

**'AN EVALUATION OF LONG-TERM SOURCES OF CAPITAL AMONG
GOVERNMENT - OWNED SUGAR COMPANIES IN KENYA'**

PRESENTED BY:

LINGULI MICHAEL MURIITHI

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STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the University of Nairobi for academic credit.

Signed: Michael Muriithi

Date: 14.11.2010

MICHAEL MURIITHI LINGULI (D61/70827/2009)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: Otieno Luther Odhiambo

Date: 14.11.2010

Otieno Luther Odhiambo

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DEDICATION:

I, MICHAEL MURIITHI, dedicate this piece of work to my dear Dad, Robert Linguli. Having worked in one of the Government Owned Sugar Companies, you always had your Family at heart and you took us to school and encouraged us to invest in education to achieve financial independence in the future. Like every other Dad in Kenya, you always were Number one in your schooling days. Today, having retired, you still are number one to us!! ASANTE SANA Dad.

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Although it will not be possible to individually thank all the well-wishers who really made this a success, I do pass my special acknowledgement to my Dear Wife Rachael at Chemelil Sugar, Children Michael, Mark and 'kapii' David Muriithi. To my Mum, brothers and sisters, you really were an encouragement. To my Colleagues at Siaya Institute of Technology, your suggestions, encouragement and criticisms were invaluable. All friends and relatives, feel you are appreciated and acknowledged in this page.

ABBREVIATIONS:

APM – Arbitrage Pricing Model

APT – Arbitrage Pricing Theory

CAPM – Capital Asset Pricing Model

COMESA – Common Market for Eastern and Southern Africa

EPA – Economic Partnership Agreement

EPZ – Export Processing Zone

EU – European Union

GDP – Gross Domestic Product

ISO – International Sugar Organization

KESREF – Kenya Sugar Research Foundation

KSB – Kenya Sugar Board

SDF – Sugar Development Fund

SONY – South Nyanza sugar Company.

US \$ - USA Dollar

WACC – Weighted Average Cost of Capital

WTO – World Trade Organizations

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ABSTRACT

Government owned sugar companies have been facing financial problems as reflected in their current financial statements. This has been attributed to the high costs of production and lack of long-term finances to modernize the factories to increase productivity and turn-around the firms.

The purpose of the study was to evaluate the long term sources of capital amongst the Government-owned Sugar companies and identify the risks associated with the identified Sources. The research design used was a census survey. The population comprised the five government owned Sugar firms in Kenya which were Muhoroni, Chemelil, Nzoia, SONY and Mumias Sugar Companies.

The findings of the research showed that the SDF Loan from KSB was the most relied source of long term financing with Muhoroni relying wholly on this source. Preference for the SDF loan was due to the low interest rate and its availability to all firms regardless of reported financial performance.

To turn around the industry, there is need to source for cheap long-term financing. With privatization of Muhoroni, Chemelil, Nzoia, and SONY Sugar being awaited, it will be necessary to re-structure the Debt-Portfolio. SDF loans is the main contributor to the Non-Performing Loans owed by these firms . The restructuring of the debt portfolio is possible since the SDF Loan is disbursed through the Kenya Sugar Board which is also a Government organ. This is possible when such Debts are converted into shares to attract a good market price of the shares upon issue.

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CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND OF THE STUDY

World sugar companies have been devising means to raise capital in order to increase production, expand their product base, remain competitive and increase revenues. For example, (at the time of this study), a joint venture between Cargill inc., imperial sugar co. and Louisiana sugar growers were setting up Louisiana sugar refining plant at Gramercy at a cost of US \$ 190 million. This project was to give rise to one of the largest sugar refineries in USA and was to be financed partially with US \$ 100 million in special bonds issued for projects in areas hit by the 2005 hurricanes. In sri lanka, five new sugar factories were being set up using a seven year loan from India for machinery and other Equipment, (ISO, Feb, 2010). In Brazil, the world's largest Ethanol and sugar producer, cosan ltd, had invested nearly US \$ 1 Billion to acquire the US based ExxonMobil's Esso unit in 2008 thereby increasing its fuel distribution business and subsequently its revenues,(ISO, Feb 2010).

Similar trends of expansion and diversification are evident in other sugar producing countries. Major sugar producing economies notably Brazil, Mauritius, and Egypt were diversifying to other enterprises e.g. Ethanol and power co-generation, (KSB, strategic plan 2009-2014). To achieve this end, sugar firms have had to source for additional capital.

Kenya is a signatory to the East African Community Customs Union, COMESA, WTO, and Economic Partnership Agreement (EPA) with the European Union (EU). These have the potential to precipitate stiff competition for the local sugar industry. At the end of February, 2012, for example, the safeguard measures granted to Kenya limiting the duty free sugar imports from the COMESA member states will come to an end. This time-line was given to enable Kenya restructure its industry to compete regionally, (COMESA Agreement, 2008).

1.1.1 LONG TERM SOURCES OF CAPITAL

Long-Term sources of capital refer to 'permanent financing'. It is more associated with the need for fixed assets such as property, manufacturing plants, and equipment where the assets will be used in the business for several years. A series of recurring, short term needs could often be more realistically viewed as along term need. The additional of long term capital should eliminate the short term problems and the crises that could occur if capital were not available to meet a short term need, (Pandey, 2005).

According to Vanhorne and Wachowicz,(2001) the major long term sources of capital are long-term debt(bonds and term loans), preferred stock and common stock(ordinary shares). Bonds can be issued on either an unsecured or secured basis (asset backed). Debentures, Subordinated debentures and income bonds form the major categories of unsecured bonds, whereas mortgage bonds represent the most common type of secured long-term debt instrument.

Term loans are always secured sources of long term debt obtainable directly from banks and financial institutions, (Pandey, 2005). According to Vanhorne and Wachowicz(2001), preferred stock is a hybrid form of financing, combining features of debt and common stock while the common stockholders of a company are its ultimate owners. They therefore assume the ultimate risk associated with ownership.

In Kenya, long-term financing to sugar firms may be done through the Sugar Development Fund (SDF) which operates under the KSB which is the Sugar regulatory body in the country. Millers may access this loan for factory development rehabilitation, cane development and maintenance and infrastructure development, (KSB, SDF Operations Manual,2009).

1.1.2 SUGAR INDUSTRY IN KENYA

The development of the sugar industry in Kenya started with private investments at Miwani in 1922, followed by Ramisi sugar company in 1927,(KSB, Strategic plan 2009 -2014). Despite being the first established government owned sugar companies, they have since closed operations. Muhoroni Sugar Company was the third established sugar parastatal in1966 and is currently under receivership, (KSB, Service charter, 2010).

There were eight operational Sugar Factories in Kenya, as at the time of this study. Kibos Sugar, West Kenya and Soin Sugar Companies are private firms while the Government had majority shareholding in Chemelil, Muhoroni, Nzoia, and SONY Sugar companies,(KSB Service Charter,2009). The eighth Sugar company, Mumias Sugar Company was partly government owned at 20% of the total shares, (Annual financial statements, 2009).

The establishment of the Parastatals was driven by a national desire to accelerate social-economic development and address regional economic imbalances, a desire which was expressed in the sessional paper no. 10 of 1965 on African Socialism and its Application to Planning in Kenya. Despite these investments, self sufficiency in Sugar remains elusive over the years as consumption continues to outstrip supply. Total Sugar production grew from 368,970 tonnes in 1981 to an all time high of 520,404 tonnes in 2007. Domestic Sugar consumption increased even faster, rising from 324,054 tonnes in 1981 to 741,190 tonnes in 2007. Consequently, Kenya has remained a net importer of Sugar with imports rising from 4000 tonnes in 1984 to 230,011 in 2007. The country's annual deficit on average is 200,000 tonnes, (Year book of Sugar Statistics, 2007).

The performance of the industry continues to face several challenges which include; liberalization under the COMESA and WTO protocols, high costs of production, poor state of some factories, poor state of roads, inadequate research and insufficient finance,(KSB, Strategic plan).The industry must therefore seek additional long term capital to address the above challenges. Improvement of the road infrastructure to reduce costs of transportation of cane to the mills diversifying to avoid over-reliance on sugar as the only product of value from sugarcane, investing more into research and substituting old machines with modern machines will require long-term capital. This will make the sugar industry to remain relevant and achieve the National Vision 2030 of increasing sugarcane production and productivity, increasing sugar production and diversifying the industry product base through value addition.

Domestic production of sugar saves the country in excess of US \$ 250 million in foreign exchange annually. Sugar industry has been contributing about 1.8% p.a. to the National GDP, (KSB, Strategic plan, 2009-2014). The industry supports over six million Kenyans(about 16% of Kenyan population) and is a major source of income for over 250,000 small scale farmers who account for over 85% of cane supply,(EPZ Authority,2005).

1.2 STATEMENT OF THE PROBLEM

According to the Kenya Development Agenda, the manufacturing sector is growing but is grappling with the challenges of high input costs(raw materials, labor, and energy); low productivity levels(low capital productivity); inefficient flow of goods and services(transport); unfavorable business environment(heavy regulation, weak trade agreements, lack of rigorous legal enforcement, insecurity and limited access to capital). The sugar industry in Kenya continues to face several challenges. Production of cane in Kenya is expensive owing to high altitude and rain-fed agriculture, poor crop husbandry, high cost of transportation and farm operations, low technology adoption, inadequate research and expensive farm inputs. In addition, poor recoveries arising from aged and poorly maintained equipment, high cost of finances and punitive tax regime makes sugar production expensive, (KSB, Strategic plan 2009-2014).

Miwani, Ramisi, and Muhoroni Sugar Companies were the first Government- owned sugar firms established in Kenya in 1922, 1927 and 1966 respectively. Miwani and Ramisi have since closed operations while Muhoroni sugar co. is currently under receivership at the time of the study. Despite the tax benefits associated with Debt, the Government-owned mills continue to operate under low profits or losses. As at 31st December, 2007, these firms were debt ridden to the tune of ksh.58 billion, (Year book of Sugar statistics, 2007). Privatization of these firms has been proposed to inject capital to revamp this industry. Positive results were registered by Mumias Sugar Company after privatization in 2001 which included increased productivity, increased revenues and diversification into power co-generation for strategic positioning. West Kenya Sugar Company which started off as a private investment has consistently posted profits, (Year book of Sugar Statistics, 2007). The prerequisite for privatization is the clearing up of the debt portfolio, (KSB, Strategic plan 2009- 2014).

Since the government-owned sugar firms are heavily indebted with exception of Mumias, raising long term capital is a problem owing to poor investor 'appetite'. To remain relevant and competitive into the future, Government-owned firms must seek cheaper and less risky long term sources of capital to counter the industry challenges and achieve sustainable growth. The sustainable development of the sugar industry is pegged on diversification and value addition to the products of the sugar industry, all of which are capital intensive.

1.3 OBJECTIVES OF THE STUDY

The objectives of the study are:

- a) To evaluate the sources of long-term capital available to Government-owned sugar companies in Kenya.
- b) To identify the risk(s) associated with various sources of long-term capital available to Government-owned sugar firms in Kenya.

1.4 IMPORTANCE OF THE STUDY

The sugar industry faces several challenges which include high cost of production and lack of adequate finance. The COMESA safeguard measures will come to an end in February, 2012 paving way for importation of duty-free sugar into the country threatening survival of the local firms. Restructuring the industry in order to increase production, lower costs of production, and to diversify into other products will require additional capital. This study will therefore analyze the different sources of long term capital. The likely beneficiaries of this study include Kenya Sugar Board which is the body charged with the responsibility of regulating, developing and promoting the Kenyan Sugar Industry, Sugar Companies' management in developing their financial plans and academicians interested to conduct research on the sugar companies.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter gives a comprehensive review of long term sources of capital used by companies in Kenya, a review of the methods of cost of capital determination, and the capital structure theories.

2.2 LONG TERM SOURCES OF CAPITAL

The long term sources of capital are for 'permanent financing'. This includes the ordinary (common stock), the preference shares, debentures and the loan capital,(Pandey,2005). Ordinary shares provide ownership rights to invest and are the ultimate owners who assume the ultimate risk associated with ownership, (Vanhorne and Wachowicz, 2001).

Preference stock is a hybrid form of financing, combining features of Debt and Common stock. It is a senior security as compared to ordinary shares since it has a prior claim on the company's income in the sense that the company must first pay the preference dividend before paying ordinary dividend, (Pandey, 2005).

A Debenture is a long term promissory note for raising loan capital. The debenture holder becomes a general creditor of the firm in the event of a company liquidation because debentures are not secured by any specific company property, (Vanhorne and Wachowicz,2001). Loan capital refers to debt obtained directly from the banks and financial institutions. Firms in emerging economies heavily rely on commercial banks for their capital requirements because stock markets and bond markets are not as developed as they are in developed countries.

According to Murugu(1998), most financial institutions collapsed due to non- performing loans(NPLs).Greuning and Bratonovic(2000) describe non-performing loans (NPLs) as those assets that are no longer generating income. NPLs in general terms refer to bad debts, whose recovery is highly doubtful, because they are not serviced as required, (CBK, 1997).

NPLs have been cited as the primary cause of bank's failure in Kenya. It is indicated that between 1984 and 1997, there was a total of 29 bank failures reported. Though this trend has been reversed, NPLs continue to be a major challenge among banks, (Njuguna and Ngugi,2000).

Most operating sugar companies were posting low profits or losses in their financial statements (Year book of statistics, 2009). Otieno and Simon, (1999) found firm profitability of importance to Bank Lending Officers (BLOs). This study assessed the extent to which these sugar companies can access loans from the financing institutions.

2.3 COST OF CAPITAL

The Cost of Debt is usually less than the cost of alternative sources of long term capital primarily because of the tax deductibility of interest. The higher the rate of corporation tax, the greater the tax benefits in having Debt finance when compared to other long- term sources, (Pandey 2005).

There are various methods of calculating the cost of equity i.e. the Gordon's dividend valuation model, CAPM Model and the APT Model. The dividend valuation Model is based on a number of assumptions, (Pandey, 2005). The CAPM model provides a framework to determine the required rate of return on an asset and indicates the relationship between risk and return. This is the objective method of calculating the risk-adjusted cost of capital, (Sharpe and Alexander, 1989).

CAPM suffers some draw backs which includes; First, it is based on unrealistic assumptions e.g a short-term, highly liquid government security is considered as a risk-free security. It is unlikely that the government will default, but inflation causes uncertainty about the real rate of return, (Pandey, 2006). Secondly, Empirical results on CAPM have given mixed results. There is need to establish that beta is able to measure the risk of a security and that there is significant correlation between beta and the expected return. Earlier tests showed there was a positive relation between returns and betas. Further these results revealed that returns were also related to other measures of risk, including firm-specific risk. In subsequent research, some studies did not find any relationship between betas and returns. On the other hand, other factors such as size and the market value and book value ratios were found as significantly related to returns, (Fama, E.F and French, R. R., 1992).

Thirdly, Beta is a measure of a security's future risk and investors do not have future data to estimate beta. They can only estimate beta based on historical data. Investors may use historical

beta as the measure of future risk only if it's stable over time. Most research has shown that the betas of individual securities are not stable over time, (Pandey, 2005),

CAPM model of Sharpe is a major analytical tool for explaining relationship between expected return and risk. The competing model of CAPM is a three factor model of Fama and French (1992). Both are linear regression based models used for the calculation of expected return.

Due to the limitations of CAPM, the Arbitrage Pricing Theory (APT) was developed as an alternative approach for estimating expected returns, (Ross, R.A 1976). The APT, out of which, APM arises is a multi-factor model. The APT states that the expected return on an investment is dependent upon how that investment reacts to a set of individual macroeconomic factors, (Steve Lumby and Chris Jones, 2003).

The APT also suffers a major drawback. The factors to be used differ from industry to industry and there are no universally agreed upon factors. For example, Chen, L Roll and Ross (1986) in a study carried out in the USA identified five factors to use in the APT model as industrial production, changes in default premium, changes in the structure of interest rates, inflation rate and changes in the real rate of return.

In a separate study, Elton et al, (1994) used APM to derive the cost of capital for electric utilities for the New York state utility commission. They specify the factors as unanticipated changes in the term structure of interest rates, the level of interest rates, the inflation rate, the GDP growth rate, changes in foreign exchange rate and a composite measure they devise to measure changes in other macro-economic factors. The APT Theory uses different factor identification procedures which results to inconsistency and introduces subjectivity. The choice of the method to be used to calculate the cost of equity will therefore be a matter of management decision and will differ from industry to industry or even within firms in the same industry.

The weighted Average Cost of Capital (WACC) is the weighted average of the costs of all individual components of the capital structure. Only those projects with a return above this WACC should be appraised. The argument in favor of WACC is the pool of funds? Which states that cash enters a general "pool" of capital within the company, and it is from this pool that investments are drawn, (Steve Lumby and Chris Jones, 2003).

2.4 CAPITAL STRUCTURE OF FIRMS

The various sources of capital are related to each other. The firm's decision to use debt in a given period reduces its future debt capacity as well as increases risk of shareholders. The shareholders will require a higher rate of return to compensate for the increased risk. Similarly, the firm's decision to use equity capital would enlarge its potential for borrowings in future. Over the long-run, the firm is expected to maintain a balance between debt and equity. The mix of debt and equity is called the firm's capital structure. Because of the connection between the sources of capital and the firm's desire to have a target capital structure in the long-run, it is generally agreed that the cost of capital should be used in the composite, overall sense i.e. in terms of the WACC, (Barges, A 1963).

There are several conflicting theories that have been brought forth to explain the relationship between capital structure and the value of the firm. These include the following:

2.4.1 Net Income approach. (NI)

According to this approach both the cost of debt and the cost of equity are independent of the capital structure; they remain constant regardless of how much debt the firm uses. As a result, the overall cost of capital declines and firm value increases with the debt. This approach has no basis in reality; the optimum capital structure would be 100% debt financing under NI approach, (Solomon Ezra, 1959).

This theory concludes that K_e and K_d are affected by the business risk. However, this theory agrees that K_d will always be lower than K_e . This is because interest on the debentures is tax allowable expense while dividends on the ordinary shares are not allowable taxation expense.

2.4.2 The Traditional approach

The traditional view emerged as a compromise to the extreme position taken by the NI approach, (Solomon Ezra, 1963).

The approach argues that moderate degree of debt can lower the firm's overall cost of capital and thereby, increase the value of the firm. The initial increase in the cost of equity is more than offset by the lower cost of debt. But as debt increases, shareholders perceive higher risk and the cost of equity rise until a point is reached at which the advantage of lower cost of debt is more than offset by more expensive equity.

This theory states that:

- I. The cost of debt will always be lower than the cost of equity.
- II. The increased use of debt in the capital structure does not affect the cost of equity up to a given relevant range, however, beyond the relevant range; the cost of equity will increase with the increased use of debt capital.

Basically, the traditional approach shows that management can increase the total value of a firm through judicious use of financial leverage.

The optimal capital structure then becomes that capital structure that minimizes the firm's cost of capital and thereby maximizing the value of the firm.

2.4.3 Net operating income approach theory (NOI)

This is a theory of capital structure in which the weighted average cost of capital and the total value of the firm remain constant as the financial leverage is changed.

According to this theory, the capital structure is irrelevant since it does not affect the weighted Average cost of capital, (WACC) and the value of the firm is calculated as follow:

Value of the firm = Operating income / WACC

$WACC = (W_e * K_e) + (W_d * K_d)$

According to this theory, the cost of equity is affected by the business and financial risk; however, the cost of debt is affected only by the business risk. As a result of the increase in the gearing, the financial risk of the company will increase and the equity holders will demand a compensation for the increased financial risk. This compensation comes from the use of the cheaper cost of debt.

Since the WACC remains constant, the risk level of the company does not change since the equity shareholders have already been compensated for the extra financial risk undertaken.

2.4.4. Modigliani and Miller Theorem (M&M Theory).

This was proposed by Franco Modigliani and Merton Miller. It forms the basis of modern thinking on capital structure. The theorem states that in a perfect market, how a firm is financed is irrelevant to its value.

This provides the base with which to examine real reasons why capital structure is relevant, that is, a company's value is affected by the capital structure it employs. M&M assume a perfect market, (No transaction or bankruptcy cost, perfect information): firms and individuals can borrow at the same time interest rate; no taxes; and investment decision aren't affected by financing decisions.

Modigliani and Miller made two findings (propositions) under these conditions:

- i) The first proposition was that the value of a company is independent of its capital structure.
- ii) The second proposition stated that the cost of equity for a leveraged firm is equal to the cost of equity for an unleveraged firm, plus an added premium for financial risk. That is, as leverage increases, the burden of risk is shifted between different investors' classes, total risk is conserved and hence no real value is created.

Their analysis was extended to include the effect of taxes and risky debt. Under a classical tax system, the tax deductibility of interest makes debt financing valuable; that is, the cost of capital decreases as the proportion of debt in the capital structure increases. The optimal structure then would be to have no equity at all.

2.4.5 Pecking order theory

In Myers, (1984) and Myers and Majluf's, (1984) pecking order model, there is no optimal capital structure. Instead, because of asymmetric information and signaling problems associated with external financing, firm's financing policies follow a hierarchy, with a preference for internal over external financing, and for debt over equity. A strict interpretation of this model suggests that firms do not aim at a target debt ratio. Instead, the debt ratio is just the cumulative results of hierarchical financing over time. Original examples of signaling include models of Ross, (1977) and Leland and Pyle, (1977). Ross, (1977) suggests that higher financial leverage can be used by managers to signal an optimistic future for the firm and that these signals cannot be mimicked by unsuccessful firms.

Leland and Pyle, (1977) focus on the owners rather than the managers. They assume that the entrepreneurs have better information on the expected cash flows than outsiders.

This theory maintains that firms will prefer internal sources of finance to the external costly funds. This theory assumes that firms do not target a specific debt ratio, but instead they prefer external financing, only when the internal funds are insufficient.

This theory maintains that firms which are profitable and which generate high earnings are expected to use less debt than those firms which are not profitable.

2.4.6 The trade off theory

As the debt equity ratio, (i.e. leverage) increases, there is a trade- off between the interest tax shield and bankruptcy costs, causing an optimum structure. The trade –off Theory of capital structure refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. The classical version of the hypothesis goes back to Kraus and Litzenberger, (1973), who considered a balance between the dead – weight costs of bankruptcy and the tax saving benefits of debt. Often agency costs are also included in the balance. This theory is often set up as a competitor theory to the pecking order Theory of capital structure. A review of the literature is provided by Frank and Goyal, (2005).

An important purpose of the theory is to explain the fact that corporations usually are financed partly with debt and partly with equity. It states that there is an advantage of financing with debt i.e. the tax benefits of debt and there is a cost of financing with debt, the costs of financial distress including bankruptcy costs, (e.g. staff leaving, suppliers demanding disadvantageous payment terms, bondholder/stockholder infighting, e.t.c) the marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm optimizing its overall value will focus on this trade- off when choosing how much debt and equity to use for financing. This theory explains the friction between the cost of financial distress and the tax benefits associated with debt in the capital structure. The theory suggests that the company's trade off several aspects including exposure of the company to bankruptcy and agency cost against the interest tax shield benefit. The optimal capital structure adopted by the company is trade – off between benefits and the costs.

This theory of the capital structure of the company predicts that a company will select a mix of debt and equity financing so as to balance the costs and benefits of the debt. The optimal capital structure will be where the benefits are maximized and the costs are minimized.

2.5 KENYA SUGAR BOARD (KSB)

The Kenya Sugar Board is a regulatory body established through an Act of Parliament in 2001 (Sugar Act, 2001). The board, which is the apex body of the Kenyan Sugar industry, succeeded the defunct Kenya Sugar Authority (KSA) on 1st April 2002, (KSB, Service charter, 2010). The mandate of the Board according to the sugar Act 2001 Section 4 is to regulate, develop and promote Kenyan sugar industry.

2.5.1 SUGAR DEVELOPMENT FUND

The Sugar Development Fund was established in 1992, with the sole purpose of creating a revolving fund to finance the activities of the sugar industry in Kenya, (KSB, SDF Manual, 2009).

The fund, which is non-profit making, is financed through a levy charged on sugar as determined by the minister of finance, (Sugar Act, 2001, Section 18). The levy is currently at 4% on both local and imported sugar (excluding imported refined white sugar) and so far the most competitive source of credit to the sugar industry and only source of funding for KESREF and KSB administration. This fund is however not enough to meet all the requirements of the industry, (KSB, SDF Manual, 2009). The levy on locally produced sugar is collected by sugar factories on behalf of the fund while that on imported sugar is collected through contracted agents, (KSB, Service Charter, 2010).

The levy, net of what is placed in reserve, is utilized to fund the following activities and shared out as follows:

| | |
|---|-------|
| (a) Factory Development/ Rehabilitation | 17% |
| (b) Research and Extension | 23.5% |
| (c) Cane Development and Maintenance | 16% |
| (d) Industry Infrastructure | 08.5% |
| (e) Kenya Sugar Board Administration | 35% |

Source: KSB, SDF Operations Manual, 2009.

ources of long term capital available to firms will be Debt or Equity. The choice of the
to be used for long term financing will be dependant upon the availability, the associated
and the capital structure desired by the management. Although Debt is a cheaper source of
term financing due to its tax deductibility, firms may find themselves in financial distress if
balance between Debt and Equity is not maintained. Access to long term finances is
with firms that register good performance because they are attractive to investors and can
sted by financial institutions. This will avoid accumulation of Non –Performing loans by
nks and other financing institutions. In Kenya, Sugar firms may access some long term
l from the Kenya Sugar Board (KSB) through the Sugar Development Fund(SDF).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The chapter presents the research design, population, data collection and analysis techniques that was used to achieve the objectives of the study.

3.2 RESEARCH DESIGN

The study adopted a census survey design. Kothari, C.R.,(2004) describes a census survey as a complete enumeration of all items in the population. The survey method was deemed best for this study since the population was small in size i.e. there were five government owned sugar companies at the time of the study. To elicit complete and reliable information, investigating all the five firms was of importance.

3.3 POPULATION

Population comprised all government-owned sugar companies registered by the Kenya Sugar Board under the Sugar Act, 2001 and Operating at the time of this study. These were Chemelil, Muhoroni, Nzoia and SONY sugar companies where the government had the majority of shareholding and Mumias Sugar company which was partly government owned (20% of the total shares), (KSB Service charter,2010). The companies are located in Western Kenya and therefore were accessible during Data collection.

3.4 DATA COLLECTION

Data collection methods comprised the following;

- (1) Primary Data; An interview guide was used to collect Data from all the government-owned sugar companies operating in Kenya soliciting information on the long term sources of capital available to them. Data was collected using both structured and unstructured questions. The interview guide collected information on sources of long term capital, preferred sources, cost of capital and capital structure. The researcher interviewed the heads of finance departments and the Managing Directors of the Government-owned Sugar firms that were operational at the time of this study. Any other

relevant information on the sources of long- term capital was sought through 'oral interview'.

(2) Secondary Data; Data and information was collected from Kenya Sugar Board strategic plans, Sugar Act 2001, Sugar Development Fund Manual, Sugar year books of statistics and other relevant documents which were available from KSB or available at the Factories. Information regarding interest rates charged on monies given from commercial Banks was sought from records of the lending Banks or obtained directly from the companies.

3.6 DATA ANALYSIS

The Data collected was examined and checked for completeness and comprehensibility. The Data was summarized, coded and tabulated. Descriptive statistics such as means, standard deviation and frequency distribution was used to analyze the Data. Statistical Package for Social Sciences (SPSS) version 13.0 was used to analyze the quantitative Data. Data presentation was done by use of pie-charts, bar charts and graphs, percentages and frequency tables for clarity. Other relevant data was presented in a prose form.

3.7 DATA RELIABILITY AND VALIDITY

According to Cooper and Schindler (1998), reliability refers to being able to secure consistent results with repeated measures of the same person with the same instrument. The research instrument was pre-tested to ensure reliability and validity. A pilot study was carried out by administering the interview guide to the finance department of Chemelil Sugar Company. An analysis of the responses was used to detect shortcomings and presence of ambiguity. The pilot study enabled the researcher assess the adequacy of the instrument to elicit the anticipated Data.

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

The chapter presents the results of Data collected on the sources of long-term capital amongst Government owned Sugar companies in Kenya and the risks associated with the different sources identified. To achieve the results on the long term sources of financing, the researcher interviewed two top managers in the finance department of the Government owned companies. Secondary Data was obtained from Kenya Sugar Board records, records within the firms and records from Sukari Campaign for Change (SUCAM).

4.2 EVALUATION OF THE LONG TERM SOURCES

Table 1: Sources of long term capital among Government owned Sugar Companies operating in Kenya.

| SOURCES OF LONG-TERM CAPITAL | NUMBER OF COMPANIES USING THE SOURCE (Frequency) | % age OF GOVERNMENT OWNED COMPANIES USING THE IDENTIFIED SOURCE |
|------------------------------|--|---|
| BONDS | 0 | 0% |
| PREFERRED STOCK | 0 | 0% |
| ORDINARY SHARES | 1 | 20% |
| LOANS FROM BANKS | 4 | 80% |
| SDF LOAN | 5 | 100% |

Source: Financial Records of the individual Sugar Firms

4.2.1 BONDS AND PREFERRED STOCK

There is no Government owned Sugar Company that uses bonds or preference stock for long term financing. This could be attributed to the fact that the Bond market is not well established in emerging economies which includes Kenya.

The annual interest rate and fixed dividend rate for issued bonds and preferred stock respectively poses the major challenge for Government owned Sugar firms in Kenya. 80% (4 out of the 5 firms) are highly indebted and will most likely default on payment of such interest or dividend when due and this is likely to result into poor investor appetite should the firms seek capital through these means.

4.2.2 ORDINARY SHARES

Table 2. The Government shareholding in the sugar companies in Kenya

| SUGAR COMPANY IN KENYA | %AGE OF GOVERNMENT OWNERSHIP(SHARES) |
|-----------------------------|---------------------------------------|
| MUHORONI (IN RECEIVERSHIP) | 74.2% |
| CHEMELIL SUGAR COMPANY LTD | 95.38% |
| NZOIA SUGAR CO.LTD | 97.93 % |
| MUMIAS SUGAR CO. LTD | 20% |
| SONY SUGAR CO. LTD | 97.0% |

Source: Financial records of the Sugar Companies.

The Government has the majority of shareholding in four out of the five Government-owned Sugar companies. Mumias Sugar Company (where the Government retained only 20% after privatization in the year 2001) is the only company listed at the Nairobi's Stock Exchange (NSE). The authorized share capital of Mumias as per financial statements ending 30th June 2009 was 2,500,000,000 ordinary shares and 1,530,000,000 were the issued and fully paid-up shares.

This paves way for Mumias to raise additional capital through issuance of ordinary shares.

The other Government owned sugar companies are unable to raise capital through issuance of Ordinary Shares.

a) Special case of Mumias Sugar Company

Through an Initial Public Offer (IPO) in the year 2001, the government relinquished some of its shares in a public issue. This enabled the company to acquire additional capital which has registered positive results. The company has been able to invest the funds to increase productivity, increase revenues and diversify their product base for strategic positioning in the Sugar industry. For example, the company commissioned the 38 MW power Co-generation on 11th May 2009 and this led to increase in export of power to the National grid from 3 MW to 26 MW thus increasing its revenues. As at the time of this study, the ethanol plant was under installation and was expected to be commissioned in December 2011. Also a water bottling project with a capacity of 16 million liters of water per year was expected to be completed by June 2011. The water project was expected to integrate sustainably with the existing Sugar and Power plants.

b) Privatization of Muhoroni, Chemelil, Nzoia and SONY Sugar companies

The sugar industry stakeholders have proposed that the only way to revive these financially ailing companies would be to privatize the firms in a bid to raise capital through issuance of ordinary shares. This has however not been without hurdles, for example, in 1996, Chemelil Sugar Company Board approved privatization in 1996 but was halted in 1998 as a result of uncertainty in the sugar market and the lack of a clear legal framework governing the industry as well as due to the effects of El-Nino rains. There was also poor performance at the Nairobi Stock Exchange (NSE). The privatization process was revisited in 1999 following the Government's move to protect the local industry, (National assembly 9th report of PIC on accounts of state corporations, 2000). The need to privatize has been enhanced by the COMESA Agreement that is to allow duty free sugar into the country by end of February, 2012. As at the time of this study, the cabinet had approved the privatization of these firms subject to parliament approval and after government restructuring of the debt portfolio.

30% of the shares are to be allocated to farmers, 51% to strategic investors while the remaining 19% is to be off-loaded through an IPO once the millers have been turned around. According to the respondents interviewed from the four firms, this is long overdue and should be fast tracked to turn around the sugar industry before the expiry of the COMESA deadline.

4.2.3 BANKS AND FINANCIAL INSTITUTION

With exception of Mumias Sugar Company, it is evident that the Government owned Sugar Firms may access funds from financing institutions under very strict conditions. Muhoroni Sugar Company confirmed inability to acquire any loan from its banker, National Bank of Kenya (NBK) owing to a default that continually accrued interest and the company was unable to settle until the Government had to bail it out. The strict conditions placed on these sugar firms are due to their dismal financial performance over the years. Table 3 shows the financial performance of the Government-owned Sugar firms in 2007/08 and 2008/09.

Table 3. : Financial Performance of Government owned Sugar Firms in Kenya: 07/08 and 08/09.

| ITEM | MUMIAS | | N ZOIA | | SO | |
|---------------------------|-------------|-------------|--------------|--------------|-----------|-----------|
| | 2007/08 | 2008/09 | 2007/08 | 2008/09 | 2007/08 | 2008/09 |
| Gross turnover | 11,970,101 | 11,791,708 | 3,075,818 | 4,536,837 | 2,976,809 | 3,695,100 |
| Corporation Tax | 375,367 | 0 | 0 | 0 | 0 | 0 |
| Excise Duty | 0 | 0 | 0 | 0 | 0 | 0 |
| KBS Marking Fee | 0 | 0 | 0 | 0 | 50 | 0 |
| a) Sugar Sales | 11,870,162 | 11,676,427 | 2,433,362 | 3,524,771 | 2,501,412 | 3,100,000 |
| b) Molasses sales | 99,939 | 115,281 | 40,567 | 48,991 | 44,805 | 0 |
| c) Miscellaneous income | 101,691 | 102,712 | 57,471 | 70,282 | 20,538 | 0 |
| Total Net Turnover(a+b+c) | 12,071,792 | 11,894,420 | 2,531,400 | 3,644,044 | 2,566,755 | 3,100,000 |
| Profit(loss) after Tax | 1,213,837 | 1,609,972 | (351,411) | 22,817 | (69,108) | 0 |
| EQUITY Capital + reserve | 1,041,497 | 10,039,469 | (11,363,693) | (11,777,611) | 985,513 | 0 |
| Dividends Paid | 61,200 | 612,000 | 0 | 0 | 0 | 0 |
| Employee Tax(PAYE) | 342,912,292 | 407,769,883 | 83,606 | 95,677 | 211,822 | 0 |
| Payment to Outgrowers | 5,010,627 | 4,923,637 | 689,578 | 793,781 | 1,244,365 | 0 |
| Presumption Tax | 0 | 0 | 0 | 0 | 0 | 0 |
| Cess to local Authority | 81,243,958 | 60,046,675 | 9,103 | 3,309 | 15,421 | 0 |
| VAT Payment | 1,782,333 | 1,930,967 | 387,543 | 402,672 | 365,650 | 0 |
| Remits to SDF | 553,023 | 461,775 | 147,513 | 116,702 | 109,748 | 0 |

Table 3: continued from the previous page

| TEM | CHEMELIL | | MUHORONI | |
|---------------------------|-----------|-----------|-------------|--------------|
| | 2007/08 | 2008/09 | 2007/08 | 2008/09 |
| Gross turnover | 2,450,260 | 1,691,698 | 1,925,415 | 2,285,452 |
| Corporation Tax | 0 | 0 | 0 | 0 |
| Excise Duty | 0 | 0 | 0 | 0 |
| KBS Marking Fee | 525 | 0 | 0 | 0 |
| a) Sugar Sales | 2,070,110 | 1,648,447 | 1,419,524 | 1,762,056 |
| b) Molasses sales | 60,863 | 43,251 | 35,486 | 46,112 |
| c) Miscellaneous income | 62,353 | 34,358 | 155,176 | 105,746 |
| Total Net Turnover(a+b+c) | 2,193,326 | 1,726,056 | 1,610,186 | 1,913,914 |
| Profit(loss) after Tax | (5,954) | (698,710) | (433,870) | (257,320) |
| Equity Capital + reserve | 0 | 0 | (9,631,115) | (10,136,934) |
| Dividends Paid | 0 | 0 | 0 | 0 |
| Employee Tax(PAYE) | 43,925 | 43,310 | 22,077 | 33,330 |
| Payment to outgrowers | 876,849 | 605,831 | 881,943 | 978,858 |
| Presumption Tax | 0 | 0 | 0 | 0 |
| Cess to local Authority | 14,123 | 5,737 | 9,366 | 9,021 |
| VAT Payment | 356,544 | 276,116 | 244,030 | 300,594 |
| Remits to SDF | 119,846 | 79,345 | 71,199 | 70,944 |

Source: KSB'S Year Book of Statistics, 2010.

From table 3, the government owned Sugar Firms registered losses in the year 2007/08 with the exception of Mumias Sugar Company. From the financial statements, Sugar firms with majority government shareholding registered either a Zero or negative figure for equity and reserves with exception of SONY Sugar. It is clear that the firms where the government has majority of shareholding are heavily indebted and any Bank Lending Officer (BLO) will be wary due to high probability of defaulting. This is due to the fact that records show failure of Banks in Kenya during the past years was as a result of Non-Performing Loans (NPLs).

Strict Banking conditions are also evident on these cash strapped Government owned Sugar Firms, for example at the time of this study, Chemelil Sugar Company could access a bank overdraft from KCB its banker up to a maximum of 60 million per year. Any extra requirement was subject to negotiation with the Banker.

Mumias Sugar where the government shareholding stands at 20% presents a difference.

Due to its continued good financial performance and its commitment to settle the loans, it has been able to attract funds for investment from four different financing institutions during the last two years as shown in the table below:

Table 4: Mumias Borrowings during years ended 2008 and 2009

| YEAR | 2008/09 '000' | 2007/08 '000' |
|---------------------------------|------------------|------------------|
| PROPARCO International | 2,700,523 | - |
| Bank Overdrafts – KCB LTD | 579,688 | 281,531 |
| Barclays Bank of Kenya ltd | - | 489,989 |
| CFC – Stanbic Bank of Kenya ltd | - | 256,080 |

Source: Annual Report and Financial Statements for the year ended 30th June, 2009.

Bank lending to Sugar firms is a therefore a function of financial performance. Banks and other financing institutions will be ready and willing to lend to those Sugar Firms that register good performance due to being credit-worthy.

4.2.4 SUGAR DEVELOPMENT FUND (SDF)

The Sugar Development Fund (SDF) is the main source of financing available to the government- owned Sugar firms. It was established in 1992 with the objective of creating a revolving fund to enable stakeholders' access affordable financing and to finance the activities of the Sugar industry in Kenya. The SDF is financed through the Sugar Development Levy charged at 4% (at the time of this study) on both locally manufactured and imported Sugar.

To Muhoroni Sugar Company (in receivership), this is the only source of long term financing available to the firm. It is the most heavily relied source of long term financing by Chemelil, Nzoia and Sony Sugar companies.

The SDF fund is disbursed either as loans or disbursed as a grant for infrastructure development and maintenance.

Table 5: Sugar Development Funding to Millers in the years 2007/08 and 2008/09

| COMPONENT | YEAR 07/08 | YEAR 08/09 |
|--|-------------|-------------|
| CANE DEVELOPMENT & PROCUREMENT OF MACHINES | 314,140,000 | 117,929,746 |
| FACTORY REHABILITATION | NIL | 380,412,202 |
| FARMERS ARREARS | NIL | 584,135,464 |
| INFRASTRUCTURE DEVELOPMENT- GRANT | 125,127,827 | 300,000 |

Source: KSB, Service Charter, 2010

According to the interviewees, this is the most preferred source for long term financing owing to low interest rates and its availability even to the poorly performing millers. However, the funds are not sufficient to meet the long-term needs of all the millers. This is partly because there are other beneficiaries of the fund inclusive of growers, KSB administration, KESREF as well as other industry stakeholders eligible for funding.

4.3 COST OF CAPITAL

4.3.1 Ordinary shares

The cost of raising finances through issue of ordinary shares involves the preliminary expenses, legal expenses and others. In subsequent years, the cost is associated with payment of dividends to shareholders. Mumias Sugar Company paid shs. 0.40 per share to shareholders during the period ended 30th June 2009.

4.3.2 Banks and Financial institutions

Table 6: Interest rates charged by different financing institutions used by the government owned Sugar firms

| COMPANY | BANK/FINANCIAL INSTN. | INTEREST RATE (%) |
|----------|-----------------------|-------------------|
| CHEMELIL | KCB | 15% |
| NZOIA | NBK | 12% |
| SONY | NBK | 12% |
| MUMIAS | PROPARCO Int. ltd | 6.53% |
| | Barclays Bank (K) ltd | 20.34% |
| | Stanbic Bank of Kenya | 11.00% |
| | Bank O/DRAFTS- KCB | 15.00% |

Source: Financial records of individual Sugar Companies

The mean average interest rate chargeable by banks and financing institutions from table 6 is 13.125%. The standard deviation is 3.93%. The cheapest Source of financing is a loan from PROPARCO International while Barclays Bank of Kenya is the most expensive way of financing Government- owned Sugar Firms.

4.3.3 SUGAR DEVELOPMENT FUND (SDF)

Table 7: Interest Rates chargeable on the various components of SDF

| SDF Component | Loan/ grant | Interest Rate |
|---|--------------------|----------------------|
| Cane Development& procurement of machinery | Loan | 5% |
| Factory Rehabilitation | Loan | 5% |
| Farmers Arrears | Loan | 3% |
| Infrastructure Development | Grant | 0% |

Source: KSB Service Charter, 2010

The infrastructure development is usually disbursed as a grant while the loans given to clear farmers arrears is charged at 3% to encourage paying off Farmers' arrears. As at the time of this study, the interest rate for cane development and factory rehabilitation was 5% providing a cheaper source of financing compared to others.

4.4 RISKS ASSOCIATED WITH THE SOURCES OF LONG TERM FINANCING

The following were identified as the risks associated with the sources of long term financing:

4.4.1 Ordinary shares

It was identified that there is a risk of raising inadequate capital by the debt ridden firms due to poor investor appetite should they be privatized. Again, as at the time of the study, there was still discontent among shareholders regarding the shareholding percentages to be awarded to the farmers, the strategic investor and the general public through an IPO. According to Mumias Sugar interviewees, there is a capital risk which arises out of debt financing of its projects, and therefore the firm was always optimizing its debt to equity structure in order to maximize returns to the shareholders.

4.4.2 Banks and Financial risks associated with financing through banks:

a) Interest rate risk

Bank interest rates keep fluctuating and a slight increase or decrease could substantially affect the financial reports. For example, an increase/decrease of 3% on interest rates during year ended 30th June, 2009, Mumias Sugar firm would have resulted in an increase/ decrease in pre- tax profit of Shs 47,115,200.

b) Currency Risk

This is evident with Mumias Sugar Company loan of PROPARCO International which despite the interest being fixed, the currency rate keeps fluctuating. As at 30th June 2009, an increase/decrease of 5% on exchange rates would have resulted in an increase/decrease in pre-tax profit of Shs 135,026,150.

c) Liquidity Risk

Muhoroni, Chemelil, Nzoia, and SONY Sugar Companies interviewees' confirmed there was the risk of the companies being unable to meet their obligations as they fall due. This was attributed to the high interest rates charged by Banks in Kenya and their indebtedness as at the time of this study. According to Mumias Sugar company interviewees, the risk exists but adequate measures are in place unless unexpected circumstances arise.

4.4.3 SUGAR DEVELOPMENT FUND (SDF)

The main risk identified with this source of financing originates from the accumulation of unpaid loans and interest accrued thereon. The loans continue to accumulate as this is the source easily available to the cash strapped government Sugar firms. According to SDF, a penalty is chargeable on the Non- Performing loans and all repayments is used first to clear accrued interest on the oldest loans and thereafter in reduction of the oldest loan. The interests continue to accrue and these firms owe the SDF approximately Shs 42 million as at the time of this study.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusions drawn from the Data analyzed and proposes recommendations of the long-term sources of finance amongst Government owned Sugar Firms. From the Data analysed, Bonds and preferred stocks are not used to finance the Sugar companies in Kenya while only Mumias Sugar uses common stock as one of its financing sources. The firms rely on SDF Loans from KSB and loans from the financial institutions.

5.1 CONCLUSIONS

The Government-Owned Sugar Companies, with exception of Mumias Sugar Company, are highly indebted and continue registering poor financial performance. This has limited the amounts they can borrow from the financing institutions due to likelihood of default. Financing through the SDF Loans is the most attractive way of long term financing available to the financially ailing Sugar Firms due to the low interest rates charged as well as its availability to the firms that continually register losses. Privatization has been proposed by the industry stakeholders in order to raise capital through issuance of ordinary shares and reduce over-reliance on the SDF loans. Mumias Sugar Company presents a classic example in favor of the privatization. Upon privatization in 2001, Mumias Sugar Company was able to increase productivity, increase revenues and diversify into Power co-generation project using a loan acquired from PROPARCO ltd. At the time of this study, the company was installing an ethanol plant and a water bottling Plant. This is the general trend amongst Sugar Companies all over the world and other government sugar firms must follow suit by sourcing for long term capital to be invested in diversification projects for sustainability.

The main risk identified with the firms where the Government has majority of shareholding was over-reliance on SDF loans and the accrued interests from failure to repay loans to commercial Banks, unpaid loans from SDF that continue to accrue interest, and third party creditors including Farmers arrears. There was a liquidity risk posed by the existence of the debts which have to be consistently paid to honor the obligations. Mumias Sugar Company faces a currency risk owing to a loan acquired from PROPARCO ltd which was being repaid in US Dollars. The risk exists due to changing exchange rates. The interest rates from the banks keep fluctuating

depending on the market trend and this exposes the firms that use bank loans to interest rate risk which could substantially affect the reported financial results.

5.2 RECOMMENDATIONS

The researcher proposes the following recommendations to the industry stakeholders:

- a) There is an urgent need to re-structure the debt- portfolio of the sugar firms where the Government has majority of the shareholding. Majority of the debt is from the Government through the SDF loans and interest accrued thereon as well as taxes due including associated penalties. The government should convert these Debts into Equity to be able to attract a good market price for the shares to be issued out.
- b) Should the intended privatization succeed, Farmers arrears may be settled by issuing them with shares equivalent of the amounts owed by the respective firms.
- c) Increase the Sugar Development Levy to be able to raise more funds to be disbursed to the industry shareholders including the millers as this forms a cheaper source of financing.
- d) Further research is recommended to establish whether these firms will actually post profits and reflect a healthier balance sheet if availed with adequate capital. It might not be automatic that the firms will turn around if availed with sufficient capital. Other factors like corruption, mismanagement and political patronage may have adverse effects on the firms. Further research is also recommended on working capital (short-term) financing of the sugar firms.

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APPENDICES:

APPENDIX 1:

LIST OF OPERATIONAL SUGAR COMPANIES IN KENYA:

A) GOVERNMENT-OWNED SUGAR FIRMS

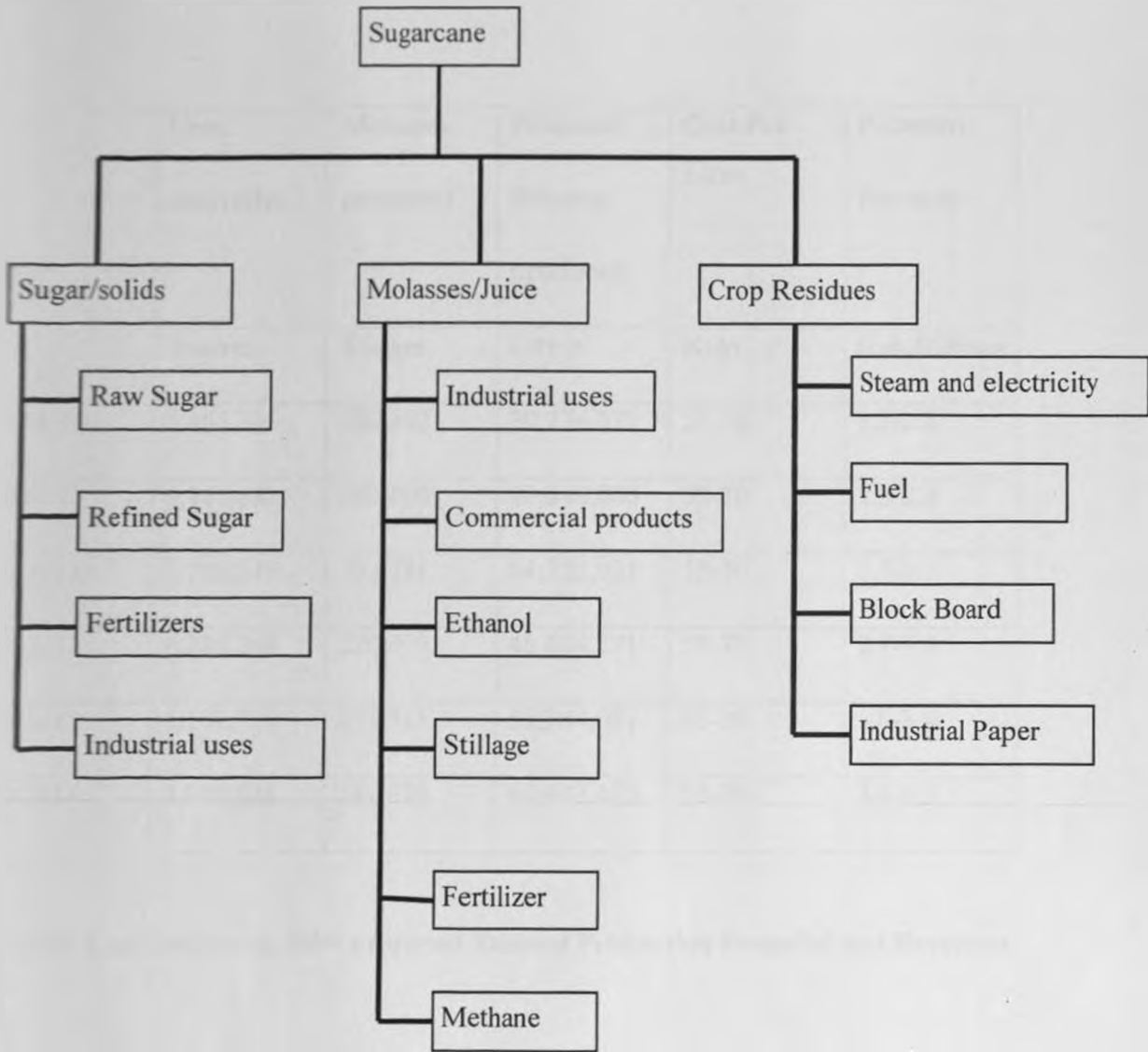
- 1) Chemelil sugar company;
- 2) Muhoroni Sugar company;
- 3) Nzoia Sugar company;
- 4) South nyanza Sugar company;
- 5) Mumias Sugar Company

B) PRIVATE SUGAR FIRMS

- 1) Kibos sugar and Allied
- 2) Soin sugar company;
- 3) West Kenya sugar Factory.

Source; Kenya Sugar Board Service Charter, 2010.

Fig I Potential sugarcane products



Source: Log Associates, 2001, financial Restructuring strategy to Sony Sugar Company

TABLE 1: ETHANOL PRODUCTION

| Year | Cane Deliveries | Molasses produced | Potential Ethanol produced | Cost Per Litre | Potential Revenue |
|-------------|------------------------|--------------------------|-----------------------------------|-----------------------|--------------------------|
| | Tonnes | Tonnes | Litres | Kshs. | Ksh,Billions |
| 2008/09 | 5,165,786 | 180,802 | 39,776,332 | 55-70 | 2.2-2.8 |
| 2009/10 | 5,110,632 | 182,000 | 40,040,000 | 55-70 | 2.2-2.8 |
| 2010/11 | 5,808,049 | 203,281 | 44,721,021 | 55-70 | 2.5-3.1 |
| 2011/12 | 6,286,269 | 220,019 | 48,404,271 | 55-70 | 2.7-3.4 |
| 2012/13 | 7,192,730 | 251,745 | 55,384,021 | 55-70 | 3.0-3.9 |
| 2013/14 | 8,010,834 | 280,379 | 61,683,422 | 55-70 | 3.4-4.3 |

Source: Log Associates, 2009 projected Ethanol Production Potential and Revenues.

TABLE 2: POTENTIAL REVENUE FROM CO-GENERATION

| Miller | Potential | Local | Sales | Rate | Hours/ | Potential | Capital Cost |
|----------|-----------|-------|-------|------|--------|---------------------------|---------------|
| | MW | Use | MW | KSH | Year | Revenue (Kshs., Millions) | Estimates |
| | MW | MW | MW | KSH | Hours | Per annum | Kshs, million |
| Mumias | 36.3 | 11.4 | 24.9 | 3000 | 7,128 | 532 | 4,926 |
| W/Kenya | 5.4 | 1.0 | 4.4 | 3000 | 7,128 | 94 | 733 |
| Muhoroni | 9.5 | 1.7 | 7.8 | 3000 | 7,128 | 167 | 1,286 |
| Nzoia | 14.2 | 2.2 | 12 | 3000 | 7,128 | 257 | 1,927 |
| Chemelil | 20.0 | 2.4 | 17.6 | 3000 | 7,128 | 376 | 2,714 |
| SONY | 13.8 | 2.4 | 11.4 | 3000 | 7,128 | 244 | 1,872 |
| Miwani | 13.8 | 2.4 | 11.4 | 3000 | 7,128 | 244 | 1,872 |
| TARDA | 36.3 | 11.4 | 24.9 | 3000 | 7,128 | 532 | 4,926 |
| Total | 149.3 | 34.9 | 114.4 | 3000 | 7,128 | 2,446 | 20,259 |

Source; log associates, 2009, potential revenue from co-generation

TABLE 3: COMESA IMPORT QUOTA

| YEAR | QUOTA(Tonnes) | TARIFF RATE(%AGE) |
|----------------------------|---------------|-------------------|
| 2008/2009 | 220,000 | 100 |
| 2009/2010 | 260,000 | 70 |
| 2010/2011 | 300,000 | 40 |
| 2011/2012 | 340,000 | 10 |
| 1 st March,2012 | Open Market | 0 |

Source: KSB, Strategic plan 2010-2014.

INTERVIEW GUIDE ON THE SOURCES OF LONG TERM CAPITAL
AMONGST GOVERNMENT OWNED SUGAR COMPANIES IN KENYA.

An analysis on the sources of long-term capital among sugar companies in Kenya;

SECTION A

Sources/cost of long-term capital:

Tick the method (s) used by your firm to raise long-term finance

- | | |
|---|--------------------------|
| Bonds | <input type="checkbox"/> |
| Preferred Stock | <input type="checkbox"/> |
| Ordinary Shares | <input type="checkbox"/> |
| Loan from Bank or Financial Institution | <input type="checkbox"/> |
| SDF Loan | <input type="checkbox"/> |

A) BONDS

(i) In case of Bond issue, state the type issued, (A) Secured or (B) Unsecured or

(C) Both (D) N/A (Tick appropriately)

(ii) Please indicate the interest rate payable to bond holders (as per the latest audited financial statements)

(iii) Briefly cite any reason(s) for choice of Bond to raise capital.

(iv) Indicate any risk(s) of issuing bonds to raise long-term finance _____

(B) PREFERRED STOCK

(i) In case of preference shares, state type issued; (A) Redeemable (B) Irredeemable

(ii) State whether the preference shares are (A) Convertible to ordinary shares or

(B) Non-Convertible

(iii) What is the preference dividend rate payable to preference shareholders? _____

(from last audited financial statements)

(iv) Briefly state any reason(s) of issuing preference stock to raise capital.

(iv) State any risk (s) of raising finance through issuance preferred stock

(v)

(C) ORDINARY SHARES

(i) Are ordinary shares issued through (A) Public offer or (B) Private placement or

(C) N/A

(ii) Please indicate the dividend rate payable to ordinary shareholders _____

(as per the latest audited financial statements).

(iii) Briefly cite any reason(s) for choice of ordinary shares to raise capital in your firm.

(iv) Are authorized shares (A) fully issued or (B) Not fully issued

(as per the latest audited financial statements)

(v) State any risk (s) associated with financial through insurance of ordinary shares

(D) LOAN FROM BANK OR FINANCIAL INSTITUTIONS

(a) What is the current loan interest chargeable by your bank on long-term?

(b) Briefly cite any reason(s) for borrowing from a financing institution to raise capital.

(c) state any risk(s) of financing through a loan from the financial institution.

E) SDF LOAN

(a) What is the interest rate payable on loans acquired from SDF. (State).

(b) Briefly cite the reason for choosing this type of financing for your firm.

(c) Cite any risk(s) associated with financing through this method.

SECTION B: RANK FROM THE LEAST PREFERRED SOURCE OF LONG-TERM CAPITAL i.e (1) TO THE MOST PREFERRED SOURCE i.e (5)

1) Sources/cost of long-term capital:

Bonds

Preferred Stock

Ordinary shares

Loan from Financial Institution

SDF Loan

2) Briefly state the reason for your preferred source.

SECTION C: CAPITAL STRUCTURE

(i) If your company uses more than one source of long-term financing above, please indicate the proportions (in terms of % age); e.g. Bonds 40% and shares 60%.

Percentage used

(i) Bonds _____

(ii) Preferred Stock _____

(iii) Ordinary Shares _____

(iv) Loan from financial institutions _____

(v) SDF Loan _____

Total 100%

(2) Highlight any advantage (s) and /or Disadvantage (s) associated with the above capital proportions that are used by your firm

(3) Identify any other source (s) of long-term financing used by your sugar firm NOT identified in this questionnaire, reason for choice and associated risk(s).(write overleaf)



UNIVERSITY OF NAIROBI
FACULTY OF COMMERCE
MBA PROGRAM – LOWER KABETE CAMPUS

Telephone: 732160 Ext. 208
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

Date 20th October, 2010

TO WHOM IT MAY CONCERN

The bearer of this letter... Mr. Michael Muriithi Linguli

REGISTRATION NO: D61/70827/2009

The above named student is in the Master of Business Administration degree program. As part of requirements for the course, he is expected to carry out a study on an evaluation of the long-term sources of capital among Government owned Sugar companies in Kenya.

He has identified your organization for that purpose. This is to kindly request your assistance to enable him complete the study.

The exercise is strictly for academic purposes and a copy of the final paper will be availed to your organization on request.

Your assistance will be greatly appreciated.

Thanking you in advance.

Sincerely,

THE COORDINATOR
UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
KISUMU CAMPUS
P.O.Box 825 - KISUMU.

MR. ALEX JALEHA
COORDINATOR, SCHOOL OF BUSINESS, KISUMU CAMPUS