

# Relationship between the Board of Directors' Characteristics and the Capital Structures of Companies Listed In Nairobi Securities Exchange

Stephen Angwenyi Nyamweya  
*Catholic University Of Eastern Africa.*

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**Abstract:** *Boards of directors' decisions have a significant impact on capital structure and hence the performance of firms. However, it is not clear how performance is affected by the boards' composition. For instance, some firms have performed well in Nairobi Securities Market (NSE) even as others have gone under receivership. The study aimed at highlighting the relationship between board decisions' and debt-equity ratio which is a measure of performance when they want to make investment. The research was based on census of forty-eight listed companies (48) at the Nairobi Securities Exchange in 2012. From these, secondary data was collected for each individual company for the period. Analysis was done using descriptive and inferential statistics using correlation and Chi-square methods. The research results using Pearson's correlation at 10% confidence interval established that gender had a positive relationship with debt-equity ratio with  $r = 0.197$  p-value of 0.073. This implied that, with more male directors employed by a company, the debt-equity ratio increased and this was very significant as it had an impact on debt-equity ratios of listed companies. This was further confirmed by the Chi-square relationship with p-value 0.010 which was less than the critical value of 1% ( $\chi^2=9.348$ ,  $df=3$ ,  $p=0.010$ ). It was established that profession had a positive relationship to debt-equity ratio with  $r=0.117$  and p-value of 0.288.*

**Keywords:** *Board, Directors, Characteristics, Capital Structures, Companies Listed, Nairobi Securities Exchange*

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## I. Introduction

The board of directors is responsible for making financing decisions which have an impact on financial performance of firms. Ogola (2006) under Table A, Article 80, says that the business of any company should be managed by the directors. Board composition is made up of independent, non-executive and executive directors. They have a duty of care and skill when discharging their duties. Under article 75, the first directors are decided in writing by subscribers to the memorandum of association while subsequent directors are appointed in general meeting from the first general meeting. The board of directors has to practice high level of corporate governance to discharge their responsibilities to meet the expectation of stakeholders. Board composition is based on gender, profession and experience. Ogola (2006) points out that the companies listed at the Nairobi Securities Exchange are regulated under company Act Cap 486 of the Laws of Kenya. The shareholders appoint the board of directors to run the organization fairly, transparently, effectively and efficiently ensuring that shareholders get value for their investment. These agents may have their own interests when making optimal capital structure for the firm.

Trade-off hypothesis holds that financial managers consider a company's optimal debt-equity ratio decision as a trade-off between the benefits of using more debt and the cost of debt. Optimal capital structure involves a trade-off among effects of corporate and personal taxes, bankruptcy cost and agency costs. According to this theory companies with safe, tangible assets and earnings enough taxable income are expected to have high levels of debt ratio because it is easy to service it.

The pecking order theory holds that there is no well-defined target of debt-equity mix and, due to information asymmetry between insiders and outsiders of companies, managers prefer internal financing to external financing. The managers act in the interest of existing shareholders in maximizing value of existing shares. According to this theory, profitable companies are expected to have low debt ratios because they are expected to borrow less while less profitable companies are expected to have high debt ratio because they do not have enough internal funds for their investment projects.

Pandley (2010) points out that the assets of a company are financed by either increasing the owner claims or creditor claims. The claims of the owner can increase when a firm raises funds by issuing ordinary shares to the public or by earnings. So capital structure is the means of financing a firm. There is a relationship between debt and equity and this entails capital structure. The capital structure of a firm greatly influences shareholders returns and risks. The shareholders expect dividends which they earn from their investment. Equity capital is a permanent source of finance for companies listed at the Nairobi Securities Exchange. However,

equity capital as a source of capital is expensive as it involves floatation costs such as cost of printing of prospectus, clerical cost, and brokerage cost or commissions paid to brokerage firms.

The board of directors uses owner's equity as a basis raising debt. When conditions are favourable earnings per share will increase with financial leverage. However, financial leverage increase risk to the shareholders. The use of debt as a source of capital enables shareholders to retain control of the firm with limited securities and also earn a higher return on total capital employed than interest rate on borrowed funds. Each company listed in Nairobi Securities Exchange has its own unique capital structure which is measured by financial ratios. It is however not clear firms choose the amount of debt and equity in capital structure. The board of directors will greatly affect the performance and also influence how investors perceive the firm. Pandley (2010) points out that the goal of a firm should be to maximize the wealth of its current shareholders.

Manasseh (1990) posits that many factors influence a company's capital structure decisions. First, companies with fixed assets can raise long term debt finance more easily and thus get high proportion of debt finance than companies without. Secondly, the cost of finance both implicit and explicit cost influence the company's capital structure. The investment becomes unviable when total sum of these cost outweigh the return expected from the investment. Thirdly, the size of the company which is reflected in terms of sales activities and its assets volume greatly influence the ability of a company to raise finance.

Manasseh (1990) indicated that capital structure is very important to a company in the following ways; capital structure influences the company's ability to raise further finance as and when it desires to do so. A highly leveraged firm will not be able to raise further finance.

The board of directors' capital structure decisions influences the company's share prices. It is pointed out that those firms that are highly geared tend to have low share prices because there is low demand for such shares. The potential shareholders would not like to risk their money in highly geared firm. The capital structure decisions by directors influence the company's dividend policy. A company with used high levels of debt and preference share capital will have a superior claim on profits made by the company and thus reduce ordinary dividend for ordinary shareholders. Finally, the capital influences the cost of finance.

The board of directors of a company has to plan capital structures which are advantageous to the company. Pandley (2010) avers that capital structure decisions should be well planned to take care of the interest of equity shareholders and other groups such as employees, customers, creditor's society and the government. Firms that fail to plan their capital structures find it difficult to raise funds to finance their activities.

Researchers continue to analyze capital structures and try to determine whether optimal capital structures exist. An optimal capital structure is usually defined as one that will minimize a firm's cost of capital, while maximizing shareholder's wealth. The criterion used by board of directors to choose the amount of debt and equity in their capital structures is not clear. Could these be influenced by the traditional capital structures of their industries or are there other reasons behind their actions? Capital structure decisions are measured using financial ratios. Financial ratios are commonly used to measure firm's leverage. Generally, companies include these ratios in their annual reports to stakeholders. The board of directors can make a dividend decision either to retain or distribute earnings thus affecting owners' claims. The shareholders' equity position is strengthened by retention of earnings and this has a bearing on capital structure of a company. The management of a company has to seek answers the following questions when making financing decisions.

- How should investment project be financed?
- How does financing affect the shareholders' risk, return and value?
- Is there an optimum financing mix in terms of maximum value to the firm's shareholders?
- Can the optimum financing mix be determined in practice for a company?

Pandley (2010) points out that financial leverage employed by a company is intended to earn more return on fixed charge funds than their costs. The surplus (or deficit) will increase (or decrease) the return on the owners' equity. For instance, a company borrows Ksh 100,000,000 at 8% interest p.a. and invests it do earn 12% return per annum, the balance of 4% p.a after payment of interest belongs to shareholders and this constitute the profit from financial leverage. Alternatively, if a company earns only a return of 6% p.a on Ksh 100,000,000 the loss to shareholders could be 2% so financial leverage provide the potentials of increasing shareholders as well as creating the risk of loss to them.

1. Debt ratio. It is the ratio of debt to total capital

$$\begin{aligned}L_1 &= D \\ D + E &= V \\ \text{Where } D &= \text{value of debt} \\ E &= \text{Value of shareholders equity} \\ V &= \text{Value of total capital}\end{aligned}$$

2. Debt-equity ratio. It is the ratio of debt to equity

$$L_2 = D/E$$

3. Interest coverage

$$L_3 = \frac{\text{EBIT}}{\text{Interest}}$$

The objective of the research was to investigate the impact of board composition on capital structure decisions on public companies listed in the Nairobi securities Exchange in Kenya.

The boards of directors in modern corporations are responsible for monitoring management activities. Jensen and Meckling (1976), Berle and Means (1933) state that the board of directors has the power and influence over firm's strategy, policy and decision-making authority and therefore a potential significant event in any firm.

According to Olatundum (2009), the board of directors is central to corporate governance mechanism in market economies. The board of directors and management are agents of shareholders. These agents may have individuals self interests in making decisions on optimal capital structure for the firm. There may be conflict of interest among these agents.

Agency problem arise between the firm controlling shareholders and debt providers and between debt suppliers and minority shareholders. The agents may use external debt which may lead to an increase in the level of non-performing loans and this hinders the proper functioning of the financial system. Olatundum (2009) has found that the performance of firm's share price could be used as indirect measure of the information contained in the change in composition of a company board since the potential contribution of an individual member to the board cannot be observed directly. A change in composition of a firm's board can take the form of a new appointment or some form of removal from the board, new appointment, resignation, retirement, death and joint occurrences of departure.

Pandley (2010) argues that good corporate governance requires firms to adopt practices and policies which comprise performance, accountability, effective management control by board of directors, adequate timely disclosure of information and prompt discharge of statutory duties. Better firm level corporate governance not only reduces agency costs but also enhances the investors' optimism in the firm's future cash flow and growth prospect. This leads to reduction of the rate of return expected by the investors, leading to low cost of equity capital to the firm. The reduction in agency costs will likely cause improved operating and investment performance of better governed firms. The reduced cost of equity and the improved operating performance will eventually enhance both the firm is ability to access equity finance and the firm value and also debt.

Corporate governance and agency problem situation involves cooperative effort by two or more people for effective and efficiency management of shareholders wealth as corporate governance demands. A relationship between the shareholders who are owners of the company and the management and board of directors is a pure agency theory relationship. Separations between ownership and control are intimately associated with general agency problem.

### **Statement of the Problem**

The boards of directors make decisions that have great impact on capital structure. The capital structure affects the performance of firms. However, what is not clear is how the boards' composition affects the capital structure and performance of firms such as those listed in the Nairobi Securities Exchange.

This is because some firms have performed well in Nairobi Securities Market (NSE) and others has gone under receivership Olatundum (2009), says that the performance of firms share could be used as indirect measure of the information contained in the change in composition of a company board since the potential contribution of an individual member to the board cannot be observed directly. A firm such as CMC holdings which has debt-equity ratio of 141.74% was suspended from Nairobi Securities Exchange in 2012 following fraud claims involving former chairman. The study sought to shed light on the relationship between board composition decisions' and debt-equity ratio which is a measure of performance when they want to make investment.

## **II. Materials And Methods**

This study employed a combination of descriptive and correlation design approach to enable it obtain a better understanding of the impact of board composition on capital structure decisions. The author gathered financial statements of firms quoted on the NSE for the year 2012. Dynamic capital structure model captures at least two important features of corporate borrowing behaviour: first, companies have a long run optimal target debt ratio which is assumed to be a function of several companies' specific characteristics that vary over time, over companies or both over time and companies; second, an adjustment process takes place which involves a lag in adjusting to changes in the optimal target debt ratio.

The population of interest comprised forty-eight public companies listed in Nairobi Securities Exchange in period 2012. Census was done on the forty-eight listed companies. Data was collected from the companies' annual published financial reports and also from their website. The period was chosen in order to capture the most current data since earlier related studies, such as those done by Ngugi (2008), had captured data from year 1990 to 1999 and it was projected that the capital financing behaviour might have changed over the years since then.

The author used the census method to sample all the listed companies. The research mostly used secondary data extracted from the annual financial reports of the firms listed in the Nairobi Securities Exchange for the period ending 31<sup>st</sup> December 2012. The data collected was examined and checked for completeness. The data was summarized, coded and tabulated. Descriptive statistics was used such when analyzing relationships between variables.

### III. Results And Discussion

Data was collected from the internet and also from the companies' published financial reports by 30<sup>th</sup> April 2013. The data entailed the characteristics of board composition and the capital structures of listed companies in NSE by 30<sup>th</sup> April 2013. A census was done for forty-eight companies. The findings were as shown in Table 1 below.

**Table 1: Summary of ten listed Companies and the variables considered**

Company name	Gender of directors	Number of Professionals	Average years of experience	% Debt	% equity	% Debt-equity ratio
Kenya Airways	Male 9 Female 1	Accountants 2 Lawyers 1 Engineers 3 Economist 2 Management 1 ICT 1	26.2	70%	30%	237.22%
Safaricom	Male 8 Female 3	Accountants 5 Engineers 2 Economist 1 ICT 3	22.6	40%	60%	67.93%
Marshall (E.A) Ltd	Male 4 Female 1	Accountants 3 Engineers 1 Economist 1	18.6	30%	70%	44.62%
E. A breweries	Male 6 Female 5	Accountants 5 Lawyers 4 Economist 2	14.18	88%	12%	734.45%
Mumias sugar company Ltd	Male 6 Female 0	Accountants 3 Economist 2 Education 1	18	43%	57%	74.26%
Sameer Africa Ltd	Male 6 Female 0	Accountants 3 ICT 1 Engineers 1 Banking 1	21.5	23%	77%	31.04%
Olympia	Male 8 Female 1	Accountants 3 Lawyers 3 Economist 3	10.22	51%	49%	105.83%
Kenya Re-insurance	Male Female 2	Accountants 5 Lawyers 3 Economist 2 Health 1	22.45	40%	60%	65.67%
Jubilee	Male 8 Female 0	Accountants 8	21.37	84%	16%	518.16%
Access- Kenya	Male 6 Female 0	Accountants 2 Engineers 2 Lawyers 2	27	48%	52%	204.62%

**Source:** Field data (2013)

Table 1 above indicates that the companies listed in Nairobi Securities Exchange have different capital structures. The capital structures are mainly debt-equity. From the findings each listed company in Nairobi Securities Exchange has its own debt-equity ratio. A capital structure is a mixture of variety of long term sources of funds and equity shares, including reserves and surpluses of a company. East African Breweries had the highest debt-equity ratio of above 7(88%) debt and 12% equity, followed by Jubilee with debt equity ratio of between 5(84%) debt 16% equity. The company with the lowest debt-equity ratio was Sameer East Africa Ltd with 2(23%) debt and 4(77%) equity. Companies with the highest debt-equity ratios are more interested in

financing activities by the long term debt. The capital structure decisions are based on a number of issues including, cost, various taxes and rates, interest rates. All these explain variation in financial leverage of all listed companies in Nairobi Securities Exchange.

From these findings the two companies (EABL and Jubilee) with leading debt-equity ratios have higher percentages of debt as compared to equity while those at the bottom (Sameer and Marshalls, 2012) have more equity than debt.

**Gender Composition of the Board**

The findings from the research indicate that 85.5% of directors were male while 14.5% were female directors. This showed that there was gender parity in Board composition in the companies listed in Nairobi Securities Exchange as by 30<sup>th</sup> April, 2013.

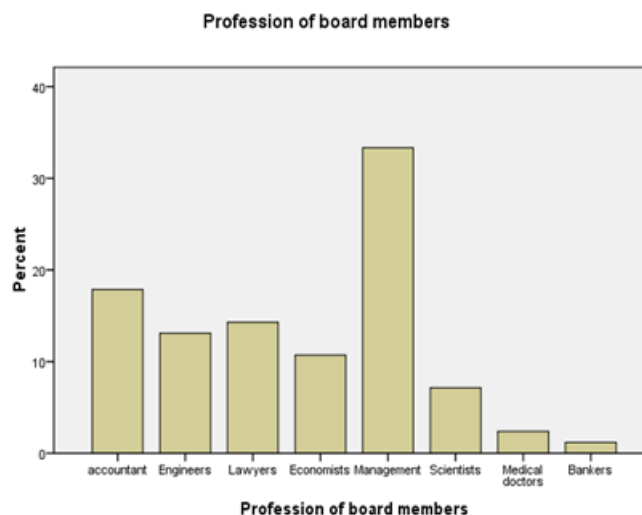
**Table 2: Gender of Board Members**

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Male	71	84.5	84.5	84.5
	Female	13	15.5	15.5	100.0
	Total	84	100.0	100.0	

Source: Author (2013)

**Profession of Board Members**

The Board Members of the companies listed in the Nairobi Securities Exchange have different professions. The findings from the research as indicated that 33.3% were managers, 17.9% were accountants, 14.3% were lawyers, 13.1% were engineers, 10.7% were economists, 7.1% were scientists, 2.4% were medical doctors and 1.2% was bankers.



**Figure 1: Professions of Board Members**

Source: Author (2013)

**Years of Work Experience of Board Members**

The findings from the research indicated that the Directors in the companies listed in the Nairobi Securities Exchange had immense experience ranging between one year to thirty-five years. The results showed that 42.9% of the directors had work experience of between 11 and 20 years, 29.8% of the Directors had experience of between 21 and 30 years, 17.9% were found to have an working experience of 0 and 10 years while 9.5% of directors were found to have working experience of above 30 years.

**Table 3: Board of Directors' Work Experience.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-10 years	15	17.9	17.9	17.9
	11-20 years	36	42.9	42.9	60.7
	21-30 years	25	29.8	29.8	90.5
	Above 30 years	8	9.5	9.5	100.0
	<b>Total</b>	<b>84</b>	<b>100.0</b>	<b>100.0</b>	

Source: Author (2013)

### **Debt-Equity Ratio**

The findings from the research indicate that each company listed in the Nairobi Securities Exchange had its own capital structure. The result indicates that 53.6% of the listed companies had debt-equity ratio of below 2, 23.8% had debt-equity ratio of between 2 and 4, 11.9% had debt-equity ratio of above 7 while 10.7% were found to have debt-equity ratio of between 5 and 7. Pandley (2010) indicates that financial leverage employed by listed companies is meant to earn more return on fixed charge funds than their cost. Manasseh (1990) also says that capital structure influence the company's ability to raise further finance as and when it arises, share prices, dividends and cost of finance. Studies carried out by Graham and Harvey (2001) have shown that 81% of companies consider debt-equity ratio when making financing decisions by directors.

### **IV. Conclusion And Recommendations**

At 10% confidence interval using correlation, there was a significant relation between gender and debt-equity with p-value of 0.073. The relation between the two was positive (0.197). This was further confirmed by the Chi-Square which showed a significant effect on the level of debt-equity ratios at +0.010 implying that there is a strong significant relationship between board composition and capital structures decisions of the companies. The results using correlations showed that the more male directors in the board, the higher the debt-equity ratios of the listed companies.

From the findings, there was a significant relation gender and debt-equity ratios. Male directors accounted for 84.5% while female directors accounted for 15.5%. There is not in compliance with the 1/3 rule of the Constitution of Kenya (2010) which stipulates that no gender should hold more than two-thirds (2/3) of positions in any public institution. It is recommended that:

- Studies should be carried out to find the influence of having more women in management positions in companies in Kenya.
- The research recommends that research should done to find the impact of board composition on financing decisions of directors in private companies in Kenya.
- The research also recommends that more women should be incorporated in the board. The result from the analysis using Pearson's correlation coefficient indicated that the fewer the female directors the lower the debt-equity ratios. This is vital because the company is not over burdened with the servicing of the debt finance and thus pays more dividends to the shareholders and also delimits shareholders' conflict with management in organizations.

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