable. Many firms accept debt in their capital to either develop their activities or financing its operations (Kasilo, 2011).
Capital structure is a precise mix of debt and equity which is normally used to finance the firm’s operations (Graham, Leary & Roberts, 2015). A firm can select among several alternative sources of capital with different mix of securities. These choices are strategic one which has many implications on the firm, therefore it should be well managed to ensure that the ultimate interest of the shareholder and other stakeholders of the company are served (Yabs, 2015). Therefore, a proper capital structure choice is key for any organization not only in terms of increasing its value and maximizing returns, but also due to the effect such a decision has on its ability to compete favorably in the market.

Globally, the study of capital structure has received much attention in developed countries compared to developing countries. In the United States for instance, research on capital structure has mainly focused on understanding the forces behind corporate financing behaviour of large listed firms. In Turkish firms immunized themselves against the economic crisis by having a low leverage capital structure because they found out that there is negative relation between financial performance and leverage (Parnell, 2017).

In Pakistan, Thailand, Brazil, Mexico, South Korea similar factors affect the capital structure choices. Total debt ratios decrease with tangibility of assets, average tax rate, and profitability but generally increased with size and market-to-book ratio. The long-term book-debt ratios are found to be similar to those of the total debt ratios except for the tangibility, which had a positive coefficient (Aguilera & Crespi-Cladera, 2016). Furumou and Aide (2017) indicated that capital structures are affected by tangibility, size, profitability, growth opportunities, tax, and business risk in seven Latin American Countries.

Chinese firms follow new pecking order in which a firm’s preference for funds is retained earnings first, followed by equity and then long-term debt (Lim, Zhao & Chai, 2015). It is found out that while Western models tended to concentrate on firm characteristics as determinants of capital choice, models that sought to explain behaviour of determinants of capital structure in China needed to look at institutional factors as these also played a very important role (Bharma, Jain & Yadav, 2017).

However, most of the Sri Lankan firms finance their operations with short-term debt capital as against the long-term debt capital (Priya, Balasundaram & Pratheepan, 2015). They found out that debt capital has a negative impact on firm performance. The negative performance implications associated with over-utilization of short-term debts and the under-utilization non-current assets provide corporate managers with useful policy direction on appropriate capital structure and operational decisions.

Among non-financial firms registered on Karachi Stock Exchange (Pakistan) shows that profitability, size, tangibility, growth, dividend and inflation affects capital structure of the firm. The negative relationships between profitability and leverage; positive relationships between growth and long term debt and dividend and total debt of firms confirm the presence of pecking order theory in determining the financing behavior of Pakistani firms (Saeed, Belghitar & Clark, 2015). The positive relationship between expected future inflation and current borrowing supports market timing theory.

In Africa it is revealed that financial performance is negatively influenced by short term debt and total debt but there wasn’t any significant relationship with long term debt (Porter, 2016). In perspective of Egypt capital structure had no effect on firms’ performance in financial perspective.

In Ghana, equity capital as a component of capital structure is relevant to the value of a firm, and long-term-debt is also found to be the major determinant of a firm’s value. From the findings of the study, corporate financial decision makers are advised to employ more of long term debt than equity capital in financing their operations since it impacts more on a firm’s value (Antwi, Mills & Zhao, 2012).

In Nigeria leverage has a negative relationship with firm size and tax on one hand and a positive relationship with tangibility of assets, profitability and growth on the other hand. However, only with tangibility of assets and tax that significant relationship was established. Furthermore, a significant relationship was established between tangibility of assets and size, tax and size, tangibility of assets and tax, tangibility of assets and growth, and finally between tax and growth in Nigeria (Akinyomi & Olagunju, 2013).

In Kenya, listed firms have a common characteristic in that they are more professionally managed, bigger in size with very high turnover and asset values as compared to unlisted firms. Further, they have more options when it comes to raising capital for their operations as compared to unlisted firms which makes their capital structure significantly different from one another and this exposes them to varying risks and returns. Another key aspect of listed firms is that being
publicly owned subjects them to greater scrutiny by investors who have high expectations regarding maximization of their shareholding wealth. Firms listed on NSE have adopted pecking order hypothesis due to undeveloped debt market and the restrictive covenants associated with long term debt, this makes long term debts expensive hence making firms borrow less. Most firms prefer to finance their activities by using short term debt. From the results the total assets was positively correlated to capital structure proxies which was significant. This indicates that long term debts was utilized by large firms that had large assets which could be used to act as collateral for securing the loans (Mule & Mukras, 2015).

Firms that use debt can not only get advantage from tax shield benefits derived from tax being deductible and allowable hence reducing obligations which are financial in nature but can also reduce asymmetry of information and control managerial discipline with regards to the investment policy of the firm (Myers, 1984). Debt financing ensures that managers promote only those projects that can guarantee earnings that are sufficient to cover the debt payments. Debt represents an indirect means of control and discipline of management behavior by constraining the tendency to use operational cash flow on personal interest or in an inefficient manner, in that interest payments and capital payoffs must be taken care of first. The capital structure determines value of the firm and its performance by reducing conflicts of interest that may emerge between the owners and creditors and bankruptcy related costs (Bhagat and Jefferis, 2002).

Board diversity also affects capital structure of many firms in Kenya (Post & Byron, 2015). Diversity means having a range of many people that are different from each other. Board diversity is justified as a key to better corporate governance. The best boards are composed of individuals with different skills, knowledge, information, power, and time to contribute. Given the diversity of expertise, information, and availability that is needed to understand and govern today’s complex businesses, it is unrealistic to expect an individual director to be knowledgeable and informed about all phases of business. It is also unrealistic to expect individual directors to be available at all times and to influence all decisions.

Board of directors has different characteristics such as board diversity which contribute to firm’s corporate governance mechanism, with some characteristics providing more controlling mechanism than others (Tarus, 2013). Board diversity is better for decision making particularly from a resource dependency perspective (Hillman et al., 2014).

**Statement of Problem**

The choice of capital structure is a critical point for the firm’s financial decision makers; since it affects earnings before interest and tax and leads to change in market value of the firm and share value. Capital structure decision is the vital one since the profitability of an enterprise is directly affected by such decision. The successful selection and use of capital is one of the key elements of the firms’ financial strategy (Velnampy & AloyNireesh, 2012). However, there is poor capital structure in the firms (Robb & Robinson, 2014).

Recently there are problems within corporate system that need quick solution for better management of firms. The corporate firms face challenges annually; included are the missing funds, poor auditing and interpersonal differences within the organizations this failures are criticized by thee governments minds, regulators, companies, investors and the general public on blaming the weaknesses in corporate governance systems and the need to address this issue with immediate effect to salvage the down fall of the firms that are key pillars of the country’s economy. Jensen & Meckling (1976) explained that the use of a board of directors reduces agency costs and in effect a cost reduction in administration of the firm.

The existence of a well-developed board diversity assist in the effectiveness of debt. Excessive board diversity has been found to be negatively related to performance because of conflicts and communication breakdowns (Murphy and McIntyre, 2014). Poor and corrupt board governance negatively affects the return on investment in many firms and account contributes to larger systematic problems at a national level. Lack of clear modality on appointment of board members, effective governance suffers because governance is hinged on competence and an effective selective process for new office bearers.

Prior studies have shown that the existence of a well-developed board diversity assists in effectiveness or debt (Kajananthan, 2013). However, the past studies have indicated disagreement on the effectiveness of board diversity on capital structure for instance Murphy and McIntyre (2014) noted that board diversity is negatively related to capital structure. Due to this contradiction in the previous studies this study looks at the possibility of introducing a third variable.
to see whether it mitigates the effects. Hence, this study established whether firm size has a moderating effect on the relationship between board diversity and capital structure of listed firms in Nairobi securities exchange, Kenya.

**Research Objectives**

To assess effect of financial expertise of board of directors on capital structure of firms listed in the Nairobi Securities Exchange

**H₀:** Financial expertise of board of directors has no significant effect on capital structure of firms listed in the Nairobi Securities Exchange

**H₁:** Financial expertise of board of directors has a significant effect on capital structure of firms listed in the Nairobi Securities Exchange

**Literature Review**

**Agency Theory**

Agency theory was propagated by Jensen and Meckling in 1976. The theory was developed on the idea that debt agency costs arise due to a conflict of interest between debt providers on one side and shareholders and managers on the other side. Managers have the motivation to invest funds in risky business for shareholders’ interest, because if the investment fails, the lenders are likely to bear the cost as the shareholders have limited liability. The use of short-term sources of debt, however, may mitigate the agency problems, as any attempt by shareholders to extract wealth from debt holders is likely to restrict the firms’ access to short-term debt in the immediate future.

The assumption of agency theory is a new theory of the production of agency. Existing realist theories of agency can be argued to presume the existence of agents that, despite necessary human knowledge limitations, routinely recognize other agents as agents and interact with them accordingly. Indeed, theories such as Archer’s morphogenesis (2000; 2003) or the institutionalism promoted and advanced by Hodgson (2003) are dependent upon action by humans within social interaction in order to achieve the reproduction and transformation of social structure and/or institutions that they theorize. But, how is it that human become agents and, perhaps more importantly, how do they recognize one another as agents in order that they might interact to affect the reproduction or transformation of social structure these theories describe? The assumption of agency theory proposes answers to these questions and so posits how the agency presumed by existing theories comes to be.

The criticism of the agency theory according to Simon, (2006) World Health Organization who justified that agency theory could not explain dynamic operations in larger organizations. The appointment of expert generates a further agency relationship which in turn impacts on trust and creates new issues relating to their independence. Banks are engaged as agents under contract but they are expected to be independent of the agents who manage the operations of the business. Bankers are agents of principals, which can lead to further concerns about trust, threats to objectivity and independence and an ongoing need to find further mechanisms such as regulation to align the interests of shareholders, directors and auditors. Furthermore, it overlooks, the role of commitment and the related forms of non-financial rewards (recognition, status, belongingness) and especially identification with organizational goals which explains why despite explicit or clear orders employees often take initiatives which are not self-serving but contribute to the achievements of the firm (Simon, 1991). The agency theory also overlooks the role of a firm in relation to their changing environment, competitive realities and the necessity to refocus resources within a firm in order to survive and grow (Foss, 2009). This is acknowledged, too, and authors therefore recommend the use of agency theory in combination with other theories, because the agency theory offers only a partial view on organizations (Eisenhardt, 2009).

Jensen and Meckling (1976) argue that the use of secured debt might reduce the agency cost of debt. Um (2014), however, suggests that if a company’s level of tangible assets is low, the management for monitoring cost reasons may choose a high level of debt to mitigate equity agency costs. This theory is relevant to the present study has it is the anchoring capital structure theory on debt and equity. Thus, the theory offers valid explanations on scenarios that companies like those listed in the NSE can use to creatively and strategically manage capital structure.

**Effect of financial expertise on Capital Structure**

According to He, & Xiong, (2013) financial expertise is a person who understands the generally accepted accounting principles (GAAP) and financial statements; is experienced in preparing or auditing financial statements of comparable companies; have experience accounting for estimates, accruals, and reserves; understand internal accounting controls; and understand the functions of an audit committee.
Financial expertise of a team may increase the probability of cross-cultural communication problem (Lehman and Dufrené, 2013) and interpersonal conflicts (Cos, Jr., 2009). However, it may also bring competitive advantages to the firm such as international networks, commitment to shareholder rights and managerial entrenchment avoidance (Oxelheim and Randoy, 2003). Financial expertise is also not studied a lot. In the Netherlands live a lot of people with different financial expertise and the amount of people with different nationalities are growing. Therefore, it is important to investigate the effect of nationality diversity on boards, because in the future more and more people from different nationalities may be candidates for board positions (Erhardt et al., 2003). There is no negative effect of nationality diversity on company performance found. Minton, Taillard and Williamson (2010) examine the performance and risk taking behavior of a broad sample of US financial institutions both during and prior to the financial crisis and relate them to the financial expertise levels of their independent board directors. They find that prior to the crisis outside financial experts on the board were associated with higher risk taking and slightly above average performance. Their results are consistent with the idea that banks with more financial expertise among independent directors perform worse during the crisis, particularly for large commercial banks. Also they investigate that banks with more financial experts have more leverage.

Kroszner and Strahan (2001) investigate what determines the presence of a commercial banker on the board of a non-financial firm. According to their paper bankers tend to be on the boards of large stable firms with high tangible capital ratios and low reliance of short term debt financing. Previous studies found positive effects or no effect at all of financial expertise on company performance. Erhardt et al. (2003) found a positive effect of financial expertise on company performance in the US, Dang et al. (2013) found positive effect of Financial expertise in the US and Richard (2000) also found a positive effect of financial expertise on company performance. There are also studies which did not find any effect of financial expertise on company performance, such as: Engelen et al. (2012) in the Netherlands and Rondoy et al. (2012) in Scandinavian countries. McCahery and Vermeulen (2013) examine the factors and board strategies that are associated with value creation and innovation by analyzing the composition of high performance and high growth companies. They look at the board composition from a different prospective by introducing in their analysis a new dimension associated with value creation. Therefore they focus on the expertise, skills and capabilities that can help a director to improve the performance of a firm. In their research they test the board composition of seventy venture capital backed companies that were involved in IPOs on US stock markets between 2011 and the first half of 2012 and show that venture capitalist (independent) directors continue to play a dominant role in the further development of the recently listed companies. They conclude that talented and experienced directors bring value to the firm.

A study by Guner, Malmendier and Tate (2006) focuses on the effect of the financial expertise of directors in South Africa. They examine whether financial experts on the board influence corporate decisions. They analyze a sample of 282 publicly traded companies from 1988 to 2001 and make a conclusion that financial experts significantly affect corporate decisions, but only when their influence serves the interest of their own institutions. The study was conducted in three steps: firstly looking at the internal investment and loan financing, secondly looking at the external financing and financing with public securities and thirdly looking at the financial expertise and CEO compensations. The outcome from the obtained research questions are that a firm displays less investment cash flow sensitivity and obtains larger loans when commercial bankers are on the board of the particular firm. Additionally firms with financial experts on their boards undertake worse acquisitions and are associated with larger bond issues. Finally from the third research question authors show that overall the financial expertise doesn’t influence much the compensation policy. However, there is need to look at the Kenyan situation with its different economic and company developmental connotations.

**Conceptual Framework**

The study employed the following conceptual framework to illustrate how the independent and dependent variable interact in the study the relationship between financial expertise and capital structure of listed firms in Nairobi stock exchange.
Independent variable

Figure 1.1 Conceptual framework

Measurements of Variables

This section presented how dependent, independent and moderating variable were measured in the study

Capital structure

Capital structure is a mix of debt and equity. It is a way through which organizations are financed. Capital structure decisions are most important because it involves heavy investments of the company. A good combination of debt and equity is required for a better performance. If a company has a good debt and equity combination it has an edge on others. According to Kasilo (2011), capital structure stands for value of the firm which is explained in the following model; the value of the firm is the sum of debt and equity; hence is

\[ V = B + S; \]

Where B is the market value of debt and S is the value of the equity.

The capital structure in this study was measured using current liabilities, long term liabilities, current assets and fixed assets of the firms.

Financial expertise

According to He, & Xiong, (2013) financial expertise is a person who understands the generally accepted accounting principles (GAAP) and financial statements; is experienced in preparing or auditing financial statements of comparable companies; have experience accounting for estimates, accruals, and reserves; understand internal accounting controls; and understand the functions of an audit committee.

In the study financial expertise was measured through assessing if directors understand the general accepted accounting principles and financial statements, experienced in auditing financial statements of comparable companies, experienced in accounting for estimates, accruals, and reserves and understanding of internal accounting controls

Dependent variable


Research Methodology

Research Design

Research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data (Kothari, 2004). This study employed explanatory survey research design as it is concerned with the causal explanation of events.

Target Population

The target population of this study was all 68 listed firms in the NSE for the period 2012-2016 (NSE handbook, 2016). Therefore, the target population above was chosen since it provided research information in respect to the study.

Census Survey

This study uses census survey to collects complete information from all participants in the population. This is due the fact that the target population for this study was small and manageable implying that sampling did not apply. The research employed a panel type of study because it was a particular design of longitudinal study in which the unit of analysis followed at specified intervals over a long period, often many years and since the study looked at data from companies for the last 5 years the study was relevant. The study collected data from the firms with complete information for the period of the study. The firms which were listed after the year 2012 or launched within the period of the study were included while those with missing data were excluded. The study looked at 68 listed firms in Nairobi Security Exchange whose data were complete for the entire period of study (NSE handbook, 2016). These make 340 (68 listed firms multiply by 5 years) observations.

Masakari and Ombaba (2018)
Research Instruments
This study utilized secondary data from the NSE list of listed firms from its website, for the researcher to get systematic information it used a designed documentary analysis guide. This guide documentary was used to find out the information concerning board diversity age, gender, financial expertise and capital structure.

Data Collection Procedure
The researcher collects the necessary data required for the study from the firms’ website and firms’ databanks where their capital statements were extracted. The data obtained through the use of data collection sheets which were filled with the relevant data from the firms that the study was target. The researcher also sought consent from the respective companies to conduct the study and once the consent is granted the researcher visit the companies to make appointments for the data collection, informing the organization the kind of information that she need and the reason for conducting the study. The researcher gave the companies ample time to collect the information that she needed for the study and collect it once it is made available. A high level of confidentiality and privacy was observed and the findings of the study were only submitted to the university and the managers of the firms.

Data Processing and Analysis
The quantitative data were gathered from the annual reports of the listed firms in Nairobi securities exchange. The data collected were analyzed using descriptive and inferential statistics. Descriptive statistics employed frequencies and percentages while inferential statistics were done through multivariate regression. The research employed a panel type of study. Panel data (also known as longitudinal or cross-sectional time-series data) is a dataset in which the behaviors of entities were observed across time (Torres-Reyna, 2007). It was employed in this study because it was a particular design of longitudinal study in which the unit of analysis is followed at specified intervals over a long period, often many years and since the study looked at data from companies for the last 5 years the study was relevant.

The analyzed data were presented in tabular forms. Inferential statistics was used through moderation regression analysis using the 4 step of Baron and Kenny (1986): First, standardizing all variables to make interpretations easier afterwards and to avoid multicollinearity; secondly do to dummy code categorical variables and manually create product terms for the predictor and moderator variables; thirdly is fitting a regression model (block 1) predicting the outcome variable Y from both the predictor variable X and the moderator variable M. Both effects as well as the model in general (R2) should be significant and finally adding the interaction effect to the previous model (block 2) and check for a significant R2 change as well as a significant effect by the new interaction term. If both are significant, then moderation is occurring.

The study used both ordinary least square (OLS) equation and moderated multiple regressions (MMR) because the study has moderating variable. This were created consisting scores for predictor variable y, score for 2nd predictor variable m hypothesized to be a moderator (Aquinis & Gottfredson, 2010).

Model specification
\[ Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 M_{it} + \beta_3 X_{it} M_{it} + \epsilon_{it} \]

Where;
- \( Y_{it} \) represents capital structure of firms
- \( \beta_0 \) represents constant
- \( X_{it} \) represents financial expertise of board of directors of firm i in time t
- \( \beta_1, \beta_2, \beta_3 \) are coefficients of financial expertise of board of directors, \( \epsilon \) represents error term

Research Findings and Discussion

Response Rate
Because the study was a census a total of 68 firms listed in Nairobi securities exchange was used to collect data for the study. This represented a response rate of 100 percent. The data collected was, therefore, effective for analysis and generalization. According to Babbie (2002) any response of 50% and above is adequate for analysis.

Background information
The study results indicated that the number of board of directors in the 68 firms was 592 female and male. From the study findings it was also noted that among the listed firms in NSE only 21% of women are represented on boards. It was also found out that number of men in position of chairperson outnumber the women with a ratio of 11 to 1. Only 54 out of 467 directors are female. There are 4 female chairs out of 61 chairpersons, Insurance, energy, telecommunications and manufacturing have the most
diverse boards (in that order) while manufacturing, agriculture and energy have the oldest board members. Average age of directors is 57 years (and 65 for chairpersons). Professional diversity is lacking with most companies recruiting lawyers, accountants or engineers.

Financial Expertise
The study sought to establish the financial expertise of board of directors in listed firms in NSE. These involved financial skills, financial knowledge and accounting knowledge. The study results are presented in table 4.1.

The study finding revealed that out of a population of 592 5(0.8%) of the board of directors had accounting knowledge, while those having financial skills were 67 (11.3%), 217(36.7%) of board of directors had financial knowledge and 303(51.2%) had no financial expertise. This implies that in the listed firms there are person who understands the generally accepted accounting principles and financial statements. They experienced in preparing or auditing financial statements of comparable companies; have experience accounting for estimates, accruals, and reserves; understand internal accounting controls; and understand the functions of an audit committee. Therefore, financial expertise of this board of directors may increase the probability of financial problem solving and interpersonal conflicts.

These study findings concur with Erhardt (2003) who found a positive effect of financial expertise on company performance in the US. McCahery and Vermeulen (2013) study concur with the study findings that financial expertise, skills and capabilities can help a director to improve the performance of a firm. They conclude that talented and experienced directors bring value to the firm.

<table>
<thead>
<tr>
<th>Table 4.1 Financial Expertise</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting knowledge</td>
<td>5</td>
<td>.8</td>
</tr>
<tr>
<td>Financial skills</td>
<td>67</td>
<td>11.3</td>
</tr>
<tr>
<td>Financial knowledge</td>
<td>217</td>
<td>36.7</td>
</tr>
<tr>
<td>No financial expertise</td>
<td>303</td>
<td>51.2</td>
</tr>
<tr>
<td>Total</td>
<td>592</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Descriptive Statistics of Study Variables

<table>
<thead>
<tr>
<th>Table 4.2 Multiple Regression Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>R</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>.667a</td>
<td>.445</td>
<td>.410</td>
<td>.45892</td>
<td></td>
</tr>
</tbody>
</table>

From table 4.2 the F test provides an overall test of significance of the fitted regression model with the influence of control variable. The F value indicates that all the variables in the equation are important hence the overall regression is significant. The F-statistics produced (F =12.64) was significant at α=0.000 thus confirming the fitness of the model and therefore, there is statistically significant relationship between, financial expertise and dependent variable capital structure. The regression model statistically significantly predicts the outcome variable; it is a good fit for the data.

<table>
<thead>
<tr>
<th>Table 4.3 Testing the Multiple Regression Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>1</td>
<td>Regression</td>
<td>4</td>
<td>2.661</td>
<td>12.635</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>63</td>
<td>.211</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The regression results from the coefficients, illustrate that the coefficient were all significant to be used for multiple regression as follows; financial expertise ($\beta = -0.428, p<0.05$). This give an implication that a unit change in age leads to 0.26 changes in capital structure, also a unit change in gender leads to 0.64 change in capital structure, further a unit change in financial expertise leads to 0.43 change in capital structure all these are influenced by a unit change in firm size with a value of 0.25. Thus the regression equation is written as;

$$Y = 1.140 + 0.26X_1$$

Where:
- $Y$ represents capital structure, dependent variable
- $X_3$ represents financial expertise

### Table 4.4 Multiple Regression Coefficients Model with the Moderator

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.140060</td>
<td>0.445167</td>
<td>2.443047</td>
<td>0.0200</td>
</tr>
<tr>
<td>Financial Expertise</td>
<td>-0.428117</td>
<td>0.141248</td>
<td>-3.027120</td>
<td>0.0045</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2531123</td>
<td>2.673210</td>
<td>0.0110</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.445230</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.410100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.850888</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
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### Hypotheses Testing

The Null Hypothesis stated that financial expertise of board of directors has no significant effect on capital structure of firms listed in the Nairobi Securities Exchange. However, the study findings indicated that financial expertise of board of directors has a positive and significant effect on capital structure of firms ($\beta = 0.428, p<0.05$). Therefore the study findings rejected the null hypothesis. This gives implication that firms with more financial expertise based on education level among independent directors perform better during capital crisis. Also firms with more financial experts have more leverage. The work experience of board of directors helps to gain skills and capabilities that can help them to improve the performance of a firm. It implies that talented and experienced directors bring value to the firm.

The study findings were in agreement with the study done by Kroszner and Strahan (2001) which found a positive effect of financial expertise on company performance in the US. Dang et al. (2013) found positive effect of financial expertise in the US and Richard (2000) also found a positive effect of financial expertise on company performance.

### Summary of Findings, Conclusion and Recommendations

The study results indicated that there was a statistical significant effect of financial expertise of board of directors on capital structure of firms listed in the Nairobi Securities Exchange. This gives implication that firms with more financial expertise based on education level among independent directors perform better. Also firms with more financial experts have more leverage. The work experience of board of directors helps to gain skills and capabilities that can help them to improve the performance of a firm. It implies that talented and experienced directors bring value to the firm.

### Recommendation

The study recommends the use of agency theory because the theory supported this study in that the theory anchors capital structure theory on debt and equity. Thus, the theory offers valid explanations on scenarios that companies like those listed in the NSE can use to creatively and strategically manage capital structure. Therefore, this theory should be adopted by companies listed in the NSE in order to achieve firm performance.
The firms should have board of directors with work experience who will bring value to firm performance because they have skills and capabilities that can help them to improve the performance of a firm.

**Recommendation for further Studies**

The researcher suggests the following further areas of research:

A research should be carried on effect board diversity on firm diversification of listed firms in Nairobi securities exchange, Kenya.

**Reference**


Randoy, T., Thomsen, S., &Oxelheim, L. (2012).A Nordic perspective on corporate board diversity.Age, 390, 0–5428


