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EFFECT OF DEBENTURE FINANCING ON FINANCIAL PERFORMANCE OF SUGAR FIRMS IN WESTERN KENYA

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Abstract: *Capital structure decisions should be directed towards maximization of the value of the firm and where those decisions are inappropriate the financial performance of sugar firms shall remain in jeopardy not just in western Kenya but across nations. The purpose of this study was to determine the effect of capital structure decisions on financial performance of sugar firms in Western Kenya. Specifically this study sought to determine the effect of debenture financing on financial performance.*

Design: *The research was anchored on Trade-Off and Pecking order Theories. The study used descriptive study design with both primary and secondary data sources, where 109 questionnaires were administered to different employees of sugar firms. The quantitative data were analyzed through descriptive statistics as well as Pearson correlation and linear regression analysis.*

Findings*: The study found that debenture financing influenced positively and significantly the financial performance of the sugar firms in western Kenya, statistically significant. The constructs and attributes regarding debenture financing were evaluated by respondents on a 5-point Likert scale and results revealed that security for debentures financing is required from a sugar company. The results further revealed that financing using debentures of floating charge and title deed positively influenced performance of sugar firms.*

Keywords: *capital structure decisions, debenture financing, financial performance*

Introduction

The capital structure is the overall sources of finance used by a company in financing its operations ranging from retained earnings to equity and debt finance. The major sources of capital are Loan and Equity with loan holders and equity holders as names given to investors in the company. A company capital structure is made up of its liabilities (Dybvig and Wang, 2002; and Gunasekaran, 2010) emphasizes the fact that capital structure analyses the ability of a business entity to deal additional loan or to invest in more funds after all other cash obligations have been met. The decision on capital structure therefore is directed towards the achievements of maximum shareholders wealth or value of the Firm, implying that the firm must determine the optimal Capital Structure that will maximize the value (Morris, 2001). On the other hand, profitability of a firm is as a result of the capital structure decisions that a firm comes up, this decisions whether short term or long term affect the profitability of a firm while at the same time increase the risk of the firm investment ventures. This is due to the fact that capital structure comprises of debt and equity, debt increases the risk of future earnings while enabling a firm to expect high returns (Muzir, 2011).

The capital structure decision has been built on the theory of Modigliani and Millers capital structure relevance theory, pecking order theory, trade off theory and agency cost theory and approaches. In Modigliani and Millers capital structure relevance theory, capital structure indeed matter in determining the value of a firm. The theory is based on the fact that in many jurisdictions interest on debt is an allowable expense hence tax shield. Based on this assertion, sugar firms could borrow maximally to reduce their taxes to zero if possible. Miller (1977) suggested that the presence of taxes on income may reduce the tax advantage associated with debt financing. This is because sugar firms could save corporate taxes by raising the debt to equity ratio, but investors would pay additional personal tax and, therefore, require higher returns to compensate for this fact and the higher associated risks. Modigliani and Millers proposition was therefore modified in 1977 to incorporate taxes but with the same argument that capital structure indeed matters. Graham and Harvey (2001) also posit that a typical firm could double tax benefits by issuing debt until the marginal tax benefit begins to decline. This implies that it is not therefore possible for a sugar firm to have a 100% debt financing.

According to Breuer and Gürtler (2008), since different countries have different tax laws, the entire proposition on tax shield relevance could lose its validity if for instance a country changes its tax laws to deny advantage on interest on debt. A case in point is Kenya where firms are subject to thin capitalization status. A firm is said to be thinly capitalized if it is predominantly foreign controlled or where the debt outweighs equity by over three times (Blouin, Huizinga, Laeven & Nicodème, 2014). Multinational groups in particular are often able to structure their financing arrangements to establish a tax-efficient mixture of debt and equity designed to evade tax through loopholes in international transfer pricing rules (Blouin, Huizinga, Laeven & Nicodème, 2014). To deter this illegality, any interest on excess debt does not enjoy tax shield implying that debt has obviously a maximum limit of tax advantage in a financial structure. The assertion of 100% debt financing is therefore not true.

The relevance of this theory to the current study is therefore anchored on propositions if capital structure decision to be taken by the sugar firms matter, then taxes and default risk could be good places to look for reasons why it matters (Miller, 1988). Understanding these propositions also helps the sugar firms to distinguish between logical and illogical reasons for particular financing decisions, and that the fundamental message is that any combination of finance sources is as good as another. No matter how many sources of finance are used, the resulting capital structure is just another way of dividing the net cash flow between the people who have contributed the capital that sustains the company's operations (Myers, 2001). Modigliani and Millers assertion is however only true in theory since in practice there exists bankruptcy and agency costs which will even increase as debt increases in a firm (Brigham & Gapenski, 1996). This therefore introduces trade off theory.

The tradeoff theory gives an assumption that the management of a company will always choose how much debt and equity to use in financing the operations of the entity and that this is obtained by balancing off the cost and benefits associated with each source of finance. According to the theory, firms should select an optimum capital structure that balances the advantages and disadvantages of both debt and equity. The theory guided the study in establishing whether sugar firms in Western Kenya have a well-known way of choosing optimal capital structures that balances the benefits and disadvantages of various capital structure decisions which are used to finance the business activities. The theory further guided the study in establishing if the financial strength and performances of sugar firms is influenced by their preferred source of financing either debts or equity. Additionally, the theory guided in establishing if managers of the sugar firms consider interest tax shied and net present value in their borrowing decisions.

The pecking order theory which is also referred to as the information asymmetry theory was proposed by Myers in 1984. According to Myers and Majluf, (1984), firms normally fund new investments, firstly with accumulated profits, then debt, and finally with the issue of new equity. The pecking order theory suggests that firms have a particular way of choosing the kind of capital they use to finance their business (Myers and Majluf, 1984). The pecking order theory guided the study in establishing if the sugar milling firms in western Kenya obey the dictates of the theory of using accumulated profits followed by external debt and finally by issuing new equity in their financing decisions when financing the business operations. The theory in turn explained the factors informing decisions on financing like risks, control and bankruptcy.

Debenture Financing

In business finance, a debenture is a medium to long-term debt instrument used by large business organization to borrow money, at a fixed rate of interest. The legal term "debenture" originally referred to a document that either creates a debt or acknowledge it, but in some countries the term is now used interchangeably with bond, loan stock or note (Malm and Roslund, 2013). A debenture is thus like a certificate of loan or a loan bond evidencing the company's liability to pay a specified amount with interest. Although the money raised by the debentures becomes a part of the company's capital structure, it does not become share capital. Senior debentures get paid before subordinate debentures, and there are varying rates of risk and payoff for these categories.

Debentures are freely transferable by the debenture holder. Debenture holders have no rights to vote in the company's general meetings of shareholders, but they may have separate meetings or votes e.g. on changes to the rights attached to the debentures (Machel, 2013). The interest paid to them is a charge against profit in the company's financial statements. According to Demirgüç, (2006) debenture can be categorized in terms of secured or unsecured debentures, redeemable or irredeemable debentures and convertible debentures. Convertible debentures are a type of debentures that can be converted into equity shares of the company. Non-convertible debentures are the type of debentures that cannot be converted into equity shares of a business organization.

On the other hand, redeemable debentures carry a specific date of redemption on the certificate. The business organization is legally bound to repay the principal amount to the debenture holders on that date. On the other hand, irredeemable debentures, also known as perpetual debentures, do not carry any date of redemption (Becker and Ivashina, 2013).

Debenture Financing and Financial Performance

The bond is the most common type of debt instrument used by private corporations and by governments. An investor loans a sum of money in return for the promise of repayment at the specified maturity date (Becker and Ivashina, 2013). Usually, the investor also receives periodic interest payments over the duration of the bond's term. In the investing world, bonds are generally considered to be a relatively safe investment. Highly rated corporate or government bonds come with little perceived default risk (Demirgüç, 2006). However, each bond, including those issued by government agencies or municipalities, will carry an individual credit rating.

Machel (2013) studied the effects of bond issues on the stock price performance of firms listed at NSE. The objective of his study was to establish the effect of bond issues on the performance of the stock price of firms listed at the Nairobi Securities Exchange. A descriptive study was carried out using the event study methodology. The target population for this study was all the companies listed at the Nairobi Securities Exchange that have issued debt, in the form of bonds or notes. The study was a census of the six listed companies that met this criterion. The market model was used to estimate the market returns which were used to calculate the abnormal returns of each company’s stock on every trading day. The findings obtained were the result of the parametric t-test carried out at a 5% significance level, which revealed outcomes that pull in either direction with regard to the objective of this study, that is where bond issues have a positive effect on the share price of the issuing company and where the bond issues have a negative effect or no effect at all. However, the reviewed study only looked at the effects of bond issues on the stock price performance of the general firms listed at NSE and not on specifically sugar firms in Western Kenya. This therefore limits the generalization of its findings for the present study. The present study therefore looked at the effects of debenture financing on the performance of sugar firms in western Kenya to fill this gap.

Malm and Roslund (2013) investigated the bond-to-total debt ratio and its impact on firms' performance. The study was conducted on the Norwegian market, within which a well-developed and mature bond market was established. So as to check the importance of the correlation between the ratio and performance, a quantitative study was conducted through a multiple correlation analysis. The results were consistent, as none of the tests performed were able to offer vital correlations for the relationship. They therefore indicated that, within the Norwegian context, the bond-to-total debt ratio failed to seem to impact firms' performance. The tests showed an insignificant relationship between the bond-to-total debt ratio and firm performance. This result indicated that practitioners among the sector ought not to worry regarding whether or not bonds can impact their performance. However, the reviewed study by Malm and Roslund (2013) looked at the bond-to-total debt ratio and its impact on firms' performance, with more emphasis on the general firms in Kenya, and not on specifically sugar firms in Western Kenya. This limits the generalization of its findings for the present study. The present study therefore looked at the effects of debenture financing on the performance of sugar firms in western Kenya to fill this gap.

Becker and Ivashina (2013) in their study reaching for yield in the bonds and debentures market noted the tendency by investors to buy riskier assets in order to achieve higher yield. This they believed to be a very important issue contributory to the credit cycle. They conducted a close study of this development within the bond market. The study indicated that insurance corporations, the biggest institutional holders of company bonds, reach for yield in choosing their investments. Reaching-for-yield existed each within the primary and also the secondary market, and was strong to a series of bond and issuer controls, as well as bond liquidity and period, and issuer fixed effects. This behavior is connected to the trade cycle, being most pronounced during economic expansions. It is also more pronounced for companies with poor corporate governance and that restrictive capital requirement is more binding. A comparison of the ex-post performance of bonds acquired by insurance companies showed no outperformance, but higher systematic risk and volatility. In general, bonds and debentures are considered safe if unspectacular investments with a guaranteed rate of return. Generally, professional financial advisors encourage their clients to keep a percentage of their assets in bonds and to increase that percentage as they approach retirement age. However, the study by Becker and Ivashina (2013) on assessing the yield in the bonds and debentures market focused on only the behavior of the investors in the market, with little emphasis on how such capital financing influence financial performance of the firms particularly the sugar firms in western Kenya. The present study therefore filled this gap by looking at the effects of debenture financing on financial performance of sugar firms.

Statement of the Problem

The sugar industry plays a significant role in socio-economic development of the Kenyan economy by directly supporting 200,000 small-scale farmers who supply over 85 percent of the cane milled by the sugar companies. In fact, an estimated six million Kenyans derive their livelihood directly or indirectly from the sugar industry

(KSB, 2010). However, most if not all of the sugar firms in western Kenya are facing myriad of problems that hurt their profitability, sales volume and financial leverage (Masinde, & Makori, 2014).

In as much as there are a number of studies on Sugar Firms, the effect of capital structure decisions on the financial performance of sugar firms in western Kenya remains unclear. This implies that there is a lacuna of evidence on the relationship between capital structure decisions and financial performance of sugar industries in Kenya. It is against this gap that the present study seeks to investigate the effects of capital structure decisions on financial performance of sugar firms in Western Kenya.

Purpose of the Study

The purpose of the study is to determine the socio-economic factors on women's participation in Rotating Savings and Credit Associations in Kabondo Kasipul Sub County, Homabay County.

Objective of the Study

The general objective of this study was to determine the effect of capital structure decisions on financial performance with a specific objective to determine the effect of debenture financing on financial performance of sugar firms in Western Kenya.

Research Methodology

This study was anchored on pragmatic knowledge which focuses on the research problem which in this study was financial performance of selected sugar firms in Western Kenya. The pragmatic perspective in employing "what works" used diverse approaches, give primacy to the importance of the research problem and question, and values both objective and subjective knowledge. The study employed a descriptive study approach, with quantitative analysis methods. The study area covered Western Kenya, comprising of Nyanza and Western provinces. Nyanza province has latitude of 0°10'S and longitude of 34°15'E while western province has latitude of 15.9455° S and longitude of 23.3824° E. Target population was the 11 (eleven) sugar manufacturing companies in western Kenya and their respective employees in different departments. Given the small number of 11 firms in the Sugar industry in Western Kenya, which of course do not warrant sampling to be undertaken, a probability study was conducted to capture all the eleven (11) sugar manufacturing firms operational in Western Kenya. Therefore, in this research, all the 11 Sugar manufacturing companies and their various employees in Western Kenya were defined as the target population from where the sample sizes for the respondents were drawn.

Results and Discussions

Debenture Financing and Financial Performance of Sugar Companies

The study objective examined the effect of debenture financing and financial performance of sugar companies. The constructs and attributes regarding debenture financing were evaluated by respondents on a 5-point Likert scale and results are presented as in table 1 below.

Table 1: Debenture Financing in Sugar Companies

Debenture Financing	**SD**	**D**	**N**	**A**	**SA**	**Mean**	**STD**
Security for debentures financing is required from a sugar company	7 7.2%	12 12.4%	8 8.2%	39 40.2%	31 32.0%	**3.773**	**1.015**

Redeemable debentures are used as a financing mechanism in sugar companies	4 4.1%	9 9.3%	5 5.2%	43 44.3%	36 37.1%	**4.010**	**0.895**
Debenture financing are convertible to equity shares and ownership	2 2.1%	9 9.3%	19 19.6%	38 39.2%	29 29.9%	**3.856**	**0.803**
Debentures are rated in financing the sugar companies	0 0.0%	2 2.1%	5 5.2%	42 43.3%	48 49.5%	**4.402**	**0.609**
The interest rate of debentures are affordable to sugar companies	13 13.4%	24 24.7%	12 12.4%	28 28.9%	20 20.6%	**3.186**	**1.149**

The results in table 1 regarding statement on security for debentures financing is required from a sugar company results showed that among the participants, 39(40.2%) agreed, while 31(32.0%) strongly agreed. However, 12(12.4%) of the respondents showed disagreement with the statement, 8(8.2%) remained neutral while 7(7.2%) indicated strong disagreement. This gives a total of 70(72.2%) of respondents who believe that their sugar firms were expected to provide security for debentures financing for their sugar companies (Mean = 3.773, SD = 1.015). Only 19(19.6%) indicated otherwise. On the statement concerning redeemable debentures are used as a financing mechanism in sugar companies, 43(44.3%) of the respondents agreed with the statement, 37.1% strongly agreed, while 5(5.2%) remained neutral. However, 9(9.3%) disagreed with the statement, while 4(4.1%) strongly disputed the statement. This shows that majority of the respondents expressed positively to the statement, (Mean = 4.010, SD = 0.895), implying that most of the sugar firms in Western Kenya utilised redeemable debentures as a financing mechanism for their firms. On the statement regarding debenture financing as convertible to equity shares and ownership, 38(39.2%) of the total respondents agreed with the statement, 29(29.9%) strongly agreed to the statement, while 19(19.6%) remained neutral. However, 9(9.3%) disapproved the statement with 2(2.1%) strongly disagreeing with the statement. Overall, majority of the respondents at 67(69.1%) (Mean = 3.856 and SD = 0.803), confirmed that debenture financing of most of the sugar firms in western Kenya were convertible to equity shares thus encouraging prospective investors to engage in debenture financing to sugar firms. Regarding the debentures rating in financing the sugar companies the majority of the respondents 48(49.5%) expressed strongly the concept, 42(43.3%) of the total respondents agreed with the statement, while only 2(2.1%) of the total respondents disagreed and only 5(5.2%) of the total respondents remained neutral on the statement. This shows that majority of the respondents at 90(92.8%) response rate (Mean = 4.402, SD = 0.609) expressed positively about the concept of debenture rating and its use in the sugar firms in Western Kenya. Regarding the concept of debenture interest charge, majority of the respondents 28(28.9%) agreed that the interest rate of debentures are affordable to sugar companies; while 20(20.6%) of the total respondents strongly agreed, 12(12.4%) of the total respondents were neutral.

The study further established the type of debentures used in the sugar sector and their effect size on the performance of sugar companies in western Kenya. Factor loading analysis was used. The information obtained from the field is presented as in the table 2 next page.

The factor loading for indicators of the effectiveness of the debenture financing indicators and financial performance of the sugar companies was established.

Table 2: Factor loading for the Debenture financing indicators and financial performance of the sugar companies.

Debenture type financing indicator	**Qualitative information (Responses from the interviews)**	**Factor loading effect on performance of Sugar Companies**
Debentures with floating charge and title deed (Unsecured Debentures)	The respondents expressed that financing using debentures of floating charge and title deed positively influenced performance of sugar firms.	**0.869 weight loading** This loading factor weight reveal that the indicator of debenture financing contributes greatly to financial performance of sugar companies in western Kenya, through fairly affordable floating interest charge that minimizes the cost of financing sugar companies.
Debentures with Fixed Charge (Secured Debentures)	The respondents revealed that fixed charge debentures are fair in terms of the cost of financing and therefore their minimization results in improved financial position of sugar companies.	**0.741 weight loading** The effect of this debenture on financial performance of sugar companies is fairly high
Convertible Debentures	The respondents revealed that this kind of financing in sugar firms minimizes the cost of finance and thus improving on the liquidity of the sugar company.	**0.683 weight loading** The factor loading of this kind of debenture indicate that it has a positive effect on the financial performance of sugar companies through the cost of financing capital.

Summary of the findings

The study established the effect of debenture financing and financial performance of sugar companies. The constructs and attributes regarding debenture financing were evaluated by respondents on a 5-point Likert scale and results revealed that security for debentures financing is required from a sugar company 39(40.2%) of the total respondents agreed (Mean = 3.773, SD = 1.015). Regarding the redeemable debentures as a financing mechanism in sugar companies, 43(44.3%) of the total respondents agreed (Mean = 4.010, SD = 0.895), implying that most of the sugar firms in Western Kenya utilised redeemable debentures as a financing mechanism for their firms. Further, on debenture financing convertibility to equity shares and ownership, 38(39.2%) of the total respondents agreed (Mean = 3.856 and SD = 0.803), this confirmed that debenture financing of most of the sugar firms in western Kenya were convertible to equity shares thus encouraging prospective investors to engage in debenture financing to sugar firms. Regarding the debentures rating in financing the sugar companies the majority of the respondents 48(49.5%) of the total respondents expressed strongly and positively to the concept (Mean = 4.402, SD = 0.609). Moreover on the concept of debenture interest charge, majority of the respondents 28(28.9%) agreed that the interest rate of debentures were affordable to sugar companies.

Factor loading analysis on the indicators of the effectiveness of the debenture financing indicators and financial performance of the sugar companies. The results revealed that financing using debentures of floating charge and title deed positively influenced performance of sugar firms with 0.869 weight loading. This loading factor weight reveal that the indicator of debenture financing contributes greatly to financial performance of sugar companies in western Kenya, through fairly affordable floating interest charge that minimizes the cost of financing sugar companies. Moreover for Debentures with Fixed Charge, the respondents revealed that fixed charge debentures are fair in terms of the cost of financing and therefore their minimization results in improved financial position of sugar companies with 0.741 weight loading. The effect of this debenture on financial performance of sugar companies is fairly high.

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