EFFECT OF CAPITAL STRUCTURE DECISIONS ON FIRM VALUE OF LISTED MANUFACTURING FIRMS IN MOMBASA COUNTY

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ABSTRACT
The current study sought to examine the effect of capital structure decisions on firm value of listed manufacturing firms in Mombasa County. This study adopted descriptive research design and the population of interest consisted of 282 employees of selected listed manufacturing firms in Mombasa County. The study adopted stratified sampling technique to obtain a sample size of 165 selected using Slovene’s formula. The study relied on both primary and secondary data where primary data was collected using structured questionnaires while the secondary data was gathered from the financial report of manufacturing firms in Mombasa. Data was analyzed using the Statistical Package for Social Scientists (SPSS) version 23 where descriptive and inferential analysis was conducted to show the relationship between the study variables. The study findings showed that unit increase in leverage will lead to a positive increase in firm value. Further a unit increase in equity financing will lead to a positive increase in firm value and a unit increase in liquidity will lead to a positive increase in firm value. Finally a unit increase in retained earnings will lead to an increase in firm value of listed manufacturing firms. From the research findings, the study concluded that financial leverage is vital for any profit maximizing firm. It was concluded that manufacturing firm leverage has increased over the last two years and that increasing debt will increase firm value due to the benefits obtained from the tax shield. The researcher concluded that most manufacturing firms will take angel investors as the first option and that equity financing has positive relationship to firm value as it was found to reduce costs of financial distress. The study recommended that the listed manufacturing firms must be careful on how much debt they take as this may undermine their return on assets. Management which is heedless on the costs and risks associated with financial leverage may lead to reduced profitability.

Key words: Firm Leverage, Ordinary Share, Liquidity, Retained Earnings, Manufacturing Firm Value

INTRODUCTION

In the field of finance, capital structure is one of the popular topics among the scholars which is aimed at competing firms resource allocation. The capital structure of a firm is very important since it is related to the ability of the firm to meet the needs of its stakeholders (Roy & Minfang, 2012). An appropriate capital structure is a critical decision for any business organization. Financing decisions is one of the important areas in financial management to increase shareholder’s wealth. To determine the extend managers achieve this object, we can relate it to the performance measurement of company. The decision is important not only because of the need to maximize returns to various organizational constituencies, but also because of the impact such a decision has on an organization’s ability to deal with its competitive environment. Financial managers are difficult to exactly determine the optimal capital structure. A firm has to issue various securities in a countless mixture to come across particular combinations that can maximum its overall value which means optimal capital structure. Most of the decision making process related to the capital structure are deciding factors when determining the capital structure, a number of issues e.g. cost, various taxes and rate, interest rate have been proposed to explain the variation in financial leverage across firms (Van Horne, 2013).

For many years the link between capital structure and the financial performance of the firm has been the subject of intense global debate and research and yet there is insufficient evidence to support this argument. Extant literature has documented market valuation as a key determinant of capital structure (Eltayeb, 2011) all have documented a negative relation between debt and the market-to-book ratio, a commonly used proxy for growth options. Rajan and Zingales (2012) has further extended this analysis to establish that the relationship between market leverage and the market-to-book ratio is negative and significant across seven different countries. Nissim and Penman (2010) in their empirical analysis showed that since price-to-book ratios are based on expected profitability, they explain how price-to-book ratios are affected by the two types of leverage i.e. operating and financial leverage.

In the Kenyan context, extant literature reviewed has produced mixed results on relationship between capital structure decisions and firm value. For instance a study by Barako (2014) found that, disclosures of all types of information are influenced by corporate governance attributes, ownership structure and corporate characteristics among which leverage was found to be significant for financial disclosures. Bitok et al., (2012), found the static trade-off theory which suggests that optimal capital structure exists and a trade-off between net tax benefit of debt financing and bankruptcy cost, provides the most robust explanation of leverage for Kenyan listed firms. Chebii, Kipchumba and Wasike (2011) found that there is a significant relationship between capital structure and dividend pay-out with companies that optimally engage financial leverage in their operations standing a chance of favourable competitive situations because of the absence of financial inhibitions.

Statement of the Problem

Capital structure decisions are important to maximize the earnings of companies. Capital structure decisions are taken by considering factors like financial performance, solvency and control. Several firms are experiencing declining performance and others have even been delisted from the NSE in the last decade as in the case of CMC motors and Access Kenya. The effort to revive the ailing and liquidating firms has focused on financial restructuring. However managers and practitioners still lack adequate guidance for attaining optimal financing decisions (Hall et al., 2012) yet many of the problems experienced by the companies put under statutory management were largely attributed to financing (Michaelas, Chittenden & Poutziouris, 2013). This
situation has led to loss of investors’ wealth and confidence in the stock market. Despite this identified scenario, studies on the relationship between various financing decisions and performance have produced mixed results. Titman and Wessels (2012) contend that firms with high profit levels, all things being equal, would maintain relatively lower debt levels since they can realize such funds from internal sources. Furthermore, Kester (2011) found a significantly negative relation between profitability and debt/asset ratios. Rajan and Zingalas (2012) also confirmed a significantly negative correlation between profitability and leverage in their work.

In the Kenyan context, extant literature has been done on capital structure and firm performance. For instance, Kioko (2010) did a study on capital structure choice. a survey of industrial firms in Kenya, Wandeto (2012) did an empirical investigation of the relationship between dividend changes & earnings, cash flows & capital structure for firms listed in the NSE, Habid (2013) did a study on the impact of profitability on capital structure of companies listed at NSE, Nyaboga (2014) did a study on the relationship between capital structure and agency cost, Ochieng (2013) did an empirical analysis of capital structure rebalancing by firms listed at the NSE, Gitau (2015) did a study on the effect of capital structure on firm value of all the companies quoted in NSE, Gachoki (2012) in his study on capital structure for 1997 crisis stated that the key factor which accelerated economic distress was the increased dependency on debt financing. The dependency had led to excess investment before the crisis and also instability in the Kenyan economy. Kiogora (2013), found a positive relationship between capital structure and value of the firm.

The reviewed empirical literature indicates that different authors have different opinion over the effect of capital structure on the firm value. The inconclusive results from the reviewed studies on capital structure and its effect on financial performance presents a gap that need to be filled by conducting further research on the topic. Consequently, very scant studies have been done per se to determine the effect of capital structure decisions on firm value of listed manufacturing firms in Mombasa County. This research study, therefore sought to fill the identified literature gap by examining the effect of capital structure decisions on firm value of listed manufacturing firms in Mombasa County.

**Research Objectives**

The general objective of the study was to determine the effect of capital structure decisions on firm value of listed manufacturing firms in Mombasa County. The specific objectives were:-

- To establish the effect of firm’s leverage on firm value of listed manufacturing firms in Mombasa County
- To determine the effect of equity financing on firm value of listed manufacturing firms in Mombasa County
- To identify the effect of firm’s liquidity on firm value of listed manufacturing firms in Mombasa County
- To establish the effect of retained earnings on firm value of listed manufacturing firms in Mombasa County

**Research Hypotheses**

- **H01**: There is no significant effect of leverage on firm value of listed manufacturing firms in Mombasa County
- **H02**: There is no significant effect of ordinary share on firm value of listed manufacturing firms in Mombasa County
- **H03**: There is no significant effect of liquidity on firm value of listed manufacturing firms in Mombasa County
- **H04**: There is no significant effect of retained earnings on firm value of listed manufacturing firms in Mombasa County
LITERATURE REVIEW

Theoretical Framework

Trade-off Theory

The term trade-off theory is used by different authors to describe a family of related theories. In all of these theories, a decision maker running a firm evaluates the various costs and benefits of alternative leverage plans. According to Elliott (2008), the firm is viewed as setting a target debt-equity ratio and gradually moving towards it. The firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. In particular, capital structure moves towards targets that reflect tax rates, assets type, business risk, profitability and bankruptcy costs. The firm is balancing the costs and benefits of borrowings, holding its assets and investment plans constant (Adedeji, 2010). The firm’s optimal capital structure will involve the trade-off between the tax advantage of debt and various leverage-related costs. Due to the distinctions in firm-specific characteristics, target leverage ratios will vary from firm to firm. Institutional differences, such as different financial systems, tax rate and bankruptcy law etc., will also lead the target ratio to differ across countries.

The theory predicts that firms with more tangible assets and more taxable income to shield should have high debt ratios (Elliott, 2008). Firms with more intangible assets, whose value will disappear in case of liquidation, should rely more on equity financing. In terms of profitability, trade-off theory predicts that more profitable firms should mean more debt serving capacity and more taxable income to shield, thus a higher debt ratio will be anticipated. Under trade-off theory, the firms with high growth opportunities should borrow less because they are more likely to lose value in financial distress. This theory of trade-off best explains the study variable of leverage.

Modigliani and Miller Capital Structure Theory

Modigliani and Miller theorem is considered the greatest breakthrough in theory of optimal capital structure. The theorem specifies the financial decisions by firms that are irrelevant to the firm’s value. Its prepositions include; the value of a firm is the same regardless of whether it finances itself with debt or equity. The weighted average cost of capital is constant. The assumptions of Modigliani- Miller theorem are; Perfect and frictionless markets, no transaction costs, no default risk, no taxation, both firms and investors can borrow at the same interest rate; there is homogeneous expectation homogeneous risk and equal access to all of relevant information.

The rate of return on equity grows linearly with the debt ratio implying that the higher the debt equity ratio the higher the expected return on equity. The distribution of dividends does not change the firm’s market value it only changes the mix of equity and debt in the financing of the firm. In order to decide an investment, a firm should expect a rate of return at least equal to cost of capital no matter where the finance would come from (Mahrt, 2010). Hence the marginal cost of capital should be equal to the average cost of capital. The constant cost of capital is sometimes called the “hurdle rate” (the rate required for capital investment). In summary the theory states that the value of a firm is invariant with respect to its leverage policy in an arbitrage-free market when there is no corporate income tax and no bankruptcy cost: whether firm is financed through debt or equity, its value remains the same (Wald, 2009). Hence the theory supports leverage variable.

Pecking Order Theory

The pecking order theory differs from the trade-off theory in that there is no well-defined debt-equity ratio (Singh, Wallace and Suchard, 2010). According to Smart, Megginson and Gagman (2007), the pecking order theory assumes there is no target capital structure. Instead of putting a target debt-equity ratio...
into place, firms adapt their financing policy to minimize associated costs. According to Myers (2012) the theory states that, firms have a preferred hierarchy for financing decisions. Firms will borrow instead of issuing equity when internal cash flow is not sufficient to fund capital expenditure. The highest preference is to use internal financing before resorting to any form of external funds.

Internal funds incur no floatation costs and require no additional disclosure of financial information that may lead to a possible loss of competitive advantage. If a firm must use external funds, the preference is to follow a certain order of financing sources: debt, convertible securities, preferred stock, and common stock. This order reflects the motivations of the financial manager to retain control of the firm, reduce the agency costs of equity, and avoid negative market reaction to an announcement of a new equity issue. The amount of debt will reflect the firms’ cumulative need for external funds. The theory has two key assumptions about financial managers. The first of these is the likelihood that a firm’s managers know more about the company’s current earnings and future growth opportunities than outside investors.

Agency Costs Theory
Agency costs rose from separation of ownership and control and conflicts of interest between categories of agents. One of the problems that cause conflict between managers and shareholders is free cash flows. Jensen (2009) and Williamson (2010) define debt as a disciplinary tool to ensure that managers give preference to wealth creation for the equity-holders. Thus, in the companies that have high cash flow and profitability, increasing of debts can be used as a tool of reducing the scope for managers until resources of company may not be waste as a result of their individual purposes. Opinion of the most researchers is that choices of capital structure may help mitigate the agency cost (Papa and Speciale, 2010; Richardson, 2009; Douglas, 2008). High leverage reduces agency cost by constraining or encouraging managers to act more responsibly in the interest of the shareholders by reducing cash flows available for spending to managers. Therefore we expect high earnings where debt ratios are higher.

The other conflicting problem is that managers may not receive all the benefits of their activities. This is seen when manager’s share in ownership of company is low. When the manager’s increase stock is high, this inefficiency decreases. Therefore, it is appropriate that by increasing debts instead of stock issuance prevent from decreasing of manager’s share of ownership interest (Huang, Song, 2010). Stulz (2009) like Jensen believes that debts payment decreases cash flows available for managers. But, on the other hand, he states that this decrease will decrease the opportunities of profitable investing. Thus, companies with less debt, have more opportunities for investment and in comparison with other active firms in industry, have more liquidity.

Conceptual Framework

![Conceptual Framework](image)

Independent Variables  Dependent variable

Figure 1: Conceptual framework

Source: Author (2019)
Empirical Literature Review

Various studies have been carried out to determine the relationship between capital structure and firm performance in different sectors of the economy both internationally and locally. For instance, Abor (2010) focused on the study of the relationship between capital structure and firm profitability. Findings revealed that there was a positive association between capital structure (short term debt) and firm profitability which was measured by ROE. It was suggested that short-term debt had a tendency to be less expensive and therefore with a reasonably low interest rate on short-term debt would lead to an increase in levels of profit. From the results it was also showed that profitability increases with the control variables (growth of sales and size). While findings revealed that there was a negative association between capital structure (long term debt) and firm profitability which was measured by ROE. Result had found a significant positive relationship between the total debt to total assets ratio and performance.

Further the capital structure and firm performance was investigated by Zeitun and Tian (2012). Their results showed that short term debt to total assets had significant and negative impact on the firm’s performance which was measured by return on assets. That negative result conclude that firms that have more short-term debt to total assets those firms also have low performance. Short-term debt exposed risk of refinance to firm as it shown a negative impact on ROA. Pratheepkanth (2013) found in his study negative and weedy correlation between structure of capital and net profit. There was a negative but weak correlation between variables of capital structure and ROI. There was also negative but a weak correlation between variables of capital structure and ROA. From that result it was concluded that there was negative but weak correlation amongst variables of capital structure and performance of firm. There was also a negative association amongst financial performance and structure of capital.

Velnampy and Anoja (2014) studied the impact of liquidity and capital structure on profitability, for all the listed telecommunication firms at the Colombo Stock Exchange, Sri Lanka from 2008-2012. The regression and correlation results showed that there is no significant impact of both liquidity and leverage on profitability. While Siahaan et al., (2014) conducted a study research on 60 firms out of 131 listed firms at the Indonesia Stock Exchange. The firms were clustered into two, 30 firms as the large listed firms and another cluster of 30 firms listed as small firms. The results indicated that there is a positive but not significant relationship between leverage and firm value for the large firms (upper cluster) while for the lower cluster there is negative and significant relationship.

Ahmad et al., (2012) concluded that total debt and short term debt had a significant relationship with return on assets. Whereas the relationship between each debt level and return on equity found significant. Soumadi and Hayajneh (2012) found financial leverage negatively influence the firm value. This Negative relationship states that desire of firm to finance its activities by increasing borrowing operations and this excess borrowing lead to bankruptcy risks which result into decrease the tax shields and consequently minimize the firm performance. The result found no significant difference between high levered firms and low levered firms to influence of financial leverage on performance of the firm. Finally, there is no difference between the financial leverage of high growth firms and low growth firms on the performance in regard that the effect of financial leverage on the basis of the growth.

In Pakistan Umar et al., (2012) had studied the capital structure effect on financial performance of the firms in Pakistan. Their result revealed that there was a
significant negative association between the variables of capital structure and financial performance of the firm which measured by EBIT. Total liability had an insignificant negative relation with financial performance of the firm. Size of the firm and firm performance had a positive relationship and concluded that performance of the firm increased by increasing assets of the firm. Result also revealed that there was a significant negative association between the variables of capital structure and financial performance of the firm which measured by return on assets of the firm. Result also revealed that there was a significant negative association between the variables of capital structure and financial performance of the firm which measured by EPS of the firm. Capital structures’ variables also had a negative relationship with net profit margin of the firm.

Uwalomwa and Uadiale (2012) did a study to basically investigate the relationship between capital structure and the financial performance of listed firms in Nigeria. The study considered a total sample of 31 listed firms on the floor of the Nigerian stock exchange. The annual reports for the period 2005-2009 were analysed using the Ordinary Least Squares (OLS) technique of model estimation to test the research propositions stated in this study. The study observed that two of the explanatory variables in the study (i.e. short-term debt and shareholders’ funds) have a significant positive impact on the financial performance of listed firms in Nigeria. In addition, the study observed that long-term debt has a significant negative impact on the financial performance of firms. The study concludes that employing high proportion of long-term debt in firms’ capital structure will invariably result in a low financial performance of a firm.

Locally, Kibet et al., (2013) conducted this study to investigate the relationship between capital structure and share prices in the Nairobi Securities Exchange (NSE). The study assessed effect of debt, equity and gearing ratio on share price. The study used panel data pertaining to energy sector over the period 2006-2011 and employed a multiple regression statistical technique to analyze the data. Firstly, they used descriptive statistics to check the features of variables and then Pearson’s coefficient of correlation to check the causal relationship between the variables. Third multiple regressions was used to test the collective relationship as elaborated in hypotheses. The results indicated that the variables debt, equity and gearing ratio are significant determinants of share prices for the sector under consideration. Further, gearing ratio and debt were found to positively affecting share prices, while equity negatively affected share prices.

Musiega et al., (2013) in examining the relationship between a firm’s capital structure and performance studied a sample of 30 non-financial firms listed on NSE over a 5 year period of 2007-2011. In the study the analysis was performed using both descriptive statistics and inferential statistics by applying linear regression analysis. The study used five performance measures: return on asset, return on equity, earning per share (EPS), and dividend payout, market price to book ratio of stock as dependent variables and three capital structure measures: short term debt to asset ratio, long term debt to asset ratio and total debt to asset ratio as independent variables. Size of the firm taken as natural logarithm of sales was considered as a moderating variable. The results indicated a significant positive correlation between total assets of a firm and capital structure proxies, indicating that long term debts were utilized by large firms that had large assets which could be used to act as collateral for securing the loans. Thus as per the study, firms on NSE appeared to use less debt in their capital structure making many firms pay less interest thereby not increasing the risks the firm may be exposed to, as debt tends to reduce performance.

Kamere (2014) did a research on some factors that influence capital structure of public companies in
Kenya. From his research, he concluded that profitability was a very important and major factor that influenced capital structure decisions in firms in NSE. His observation was that those companies whose profits were very high borrowed very little, that is; they did not borrow so much since some of the profit would be ploughed back into the business. He further noted that those with small profit would not be able to plough back any substantial amount into the business; therefore, they were forced to seek additional funds from outside sources. In fact, this result concurred with the pecking order theory which argues that in the presence of asymmetric information, a firm would prefer internal finance over the other sources of finance, but would issue debt if internal funds were exhausted. However, Omondi (2011) in his research on capital structure in Kenya came up with a conclusion that totally contradicted the Pecking order theory. In his research, he observed that those firms in NSE and with high returns on investments used relatively high debt. That is, those firms which recorded high profit were also found to have borrowed much.

Kaumbuthu (2011) carried out a study to determine the relationship between capital structure and return on equity for industrial and allied sectors in the Nairobi Securities Exchange during the period 2004 to 2008. Capital structure was proxied by debt equity ratio while performance focused on return on equity. The study applied regression analysis and found a negative relationship between debt equity ratio and ROE. Maniagi et al., (2013) in the study of the relationship between a firm’s capital structure and performance among a sample of 30 companies listed on NSE whose data for 5yrs period 2007-2011: concluded that 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.

METHODOLOGY
This study used descriptive research design, in which it is a study of relatively short duration and it involves a systematic collection of data which was presented to give a much better understanding of the research topic. To answer capital structure decisions on firm value in a finance context, the senior employees of selected listed manufacturing firms in Mombasa County were used to collect the required data. According to Nairobi Securities Exchange report (2018) there are only 7 manufacturing firms in Mombasa County which are listed in NSE. The researcher used questionnaire method to acquire or solicit data. Secondary data was obtained from already existing sources. Data was obtained for the dependent variable from the financial records of the target manufacturing firms for the last five years i.e. from 2012-2017. The study used questionnaires to collect data from 165 respondents in the study. Data was analyzed using quantitative techniques. The SPSS (version 23) computer software was used in the analysis. A multiple regression analysis was applied to establish independent variables influence dependent variable as illustrated below;

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon
\]

Where;
\[
Y = \text{Firm Value} \\
X_1 = \text{Firm Leverage} \\
X_2 = \text{Ordinary Share} \\
X_3 = \text{Liquidity} \\
X_4 = \text{Retained Earnings}
\]

\[
\beta_0 = \text{constant.} \\
\beta_1, \beta_2, \beta_3, \beta_4 = \text{Beta coefficients.} \\
\epsilon = \text{Stochastic term}
\]
Tests of statistical significance were used to address the question of whether or not the relationship between two or more variables is caused by mere chance or not.

**FINDINGS**

**Effect of firm leverage on firm value**

With a view to establish the effect of leverage on firm value of listed manufacturing firms in Mombasa County, the study sought the views of respondents on the extent to which the given aspects of leverage affect firm value as indicated by their level of agreement. A likert scale data was collected rating the extent of agreement in a scale of 1 to 5 where 1 is the strongly disagree whereas 5 is the strongly agree indicator. Findings are as presented in table 1 below;

<table>
<thead>
<tr>
<th>Leverage</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The firm leverage has increased over the two years</td>
<td>4.30</td>
<td>.420</td>
</tr>
<tr>
<td>Increasing debt will increase firm value due to the benefits obtained from the tax shield</td>
<td>4.10</td>
<td>.570</td>
</tr>
<tr>
<td>Too much debt will lead to increased financial distress costs</td>
<td>4.27</td>
<td>.283</td>
</tr>
<tr>
<td>Higher financial leverage leads to lower average cost of capital</td>
<td>4.39</td>
<td>.291</td>
</tr>
</tbody>
</table>

From table 1 above, the respondents agreed that the manufacturing firm leverage had increased over the two years as indicated by a mean of 4.30 and standard deviation of 0.420. The respondents further agreed that increasing debt will increase firm value due to the benefits obtained from the tax shield as shown by a mean of 4.10 with a standard deviation of 0.570. The findings were supported by Abor (2010) who in His study revealed that there was a positive association between capital structure (short term debt) and firm profitability which was measured by ROE. It was suggested that short-term debt had a tendency to be less expensive and therefore with a reasonably low interest rate on short-term debt would lead to an increase in levels of profit. Findings also showed that, the respondents agreed (mean = 4.27; std. dev. = .283) indicating that too much debt will lead to increased financial distress costs. The findings were supported by Zeitun and Tian (2012) whose study results showed that short term debt to total assets had significant and negative impact on the firm’s performance which was measured by return on assets. That negative result concluded that firms that had more short-term debt to total assets those firms also have low performance.

Finally majority of the respondents agreed that higher financial leverage led to lower average cost of capital as indicated by a mean of 4.39 and a standard deviation of .291. The findings agreed with study by Siahaan et al., (2014) who conducted a study research on 60 firms out of 131 listed firms at the Indonesia Stock Exchange. The results indicated that there is a positive but not significant relationship between leverage and firm value for the large firms (upper cluster) while for the lower cluster there was negative and significant relationship. Further the findings concurred with the study by Omondi (2011) who observed that those firms in NSE and with high returns on investments used relatively high debt. That is, those firms which recorded high profit were also found to have borrowed much.

**Effect of equity financing on firm value**

The findings under this section were also based on the means and standard deviation for the data that was collected through the likert scale measuring the level of agreement of the respondents with respect to the given aspects of equity financing. The results are as presented in Table 2 below.
As shown in the table 2, the respondents agreed that angel investors were the first option for large companies as indicated by a mean of 4.27 and standard deviation of 0.283. The respondents further agreed that equity financing has positive relationship to firm value and reduces costs of financial distress as shown by a mean of 4.54 and a standard deviation of 0.175. The findings were supported by Kibet et al., (2013) who conducted this study to investigated the relationship between capital structure and share prices in the Nairobi Securities Exchange (NSE) and concluded that equity and gearing ratio are significant determinants of share prices for the sector under consideration. Further, the respondents agreed to a strong extent that equity financing makes firm perform better since equity holders are residual claimant they have to ensure that resources are allocated efficiently. This was shown by a mean of 4.30 with a standard deviation of 0.543. Also the respondents agreed to a strong extent that equity financing add value to shareholders by way of improving capital structure of firms to an optimal level. This was shown by a mean of 4.05 with a standard deviation of 0.667. The findings above resonate with the study by Uwalomwa and Uadiale (2012) who carried a study to basically investigate the relationship between capital structure and the financial performance of listed firms in Nigeria and observed that two of the explanatory variables in the study (i.e. short-term debt and shareholders’ equity) have a significant positive impact on the financial performance of listed firms.

**Effect of liquidity on firm value**
Table 3 presents the study results on the effect of liquidity. The results are as well based on the means and standard deviation for the likert scale data collected.

<table>
<thead>
<tr>
<th>Table 2: Equity financing</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angel investors are the first option for large companies</td>
<td>4.27</td>
<td>.283</td>
</tr>
<tr>
<td>Equity financing has positive relationship to firm value and reduces costs of financial distress</td>
<td>4.54</td>
<td>.175</td>
</tr>
<tr>
<td>Equity financing makes firm perform better since equity holders are residual claimant they have to ensure that resources are allocated efficiently</td>
<td>4.30</td>
<td>.543</td>
</tr>
<tr>
<td>Equity financing add value to shareholders by way of improving capital structure of firms to an optimal level</td>
<td>4.05</td>
<td>.667</td>
</tr>
</tbody>
</table>

As shown in the table 3, the respondents strongly agreed that long term debt affects future cash flows which in turn affects liquidity as indicated by a mean of 4.36 with a standard deviation of 0.338. Further respondents agreed that choice regarding liquidity depends on firms’ access to capital markets as indicated by a mean of 4.38 with a standard deviation of 0.365. Respondents also agreed that perceived importance of future investments affects liquidity level of a firm as indicated by a mean of 4.11 and standard deviation of 0.201. Finally respondents agreed that there was a relationship between cash

<table>
<thead>
<tr>
<th>Table 3: Liquidity</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term debt affects future cash flows which in turn affects liquidity</td>
<td>4.36</td>
<td>.338</td>
</tr>
<tr>
<td>Choices regarding liquidity depends on firms’ access to capital markets</td>
<td>4.38</td>
<td>.365</td>
</tr>
<tr>
<td>Perceived importance of future investments affects liquidity level of a firm</td>
<td>4.11</td>
<td>.201</td>
</tr>
<tr>
<td>There is a relationship between cash holdings and investment opportunity and thus firm value</td>
<td>4.36</td>
<td>.703</td>
</tr>
</tbody>
</table>
holdings and investment opportunity and thus firm value as indicated by a mean of 4.36 and standard deviation of 0.703. The study findings resonates with study by Velnampy and Anojan (2014) studied the impact of liquidity and capital structure on profitability, for all the listed telecommunication firms at the Colombo Stock Exchange, Sri Lanka from 2008-2012 and the results showed that there is no significant impact of both liquidity and leverage on profitability.

**Table 4: Retained earnings**

<table>
<thead>
<tr>
<th>Retained earnings</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms prefer cash from operations as a major source of capital for re-investment</td>
<td>4.38</td>
<td>0.365</td>
</tr>
<tr>
<td>Retained earnings is preferred by firms since it is the cheapest source of finance</td>
<td>4.17</td>
<td>0.548</td>
</tr>
<tr>
<td>Dividend policy affects retained earnings of a firm</td>
<td>4.36</td>
<td>0.427</td>
</tr>
<tr>
<td>Retained earnings affect firm value positively</td>
<td>3.96</td>
<td>0.622</td>
</tr>
</tbody>
</table>

Findings as presented in table 4 showed that the manufacturing firms prefer cash from operations as a major source of capital for re-investment. As indicated by a mean of 4.38 and standard deviation of 0.365. Findings further show that retained earnings is preferred by firms since it is the cheapest source of finance as indicated by a mean of 4.17 and standard deviation of 0.548. The findings resonated with Campbell, (2012) who asserted that some organizations prefer to retain more earnings and plow it back into operations especially when they have viable investment opportunities. The findings also show that dividend policy affects retained earnings of a firm (mean = 4.36; std. dev. = .427).

Finally respondents agreed that retained earnings affect manufacturing firm value positively (mean = 3.96; std. dev. = .622). The findings above concurred with the pecking order theory which argues that in the presence of asymmetric information, a firm would prefer internal finance over the other sources of finance, but would issue debt if internal funds were exhausted.

**Firm value**

The study results on firm value were as presented in Table 5. The findings were on means and standard deviation showing the extent of the respondents’ agreement on firm value aspects given.

**Table 5: Firm value**

<table>
<thead>
<tr>
<th>Firm value</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in profit is as a result of use of equity financing</td>
<td>4.43</td>
<td>0.316</td>
</tr>
<tr>
<td>Liquidity position affect firm value hence performance</td>
<td>4.46</td>
<td>0.248</td>
</tr>
<tr>
<td>Source of finance influences firm value</td>
<td>4.40</td>
<td>0.196</td>
</tr>
<tr>
<td>Increase in sales attributed to use of debt financing</td>
<td>4.35</td>
<td>0.405</td>
</tr>
</tbody>
</table>

According to the findings in table 5, majority of respondents agreed that increase in profit is as a result of use of equity financing as indicated by a mean of 4.43 and standard deviation of 0.316. The respondents further agreed that liquidity position affect firm value hence performance and that sources of finance influences firm value as indicated by a mean of 4.46 and 4.40 respectively. Finally, majority
of the respondents agreed that increase in sales in the manufacturing firms is attributed to use of debt financing as indicated by a mean of 4.35 and standard deviation of 0.405. The study is in line with the findings by Maniagi et al., (2013) who studied the relationship between a firms capital structure and performance among a sample of 30 companies listed on NSE whose data for 5yrs period 2007- 2011 and concluded that 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.

Correlation Analysis

Table 6: Bivariate correlation

<table>
<thead>
<tr>
<th></th>
<th>Leverage</th>
<th>Equity financing</th>
<th>Liquidity</th>
<th>Retained earnings</th>
<th>Firm value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage</td>
<td>Pearson 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.657***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.630***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity financing</td>
<td>Pearson .593**</td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.622**</td>
<td>.487**</td>
<td>.588**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Liquidity</td>
<td>Pearson .606**</td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.633**</td>
<td>.580**</td>
<td>.359**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>Pearson</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.606**</td>
<td>.359**</td>
<td>.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

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

Regression Analysis

Table 7: Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.712*</td>
<td>.507</td>
<td>.487</td>
<td>1.903</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Retained earnings, Equity financing, Liquidity, Leverage

Table 8: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>361.938</td>
<td>4</td>
<td>90.485</td>
<td>24.980</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>351.356</td>
<td>97</td>
<td>3.622</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>713.294</td>
<td>101</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm value
b. Predictors: (Constant), Retained earnings, Equity financing, Liquidity, Leverage
### Test of Hypothesis

The first objective that this study sought to establish was the effect of leverage on firm value of listed manufacturing firms. This was established by determining Pearson correlations of refined data. The results showed that there was a strong positive significant correlation between leverage and firm value \((r = 0.606, P<0.05)\). Regression analysis conducted proved that there was a positively significant effect of leverage on firm value as indicated by the values \(\beta_1 = 0.316, t = 3.139, p<0.05\). Hypothesis testing conducted at 95% confidence level on leverage confirmed its significant effect on the dependent variable, hence the Null hypothesis was rejected.

The second objective sought to determine the effect of equity financing on firm value of listed manufacturing firms in Mombasa County. Pearson correlation was conducted and the findings indicated that there was also a strong significant correlation between equity financing and firm value \((r = 0.633, P<0.05)\). Regression analysis was also conducted and the results postulated that there was positively significant effect of equity financing on firm value as indicated by the values \(\beta_2 = 0.250, t = 3.092, p<0.05\). Further hypothesis testing conducted at 95% confidence level on equity financing confirmed that it had a statistical significant effect on firm value of listed manufacturing firms hence the Null hypothesis was rejected.

The third objective sought to establish the effect of liquidity on firm value of listed manufacturing firms in Mombasa County. Pearson correlation was conducted and the findings indicated that there was a moderately strong significant correlation between liquidity and firm value \((r = 0.580, P<0.05)\). Regression analysis was also conducted and the results proved that there was positively significant effect of liquidity on firm value as indicated by the values \(\beta_3 = 0.191, t = 2.758, p<0.05\). Hypothesis testing was also conducted on this variable at 95% confidence level and it was found out that liquidity had a statistical significant effect on firm value of listed manufacturing firms, hence the Null hypothesis was rejected.

Finally the study sought to investigate the effect of retained earnings on firm value of listed manufacturing firms in Mombasa County. The findings through Pearson correlation analysis concluded that there was a moderately strong significant correlation between retained earnings and firm value \((r = 0.359, P<0.05)\). Regression analysis conducted afterwards confirmed that there existed a positively significant effect of retained earnings on firm value as indicated by the values \(\beta_4 = 0.169, t = 2.012, p<0.05\). Conducting Hypothesis testing on this variable at 95% confidence interval concluded that retained earnings had statistically significant effect on firm value of listed manufacturing firms in Mombasa County, hence reject the Null hypothesis.

### Table 9: Regression coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>7.058</td>
</tr>
<tr>
<td></td>
<td>Leverage</td>
<td>.316</td>
</tr>
<tr>
<td></td>
<td>Equity financing</td>
<td>.250</td>
</tr>
<tr>
<td></td>
<td>Liquidity</td>
<td>.191</td>
</tr>
<tr>
<td></td>
<td>Retained earnings</td>
<td>.169</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm value
Table 10: Hypothesis results

<table>
<thead>
<tr>
<th>Hypothesis Statement</th>
<th>Test Model</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage</td>
<td>Y= β₁X₁+ E</td>
<td>P&lt;0.05 Reject</td>
</tr>
<tr>
<td>Equity financing</td>
<td>Y= β₂X₂+ E</td>
<td>P&lt;0.05 Reject</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Y= β₃X₃+ E</td>
<td>P&lt;0.05 Reject</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>Y= β₄X₄+ E</td>
<td>P&lt;0.05 Reject</td>
</tr>
</tbody>
</table>

CONCLUSIONS

From the research findings, the study concluded that financial leverage is vital for any profit maximizing firm. It also concluded that manufacturing firm leverage has increased over the last two years and that increasing debt will increase firm value due to the benefits obtained from the tax shield. The study further concluded that too much debt will lead to increased financial distress costs and that higher financial leverage leads to lower average cost of capital.

The researcher concluded that most manufacturing firms will take angel investors as the first option and that equity financing has positive relationship to firm value as it was found to reduce costs of financial distress. Further, it was concluded that equity financing makes firm perform better since equity holders are residual claimant they have to ensure that resources are allocated efficiently and that equity financing adds value to shareholders by way of improving capital structure of firms to an optimal level.

The study also concluded that long term debt affects future cash flows which in turn affects liquidity. Further it was concluded that the choice regarding liquidity depends on firms’ access to capital markets and perceived importance of future investments affects liquidity level of a firm. Finally the study concluded that there is a relationship between cash holdings and investment opportunity and thus firm value.

The study finally concluded that manufacturing firms prefer cash from operations as a major source of capital for re-investment and that retained earnings is preferred by manufacturing firms since it is the cheapest source of finance. The study also concluded that dividend policy affects retained earnings of a manufacturing firm. Finally it was concluded that retained earnings affect manufacturing firm value positively.

RECOMMENDATIONS

- The study recommends that the listed manufacturing firms must be careful on how much debt they take as this may undermine their return on assets. Management which is heedless on the costs and risks associated with financial leverage may lead to reduced profitability.

- Further it is recommended that the improvement in capital structure can also be achieved through the substantial equity injections from the companies’ main shareholder, a move that demonstrates their commitment to the companies. Further the study recommends that the manufacturing firms should embrace angel investors as the first option and prioritize equity financing as it was found to reduce costs of financial distress.

- The study recommends that manufacturing firms should manage their working capital efficiently so as to minimize liquidity problems which can affect smooth operations of the firms. Further it is recommended that the choice of liquidity should be based on the firms’ ability to access capital.
Finally the study recommends that manufacturing firms should first exhaust cash from operations as a major source of capital for re-investment before embracing other financing avenues. Further it is recommended that manufacturing firms should embrace retained earnings since it is the cheapest source of finance. However this should be done with great caution as retained earnings are almost never adequate for capital financing decisions.

Suggestions for Further Research
As this study had considered only capital structure decisions on firm value another study should be done on the other factors that have impact on the firm value of none-listed manufacturing firms in Kenya. This was from the fact that capital structure could predict only 50% of the firm value of manufacturing firms. A similar study should be also done in other counties in Kenya with a view to generalize the findings. A comparison will in this case enable the researcher to justify his findings based on the observation from the other counties. Finally a study should be conducted where a larger sample is used in this case to see if the model summary could be affected and see its reliability in prediction of the firm value of manufacturing firms.

REFERENCES


