

**STRATEGIC FINANCING OF LOCAL SUGAR INDUSTRY TOWARDS
SELF SUFFICIENCY IN TANZANIA**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS
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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation titled: “**Strategic Financing of Local Sugar Industry Towards Self Sufficiency in Tanzania**”, in partial fulfillment of the requirements for the Degree of Master of Business Administration (MBA) of the Open University of Tanzania.

.....

Dr. Raphael Gwahula
(Supervisor)

.....

Date

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I, **Abubakari Nassoro Rizwani**, declare that, the work presented in this dissertation is original. It has never been presented to any other university or institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirement for the Degree of Master of Business Administration (MBA).



.....
Signature

.....
Date

DEDICATION

This Dissertation is especially dedicated to my lovely wife Mwanajuma Simba, my mother Jokha Abubakari, my father Nassoro Rizwani, my children Jokha, Imran, Nassor, Nasrin, Anwar and Irfan for their hearty encouragement. You are all the hidden treasures!!!

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ABSTRACT

This study was conducted to examine financing strategies of local sugar industry towards self-sufficiency in Tanzania. The study comprises four objectives namely; to examine the role of venture capital on local sugar industry; to examine the influence of long-term loans on local sugar industry; to assess the strategies used to manage economic exposure on local sugar industry; and to analyse the effect of financing strategies on self-sufficiency of local sugar industry. Positivism philosophy was adopted aside with quantitative approaches. The study employed cross-sectional design to collect data from 42 respondents. Questionnaire was used as data collection tool. Findings of the study revealed that, venture capital have no influence on various aspects of local sugar industry including financial outlook, working team, market opportunities, development of technology, and competitive advantage. It was also found that, long-term loans highly influenced long-term sustainability. Matching currency flows, diversifying production facilities and product markets managed economic exposure. Besides, venture capital, economic exposure, long-term loans, and listing into financial markets accounts for significant 7.1% of self-sufficiency in local sugar industry, given that ($p < .05$). The study recommends that, with the correct financial plan and budget in place, overall liability will be reduced and the cash flow ratio increased by supporting professional ethics in financial reporting. This will enhance companies' capacity to pay their suppliers on time, manage their competitive market and manage their debts and boost its working capital.

Keywords: Sugar Industry, Strategic Financing and Sufficiency

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LIST OF ABBREVIATIONS

URT	United Republic of Tanzania
DSE	Dar es salaam Stock Exchange
MY	Milling Year
KSL	Kagera Sugar Limited
MSE	Mtibwa Sugar Estate
KSCL	Kilombero Sugar Company Limited
IFAD	International Fund for Agricultural Development
TARI	Tanzania Agricultural Research Institute
SPSS	Statistical Package for Social Sciences
SBT	Sugar Board of Tanzania
US\$	United States of America Dollar
TZS	Tanzanian Shillings
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
OUT	Open University of Tanzania

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

This chapter gives the background information, statement of the problem, Research objectives, Significance of the study, Scope of the study, Limitation/Delimitation of the study and organization of the proposal.

1.2 Background of the Study

Sugar is regarded a commodity with various economic and social development contributions in manufacturing countries and has significant protection and favoured trading treaties administered by the World Trade Organization (WTO) (Fuller & Kennedy, 2019). In the interests of the continued competitiveness of the sugar sector, industries focus on addressing the issues of production and other diversification both inside and beyond the industry (Agbenyegah, 2018).

Sugar manufacturing in recent years has become one of the most sophisticated agri-food businesses (Food and Agriculture Organization, 2017). The sugar sector does not only generate sugar but also manufactures many by-products, such as biomass, bagasse and molasses, that may be utilised for energy, fuel, paper, and organic chemical production (Eggleston & Lima, 2015). In 2018-19, Asia produced 77 million tonnes of sugar, followed by South America (38 million tonnes), and Europe (36 million tonnes). Brazil, India, the European Union, Thailand, China, and the United States produced more than half of the world's sugar in 2018, (FAO, 2019).

Muistry *et al.* (2011) stated that the industry's competitiveness in terms of production costs is an essential factor that determines financial success. Price, quality, and reliability of acquired inputs determine firm production costs. It is one of the most immediate and apparent competitive sources. Furthermore, due to the many transport facilities and time-consuming operations involved in the delivery process, the cost of moving sugarcane from the farm gate to the mills is relatively expensive (Almubarak *et al.*, 2020).

Self-sufficiency is the capacity of the domestic sugar industry to respond directly or indirectly to society's sugar consumption (Sessu, 2016). Sugar self-sufficiency is significant as a country no longer has to satisfy national consumption requirements through imports if it is able to achieve its self-sufficiency. Foreign currency money formerly used for importing sugar can be repurposed for importing other products, especially capital goods for industrial expansion (Bantacut & Novitasari, 2016). As stressed by Frank and Goyal (2011) in Trade-off theory, when there is a contradiction between promoting economic efficiency and maximising society's equity, this is referred to as an equity-efficiency trade-off. If a trade-off exists, economists or public authorities may choose to forego some economic efficiency from abroad in order to fulfil domestic demands.

Tanzania is a sugar deficit country and in the recent years sugar has attracted political interest, drawing attention of its supply and movement across the country. Tanzania's annual sugar consumption reached 710,000 tonnes in 2019, compared to 439,100 tonnes produced locally. Tanzania's sugarcane growing and processing capacity is insufficient to fulfil national demand, thus sugar imports are used to cover the void

(TanzaniaInvest, 2021). Again IFAD (2015) reported that, the country imports about half of its sugar needs, at a cost of US\$150-200 million per year.

The Sugar Industry started in Tanzania in early 1924 when Tanganyika Plantation Company (TPC) factory started in Moshi, followed by two other sugar factories situated in Morogoro, Kilombero Sugar Company Limited (KSCL) and Mtibwa Sugar Estate (MSE) in 1961 and 1962, Kagera Sugar Limited (KSL) in Kagera was the last one by mid 1960s, (Matango, 2006).

All the companies were privatised between 1998 and 2001. The government retained 25 percent stakes in two of them: KSCL, whose majority owner is the South African company Illovo Sugar (itself a subsidiary of Associated British Foods); and TPC, now majority owned by the Mauritian sugar group Alteo. MSE was acquired by the Tanzanian company Super Group, which also owns KSL, (Future Agricultures Consortium, 2014).

Since privatisation, the industry has made significant gains in terms of capital investments, area under cane and revenue generated for the Treasury. However, to date its 20 – 23 years and no single new estate or factory has been established and produced even a kilogram of sugar. Over the past decade, giant businessmen in the country opted on trading imported sugar rather than locally investing in sugar production, not surprising, traders took advantage of the then fixed tariffs of 10% without considering the world market prices (Rabobank, 2013). This contributed to higher import volumes at lower world prices and lower tariffs, impacting local prices and therefore revenue of local producers.

This practice has had a drawback towards country self-sugar sufficiency efforts over the last decade (Machimu & Kayunze, 2019). Despite continued challenges faced by local sugar producers, their motivation and commitment to increase sugar production in the country can be clearly seen from increased sugar production, which rose from a pre-privatisation level of 112,903 metric tons of sugar in 1995/96 to reach a peak of 304,135 metric tons in 2010/11, (Future Agricultures Consortium, 2014).

The main source of sugar produced for both export and domestic consumption in Tanzania is sugarcane (Machimu & Kayunze, 2019). Sugarcane is the second largest agricultural crop in the country, contributing almost 4% of annual gross value of agricultural production. The sugar industry is one of the largest agro-processing industries in Tanzania and contributes about one third of gross output of the food-manufacturing sector and about 5-7% of total manufacturing value added (IFAD, 2015). The sector directly accounts for about 13% of agricultural employment in Tanzania, and almost 6.0% of total national employment. In 2012, the sugar industry in Tanzania contributed 1.0% of national GDP and generates 2.0% of total tax revenue (IFAD, 2015).

In order to fill the local and regional sugar gap, the Government of Tanzania was looking to develop an additional 3 – 5 large sugar projects and worked to prepare addition sites for sugar investments (SAGCOT, 2012; Chanzi, 2016). Despite the motivation efforts by the government to attract investors to this sector in order to increase sugar production to meet demand, to date, none of the previous earmarked five sugar estates has come up (Msomba, Ndaki, & Nassary, 2021).

This is not surprising, as both entrance and exit barriers in the sugar production are quite higher; to motivate the existing investors to increase sugar production and to attract prospective investors, the Government of United Republic of Tanzania (URT) will need to establish an enabling environment with clear regulation on investment and review policies on sugar imports and exports, (Sulle & Dancer, 2020).

It is thought that, continued unregulated/smuggled sugar imports, low sugar market price and unfavourable climatic conditions over the past decade has weakened financial muscle of the local sugar industry to expand more (TanzaniaInvest, 2021). For Tanzania to achieve sugar self-sufficiency, strategic financing on investment capital to put more production area under irrigation and to expand the processing capacity of the existing factories stand a highest priority (Mbua, 2020). This study therefore aims to examine financing strategies to local sugar industry towards self-sufficiency.

1.3 Statement of the Problem

The data on sugar production trend versus sugar imports and amount of foreign currency spent to fill the gap of sugar deficit seem to have a going concern. Despite the number of interventions by the local and international development partners in an effort to support increasing sugar production in the country, still the country imports about half of its sugar needs at a cost of US\$150-200 million per year (IFAD, 2015). Continued imports of sugar have had a negative impact not only to the cash flow of local sugar industry alone but also to the national economy and performance of local currency against US\$. The question is, how long and by when the country is going to get out of this scourge. It should also be noted that, Tanzania current per capita sugar

consumption is half to one third of its neighbours and is expected to grow by 5-7% per year hence posing even a more challenge with current country sugar insufficiency (IFAD, 2015).

Again, the East and Southern Africa region is also a sugar deficit region, hence a room for export markets even when Tanzania produce at surplus. Tanzanian sugar production is likely to expand by almost 33% in 2023/24 if six additional plantations are approved (Rweyendela & Mwegoha, 2020). However, the government is silent on financial strategies adopted in improving production to fill the import gap. There is also a knowledge gap in literature as no recent study has captured an aspect of self-sufficiency in sugar industry. For instance, (Mbua, 2020; Sulle & Dancer, 2020; Msomba, Ndaki, & Nassary, 2021) focused solely in production, growth, and challenges facing sugarcane industry in Tanzania. This study aims at filling the gap by identifying strategic financing to the local sugar industry to achieve self-sufficiency in a near future, with respect to venture capital, long-term loans, economic exposure, and listing into financial markets.

1.4 Research Objectives

1.4.1 General Objective

Examine financing strategies of local sugar industry towards self-sufficiency in Tanzania.

1.4.2 Specific Objectives

- (i) To examine the role of venture capital on local sugar industry
- (ii) To examine the influence of long-term loans on local sugar industry

- (iii) To assess the strategies used to manage economic exposure on local sugar industry
- (iv) To analyse the effect of financing strategies on self-sufficiency of local sugar industry.

1.5 Research Hypothesis

H0: Venture capital has a significant positive effect on local sugar industry self-sufficiency

H1: Long-term loans has a significant positive effect on local sugar industry self-sufficiency

H2: Economic exposure has a significant positive effect on local sugar industry self-sufficiency

H3: Listing into financial market has a significant positive effect on local sugar industry self-sufficiency

1.6 Significance of the Study

The findings of this study will help sugar producers in the country find other strategies of financing their businesses, expose policy makers, research and regulatory authority of the sector to understand the existence of the limited financing strategies in the Sugar sector within the country. Findings of the study will also help the stakeholders understand what need to be done to achieve sugar self-sufficiency. The findings of the study will also, help stakeholders to get a better understanding of what financing strategies has been employed by the countries which are world leaders in sugar production today. Successful completion of the study will also help the researcher to

attain the partial fulfilment of the requirements for the award of a Master Degree in Business Administration (MBA) offered by the Open University of Tanzania (OUT), but more importantly give in depth information to financial institutions, policy decision-makers and government.

1.7 Scope of the Study

This study focused only on the existing four large sugar estates in the country as sample representative. These includes; KSL, MSE, KSCL and TPC located in Kagera region at Missenyi district, Morogoro region at Mvomero district, Morogoro region at Kilombero district and Kilimanjaro region in Moshi Municipal, respectively. The targeted population were key/senior business leaders in the sugar estates.

1.8 Limitation of the Study/Delimitation

The study population was key/senior business leaders in the sugar estates, these people are very busy and may be on frequent travelling. Again, the four existing large sugar estates are located in different district and regions far apart. Due to limited time to completion of this study, the target sample may not all be covered. Therefore, assistant key business leaders in the hierarchy were interviewed in case of the absence of the primary target group.

1.9 Organization of the Proposal

The study consists of six chapters; chapter one presents the introduction of the study, gives the background information, statement of the problem, research objectives, significance of the study, and scope of the study. Chapter two presents the literature

review, which consists of conceptual definitions, theoretical literature review, empirical literature review, research gap and conceptual and theoretical framework. Chapter three presents research methodology, discusses the methodology of the study; it further discusses sampling techniques, area of the study, sampling method and procedures, variables, methods of data collection, processing and analysis. Chapter four provides findings presentation. Chapter five gives discussion of the findings while chapter six provides conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter presents literature review. It specifically consists of conceptual definitions, theoretical literature review, empirical literature review, research gap and conceptual and theoretical framework.

2.2 Conceptual Definitions

The study bases mostly on “*Financing Strategies*” and “*Self-sufficiency*”. NASDAQ (2021) defined financial strategy as a practice of a firm adopts to pursue its financial objectives. These are pursued by capital availability.

There are two types of capital; debt and equity, and each has both benefits and drawbacks. Debt financing is capital acquired through the borrowing of funds to be repaid at a later date (Forbes & Warnock, 2012). Common types of debt are loans and credit. The benefit of debt financing is that it allows a business to leverage a small amount of money into a much larger sum, enabling more rapid growth than might otherwise be possible (Klein, O’Brien, & Peters, 2002).

In addition, payments on debt are generally tax-deductible. The downside of debt financing is that lenders require the payment of interest, meaning the total amount repaid exceeds the initial sum. In addition, payments on debt must be made regardless of business revenue. For smaller or newer businesses, this can be especially dangerous (Hovakimian *et al.*, 2004).

Equity financing refers to funds generated by the sale of stock. The main benefit of equity financing is that funds need not be repaid. However, equity financing is not the no-strings-attached solution it may seem (Gompers & Lerner, 2003). Shareholders purchase stock with the understanding that they then own a small stake in the business. The business is then beholden to shareholders and must generate consistent profits in order to maintain a healthy stock valuation and pay dividends (Mahdavi & Torfi, 2020). Because equity financing is a greater risk to the investor than debt financing is to the lender, the cost of equity is often higher than the cost of debt (Drover *et al.*, 2017).

The amount of money that is required to obtain capital from different sources, called cost of capital, is crucial in determining a company's optimal capital structure. Cost of capital is expressed either as a percentage or as a dollar amount, depending on the context (Fianto *et al.*, 2018). On the other hand, Cambridge dictionary define ‘‘Self-sufficiency’’ as being able to provide everything you need, especially food, for yourself without the help of other people (Tosun *et al.*, 2019). Self-sufficiency is the state of not requiring any aid, support, or interaction, for survival; it is therefore a type of personal or collective autonomy. The term self-sufficiency is usually applied to varieties of sustainable living in which nothing is consumed outside of what is produced by the self-sufficient individuals (Anderson *et al.*, 2018).

2.3 Theoretical Literature Review

2.3.1 Pecking order Theory

Pecking order theory was first suggested by Donaldson in 1961 and it was modified by Myers and Majluf (1984). According to Myers and Majluf (1984), in corporate

finance, pecking order theory (or pecking order model) postulates that the cost of financing increases with asymmetric information and that Financing comes from three sources, internal funds, debt and new equity. Companies prioritize their sources of financing, first preferring internal financing, and then debt, lastly raising equity as a “last resort”. Hence: internal financing is used first; when that is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is issued (Frank, Goyal, & Shen, 2020). This theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity would mean issuing shares which meant 'bringing external ownership' into the company). Thus, the form of debt a firm chooses can act as a signal of its need for external finance (Guizani, 2020).

The pecking order theory is popularized by Myers and Majluf (1984) where they argue that equity is a less preferred means to raise capital because when managers (who are assumed to know better about true condition of the firm than investors) issue new equity, investors believe that managers think that the firm is overvalued and managers are taking advantage of this over-valuation. As a result, investors will place a lower value to the new equity issuance (Simatupang *et al.*, 2019).

Pecking order theory starts with asymmetric information as managers know more about their company's prospects, risks and value than outside investors. Asymmetric information affects the choice between internal and external financing and between the issue of debt or equity. Therefore, exists a pecking order for the financing of new projects (Oktaviani *et al.*, 2019).

Asymmetric information favours the issue of debt over equity as the issue of debt signals the board's confidence that an investment is profitable and that the current stock price is undervalued (were stock price over-valued, the issue of equity would be favoured). The issue of equity would signal a lack of confidence in the board and that they feel the share price is over-valued. An issue of equity would therefore lead to a drop in share price (Bhama, Jain, & Yadav, 2018).

Tests of the pecking order theory have not been able to show that it is of first-order importance in determining a firm's capital structure. However, several authors have found that there are instances where it is a good approximation of reality. On the one hand, Fama and French and also Myers and Shyam-Sunder (1984) find that some features of the data are better explained by the Pecking Order than by the trade-off theory. Goyal and Frank show, among other things, that Pecking Order theory fails where it should hold, namely for small firms where information asymmetry is presumably an important problem (Bukalska, 2019).

2.3.2 Tradeoff Theory of Capital Structure

The theory 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 (2011).

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 to financing with debt, the tax benefits of debt and there is a cost of financing with debt, the costs of financial distress including bankruptcy costs of debt and non-bankruptcy costs (e.g. staff leaving, suppliers demanding disadvantageous payment terms, bondholder/stockholder infighting, etc.), (Nicodano & Regis, 2019). The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing (Dierker, Lee, & Seo, 2019).

The empirical relevance of the trade-off theory has often been questioned. Miller (1977) for example compared this balancing as akin to the balance between horse and rabbit content in a stew of one horse and one rabbit. Taxes are large and they are sure, while bankruptcy is rare and, according to Miller, it has low dead-weight costs. Accordingly, he suggested that if the trade-off theory were true, then firms ought to have much higher debt levels than we observe in reality. Fama and French (2002) criticized both the trade-off theory and the pecking order theory in different ways. Welch (2004) has argued that firms do not undo the impact of stock price shocks as they should under the basic trade-off theory and so the mechanical change in asset prices that makes up for most of the variation in capital structure.

Despite such criticisms, the trade-off theory remains the dominant theory of corporate capital structure as taught in the main corporate finance textbooks. Dynamic version of the model generally seems to offer enough flexibility in matching the data so,

contrary to Miller's verbal argument, dynamic trade-off models are very hard to reject empirically (Sardo & Serrasqueiro, 2017).

2.4 Empirical Literature Review

Various empirical studies were reviewed by the researcher so as to consider how others have obtained so as to get the knowledge gap.

2.4.1 The Role of Government Towards Sugar Self Sufficiency

Sari (2019) conducted a study to notify the government of the importance of care and help for farmers of sugar cane, particularly in East Java. Most countries that are leaders in sugar production around the world today have had continued strategic financing and direct support from their government. It was found that, as government suggested that it is important to encourage agriculture and its subsectors to be the driving force for economic growth and that sugarcane farmers are the main actors in the sugar sector, then the Government and the Regional Government must now react to a great deal of sugarcane trucks on provincial highways, throughout the whole day.

Sulaiman *et al.* (2019) assessed the role of government in improving sugar production in Indonesia through land adequacy analysis and the restructuring of the sugar mill. Results indicated that, there are two ways, which need to be taken concurrently: increasing the planting area of sugarcane and increasing productivity and sugar production. Initial, the discovery of sugar cane growing places outside Java both in existing farmlands and new locations is the first strategy to boosting sugar output. For the whole nation a semi-detailed land suitability study was done. The current area of agriculture through the integration system or existing crop exchange has been the

major development objective. USDA (2016) revealed that, the government of Thailand considered additional financial support to cane growers by offering direct payments of 160 baht per metric ton (US\$ 4.6/MT) while the state-run cane and sugar fund still had to secure the funding to repay sugar mills under the milling year (MY) 2014/15 price support program as the market prices were lower than the intervention prices. With these financing strategies Thailand sugar production is at surplus and during MY2016/17 forecasted to increase moderately to 10 million metric tons while sugar consumption forecasted to increase to 2.6 - 2.7 million metric tons. Thailand exported about 8.8 million metric tons of sugar during MY2015/16.

Chatenay (2013) found that, government support has been of major importance to the development of the Brazilian sugar industry, and that it continues to be instrumental in maintaining its strong competitive position. Indeed, conservatively estimating current annual income support shows that the industry benefits from some US\$ 2.5 billion per year from direct or indirect government incentives. Further, important amounts of debt owed to the federal government have been written-off over the years. Because of the complex and many procedures involved over many years, the exact amount will never be known. Brazil is now the world's largest sugar producer and the second-largest source of ethanol; supplying nearly 50% of internationally-traded sugar, it is also the largest exporter of ethanol.

Despite partial liberalization since 1997, government support has played a major role in the development of Brazil's sugar industry. Federal and state government intervention still impacts the economics of the sugarcane industry significantly. The role of the Brazilian government in fostering the world's largest and most advanced

sugarcane sector can be seen as a formidable example of successful government intervention.

Belair (2019) indicated that, as a former Sugar Protocol country, Tanzania benefited from the accompanying measures for countries affected by the EU sugar reform of 2006. In response to Tanzania's National Adaptation Strategy (NAS) for Sugar of 2006, EU support for the period 2006-2013 aimed at improving the relative situation of the Tanzanian sugar industry and increasing its competitiveness (reduction of production costs and increase of productivity). However, EU supports specifically targeted Outgrower schemes is seeking to improve the welfare of smallholders. The EU Multiannual Adaptation Strategy was implemented through two successive Multiannual Indicative Programmes (MIPs), which covered the periods 2007-2010 (EUR 6 560 000) and 2011-2013 (EUR 6 573 000) respectively (URT, 2011).

The Tanzanian Sugar Industry Development Plan and Strategy (SIDPS, 2001-2010) aimed at promoting efficiency in sugar cane production, processing and marketing through the establishment of an enabling environment, adequate resource management and environmental protection. It focused on self-sufficiency, sugar exports, employment and contribution to Government's revenue, poverty alleviation, environmental conservation and sustainability of the industry.

2.4.2 Venture Capital

Hellmann and Puri (2000) found that, venture capital financing is related to product market strategies and outcomes of start-ups in European countries. Venture capital is also associated with a significant reduction in the time to bring a product to market,

especially for innovators. With these finding chances that venture capital financing in agriculture sector whose investments and return take long time become so narrow.

2.4.3 Long Term Loans

Uma Devi (2012) revealed that for agricultural development, credit is an important input which ensures adequate working capital as well as infrastructural development in India. Adequate credit increases the agricultural output. Agricultural credit and agricultural development go by hand in hand; hence the farmer should be provided adequate and cheap credit.

Dutta and Sundaram (2005) found that, public and private sector agricultural financing in Tanzania is inadequate. Unavailability of long-term financing has limitations in terms of investment for medium and large-scale farming. Short-term credit facilities in Tanzania account for more than 70 percent of the total institutional lending to the agriculture sector, which means less access to credit for long-term investment projects. There is clear indication that commercial banks in Tanzania consider agriculture sector projects as of high risks with low returns.

URT (2013) emphasize that, while Tanzania sugar estates depend entirely on primary investors and limited loans from commercial banks as source of financing capital investment, world leaders in sugar production today have had several financing strategies over extended period of time to achieve sugar self-sufficiency. Harwood and Cheruyoit (2015) found that, although not statistically significant, long term loan negatively affects sugar firm performance. The study recommended that sugar firms should manage well the portfolio of its long-term debt structure to minimize the risks

associated with adoption of the various forms of long-term debt. Perhaps, notwithstanding other reasons, most countries that are leaders in sugar production around the world today; have had continued strategic financing and direct support from their government due to this situation.

2.4.4 Financing through Listing the Company into Financial Market

Kamfwa (2018) explored why, since its introduction, the alternative investment market in Zambia has been free from SME listings. This study found that equity demand and supply issues prohibit SMEs from entering the Alternative Securities market in Lusaka. SMEs are not informed and have little market knowledge, risk aversion of entrepreneurs, tight laws and listing standards, which are the main barriers to listing SMEs on the market.

Dabengwa (2017) sets forth the various reasons and advantages of cross listings for Johannesburg Stock Exchange (JSE) listed businesses in other sub-Saharan exchanges. The analysis suggests that there is no indication that JSE listed businesses gain financially from other Sub-Saharan trading schemes. Furthermore, the report advises that JSE listing businesses should instead seek cross listings for qualitative reasons.

Norman (2010) found that, some people seem to be doubtful in deciding to invest for what is considered a risk business in Malaysia. Perhaps, this is the reason why most of agriculture firms don't opt to go public. Proshare (2001) revealed that, the Virgin Company had the view that it had experienced difficulties in terms of progress after listing compared to the period before listing its shares with the London Stock

Exchange (LSE). These disadvantages included, prolonged period for decision making even in circumstance of urgent need for such decision. This is because meetings are scheduled on specific dates and numbers of such meetings are known and weak ideas in meetings because the qualification for purchasing shares is essentially money rather than skills in that area. Hence, when the majorities of shareholders are not familiar with the entire business the possibility of not assenting to viable solutions become slim, hence distorting the performance of the company.

2.4.5 Exchange Rate Risk: Economic Exposure

Makori (2017) conducted a descriptive examination on the implications of the exchange translation exposure of firms listed in the Nairobi Securities Exchange. The study indicated that majority of the listed firms are susceptible to the unfavourable effects of translation. Translation exposure in monetary terms is important but not substantial compared to other financial performance factors, e.g. net income and returns on capital. The insignificance of translation in comparison with other elements determining financial success was shown in terms of translation exposure to total incoming ratios.

Sikarwar and Gupta (2019) indicate that, changes in exchange rates have a substantial influence on companies' operations and profitability in India. Exchange rate volatility affects not just multinationals and large corporations, but small and medium-sized enterprises as well, even those who only operate in their home country. While understanding and managing exchange rate risk is a subject of obvious importance to business owners, investors should be familiar with it as well because of the huge impact it can have on their investments.

As reported by (BOT) Bank of Tanzania (URT, 2015), the strong dollar has not only triggered exchange rate volatility globally but it has also led to tightening of financial conditions. While some emerging economies have been hit by volatility in global currency markets, expectations about normalization of monetary policy in the US has added to the tight financial conditions. Furthermore, Tanzania was not spared from the tight liquidity conditions during the period of March – September 2015 as pressure emanating from strong US dollar mounted. With such increase in exchange rate of TZS against US\$, it is obvious that, Tanzania farming firms opting for cross border loans will not only suffer transaction exposure alone but also cost of production will be high and hence selling price of the end product.

Table 2.1: Summary of the Empirical Studies

Variable	Country	Methodology	Findings	Authors
Venture capital	USA	Unique hand-collected database	Venture capital financing is related to product market strategies and outcomes of start-ups. Venture capital is also associated with a significant reduction in the time to bring a product to market, especially for innovators	Thomas Hellmann and Manju Puri (2000)
Long-term loan	Kenya	Retrospective research strategy in collection of data.	The study found that Long term loan negatively affects ROA although not statistically significant	Harwood & Cheruyoit, 2015
Sugar fortification	Guatemala	Case study	The cost of fortification is about one-fifth of that of other interventions	UNICEF
Exchange rate hedging: Financial vs Operational strategies	USA	Case study	The more geographically dispersion it is, the more likely it is to use financial hedge. The end results in firm value, is that operational hedging strategies benefits shareholders only when used in combination with financial hedging strategies	George A. <i>et al</i> , (2001)

This arises from the effect that exchange rate fluctuations have on a company's obligations to make or receive payments denominated in foreign currency in future. Allayannis, Ihrig and Weston (2001) studied exchange rate risks in USA firms, found that the more geographically dispersion it is, the more likely it is to use financial hedge to mitigate risk exposure and that operational hedging strategies benefits shareholders only when used in combination with financial hedging strategies.

2.5 Research Gap

While Tanzania sugar estates depend entirely on primary investors and limited loans from commercial banks as source of financing capital investment. Empirical studies show the positive outcomes of financing strategies undertaken by the world sugar leaders today. In many developing countries, there has been concern about the extent that such financing strategies can really help Sugar estates increase its production to achieve self-sufficiency.

In this respect then, the study has assessed and availed an understanding of the range of financing strategies undertaken by the world sugar leaders. But still these strategies have not been utilized in Tanzania. Therefore, by concerting only key business leaders in the sugar estates, Sugar board of Tanzania and Sugar Research Institute, the researcher aim to find out financing strategic of the local sugar industry to achieve sugar self-sufficiency.

2.6 Conceptual Framework

The diagrammatic representation in Figure 2.1 shows conceptual framework for the strategic financing of local sugar industry towards self-sufficiency in Tanzania. The

framework was made up of five independent variables and one dependent variable. Venture capital, long-term loans, economic exposure, listing into financial markets, and government were termed as independent variables whereas self-sufficiency of local sugar industry as a dependent variable. The selection of independent variables adhered to the proposition of Myers and Majluf (1984). The effect of the independent variables predicted the rate at which self-sufficiency can be measured in local sugar industry. Multiple linear regression was used to analyse the relationship between dependent and independent variables.

The analysis of the variables was guided by the following study hypotheses;

H0: Venture capital has a significant positive effect on local sugar industry self-sufficiency

H1: Long-term loans has a significant positive effect on local sugar industry self-sufficiency

H2: Economic exposure has a significant positive effect on local sugar industry self-sufficiency

H3: Listing into financial market has a significant positive effect on local sugar industry self-sufficiency.

2.6.1 Discussion of the Conceptual Framework

Financing strategies: It comprises of long-term loans, venture capital, listing into financial markets, economic exposure and continuous assistance of the government, which may contribute to the sugar self-sufficiency. Self-sufficiency can be achieved with combined efforts from all the stakeholders and government in particular.

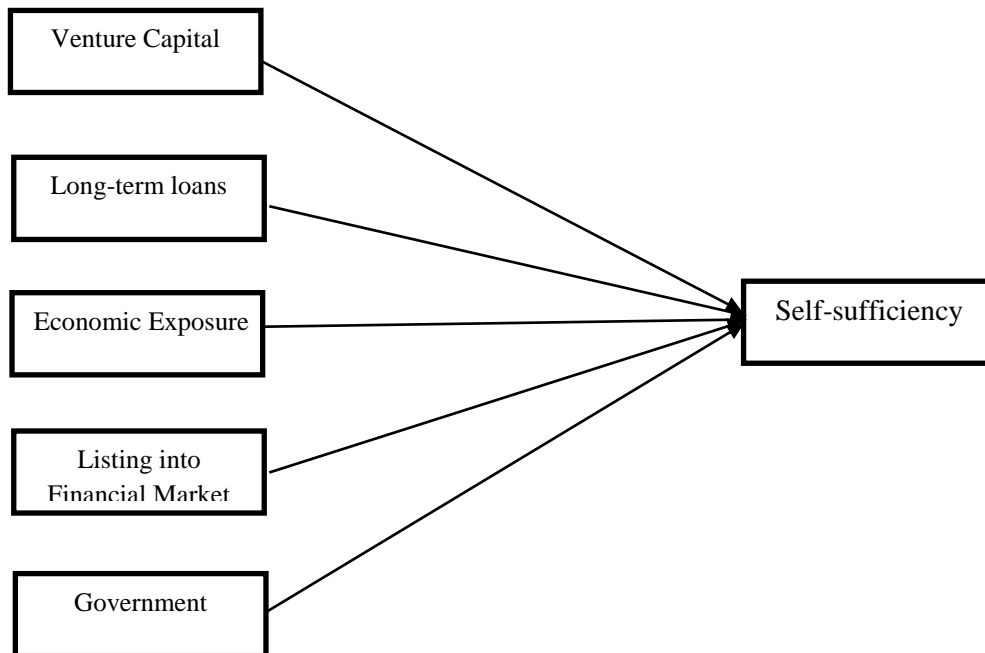


Figure 2.1: Conceptual Framework of the Study

Long-term loans: refers to the loans and financial obligations lasting over one year. Long-term debt for a company would include any financing or leasing obligations that are to come due in a greater than 12-month period. Because agricultural investment takes long time to start generating revenue, availability of more long-term loans, facilitate growth and expansion of the production.

Venture capital: is the start-up or growth equity capital or loan capital provided by private investors (the venture capitalists) or specialized financial institutions (development finance houses or venture capital firms). The more venture capital is made available to business the more likely the businesses going to grow and expand its production.

Dependent variable: The dependent variables represent the output or outcome whose variation is being studied. The change in dependent variable is due to change in

independent variable(s). In this study, the dependent variable is sugar self-sufficiency. Strategic financing may result into positive or negative effect on sugar production. Continued strategic financing of the local sugar industry results into sustainable and independent sector in future.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This section provides the methodology adopted in the study. It consists of research design, area of the study, sampling techniques and procedures, methods of data collection and data processing and analysis.

3.2 Study Area

As mentioned earlier, this study was conducted in the areas where four large sugar estates exist in the country as sample representative. These includes; KSL, MSE, KSCL and TPC located in Kagera region at Missenyi district, Morogoro region at Mvomero district, Morogoro region at Kilombero district and Kilimanjaro region in Moshi Municipal, respectively. Others were Sugar Board of Tanzania (SBT) in Dar-es-salaam and Tanzania Agricultural Research Institute (TARI-Kibaha) in Pwani region, the government institutions responsible for regulating and research development respectively. The researcher has chosen these areas specifically due to the fact that, the four estates of sugar are the largest sugar plants in the country implying that, the findings from the study area reflects the general outcome of the problem under investigation.

3.3 Research Philosophy

The research philosophy encompasses knowledge development via data collection, analysis and utilisation of findings. In specifically, the field of business studies comprises four important research philosophies: pragmatism, positivism, realism and

interpretivism. (Moon *et al.*, 2019). For the purpose of this research, then, the philosophy of positivism was embraced. The reason for this choice is to facilitate the development of concepts based on field data, using documentation, interviews and surveys. Positivist philosophy is often intended to evaluate theory and is associated with the quantitative methods of gathering and analysis, (Creswell, 2014).

3.4 Research Approach

This study adopted a quantitative approach. This included a comprehensive analysis and examination of the data on the study periods. The researcher relied mostly on the current accessible information on financial strategies and sugar industry. Descriptive analyses were utilised to analyse coded questionnaire quantitative data.

3.5 Research Design

Research design is the chosen and planned procedure of investigating and studying the social reality in society or organizations so as to optimize the research outcome, as a plan for selecting subjects, research sites and data collection procedures to answer the research questions (Durrheim, 2006). The design shows at what individuals will be studied, when, where and under what circumstances. The cross-sectional research design was employed to collect information.

Data were collected at one point in time or in a single session on several variables. The researcher selected cross-sectional design as they allow the collection of a large amount of data from a sizeable population in a highly economical way. The survey strategy allows collection of quantitative data, which were analysed quantitatively using descriptive and inferential statistics.

This strategy gives more control over the research process and when sampling is used, it is possible to generate findings that are representative of the whole population at a lower cost than collecting the data for the whole population (Lindell & Whitney, 2001). The survey design employed questionnaire to examine the financing strategies of local sugar industry towards self-sufficiency in Tanzania.

3.6 Population of the Study

In this study, the population of the study include 70 respondents whereby 60 sugar estates key leaders were considered, 10 Sugar Board of Tanzania and Sugar Research Institute officers.

3.7 Sample Size and Sampling Techniques

3.7.1 Sample Size

As defined by Kothari (2004), a sample is a collection of some parts of the population on the basis of which judgment is made, small sample for convenient data collection and large enough to be a true representative of the population from which it has been selected. Sample size refers to a number of items to be selected from the universe to represent others.

The sample must be sufficient. A sample size of 42 respondents was considered in this study. Due to the fact that, the sample area for the study involve five different regions in Tanzania, this sample size was selected with the aim of ensuring accessibility, easy management and cost reduction on data collection by the researcher. With regard to the sample size, the researcher applied a simplified formula provided by Yamane

(1967) at 95% confidence level, degree of variability=0.5 and level of precision (e) = 0.10

$$n = \frac{N}{1 + N(e)^2}$$

Where n is sample size, N is the total number of study population, 70

Where e is the level of precision

$$n = 70 / (1 + 70 * 0.10^2)$$

$$n = 41.17 \approx 42$$

Where,

n (All Sectors) = Sample size of two sectors (Sugar estates + SBT and TARI-Kibaha)

N (All Sectors) = Population of respondents (Sugar Estates + SBT and TARI-Kibaha)

3.7.2 Sampling Technique

The researcher used non-probability purposive sampling technique to get samples of study's respondents. Purposive sampling was used to select 42 respondents from sugar estates, sugar board and sugar research institute believed to be reliable and who provided required information for this study.

38 Data Collection Methods and Tools

To accomplish the objectives of this research and come up with reliable results the researcher used both primary as well as secondary data. The primary data collection methods that were used during the study include questionnaires and one on one interview. The secondary data was collected from relevant documentation.

3.9 Questionnaires

Questionnaire is a list of a research or survey questions asked to respondents, and designed to extract specific information. It serves four basic purposes: to collect the appropriate data, make data comparable and amenable to analysis, minimize bias in formulating and asking question, and to make questions engaging and varied (Krosnick, 2018). Key leaders from each of the four (4) sugar estates, SBT and TARI-Kibaha were distributed with questionnaire and interviewed, yielding a total of 42 respondents.

3.9.1 Interviews

Kothari (2004) defined an interview as a set of questions administered through oral or verbal communication between the researcher and the interviewee. This study used combination of open ended and close-ended interview questions. Fowler (1984) state that, personal interview procedures are probably most effective ways of enlisting cooperation for most population. The researcher in this study talked to the key informants with the aim of getting the wider perspective on best financing strategies to be employed in Tanzania for strategic investment to achieve sugar self-sufficiency.

3.10 Data Processing and Analysis

Data processing implies editing, cleaning, coding, classification and tabulation of the collected data so that they are amenable to analysis (Kothari, 2004). Data were cleaned by an aid of Microsoft Excel 2019. This is an immediate stage between data collection and data analysis. Quantitative data from the questionnaires were categorized, coded and entered into the computer for computation of descriptive

statistics. The Statistical Package for Social Sciences (SPSS) version of 24 was used to run descriptive analyses to produce frequency distribution, percentages means and standard deviations based on collected data.

Multiple regression analysis was used to analyse the relationship between dependent and independent variables. Multiple regression analysis is more amenable to ceteris paribus analysis because it allows us to explicitly control for many other factors which simultaneously affect the dependent variable (Wooldridge, 2003). Multiple regression involves five assumptions namely; linearity, normality, homoscedasticity, autocorrelations, and multicollinearity. The multiple regression analysis was analysed in regards to the developed regression model as follows;

From general multiple regression equation,

$$Y = \alpha + x_1\beta_1 + x_2\beta_2 + \dots x_n\beta_n + \varepsilon$$

Then,

$$Y = \alpha + x_1\beta_1 + x_2\beta_2 + x_3\beta_3 + x_4\beta_4 + x_5\beta_5 + \varepsilon$$

Where,

Y= Self-Sufficiency

X₁= Venture Capital

X₂ = Economic Exposure

X₃= Long-term loans

X₄ =Listing into financial markets

β =Regression Coefficient

α = Constant

3.11 Reliability and Validity

3.11.1 Validity Analysis

The validity of a measurement is stated as a measuring ability in a dimension or instrument. It is the accuracy and authenticity of the outcomes and the data (Msabila & Nalaila, 2013). In order to ensure the validity of data instruments, the study carried out a pilot test-re-test. The participants received 20 questionnaires and administered them. Following one week after the same treatment, the same subjects were repeated. Results reveal that the identical responses were given in a questionnaire proving that the instruments are valid.

3.12 Reliability Analysis

The reliability of an instrument of research is the extent to which an instrument of research results consistently following repeated tests. The measurement quality is dependent on reliability. The test findings of Table 3.1 showed that the Cronbach coefficient of all variables was over 70 percent as a statistically reliable data collection tool.

Table 3.1: Reliability Analysis

Item	Number of Respondents	Cronbach's Alpha	Number of items
Venture capital	42	0.881	5
Long-term loans	42	0.851	5
Economic exposure	42	0.863	5
Listing into financial market	42	0.913	5
Self-sufficiency	42	0.861	5

3.13 Response Rate

After collection of data and quality assurance using validity and reliability tests, the response rate was found 100%. This was marked since all data instruments administered to the respondents were successfully filled in and returned.

CHAPTER FOUR

PRESENTATION OF THE FINDINGS

4.1 Chapter Overview

This chapter provides analysis of the findings as respect to financing strategies and self-sufficiency of local sugar industry. The findings were presented based on specific objectives of the study preceded by socio-demographic characteristics of the respondents.

4.2 Socio-Demographic Characteristics of the Respondents

The study summarised the socio-demographic features of the participants to understand a socio status overview of the population under investigation. Four features were considered namely; sex, age, education, and working experience as depicted on Table 4.1.

Table 4.1: Descriptive Statistics Showing Socio-Demographic Characteristics

Variable	Category	Frequency	Percent (%)
Sex	Male	34	81.0
	Female	8	19.0
Age	18-30	12	28.6
	31-45	14	33.3
	45-60	16	38.1
Education Level	Undergraduate	23	54.8
	Postgraduate	19	45.2
Working Experience	1- 5 years	12	28.6
	6 - 10 years	16	38.1
	Above 10 years	14	33.3

Source: Researcher (2021)

4.2.1 Sex of the Respondents

Based in Table 4.1, majority 34 (81%) out of the 42 respondents were males while a few 8(19%) from the same total were their female counterparts. Male participants outnumbered female ones. This gives an implication that, majority of employees in sugar industry particularly at managerial level are males employees. Decision making in critical matters regarding sugar industry can be inferred as mostly dominated by males.

4.2.2 Age of the Respondents

Results on Table 4.1 indicate that, many 16 (38.1%) out of 42 participants were adult aged 45-60 years old. It also shows that, a few respondents were aged 18-30 years and 31-45 years old, accounting for 28.6% and 33.3% respectively. It implies that, majority of respondents were old adults, which can be associated with working experience as the study targeted respondents from managerial level.

4.2.3 Education Level of the Respondents

Findings as regards to Table 4.1 reveal that, 23 (54.8%) out of the 42 respondents had undergraduate level of education, whereas the rest 19 (45.2%) from the same total attained postgraduate education. Results implies that, majority were literate suffice to participate in the survey.

4.2.4 Working Experience of the respondents

As obtained in Table 4.1, majority 16 (38.1%) out of 42 respondents had 6-10 years of working experience, followed by 14 (33.3%) respondents with over 10 years of the experience. The findings also yielded that, a few 12 (28.6%) respondents had 1-5

years of working experience. Working experience of the majority indicate that, they have enough knowledge and information pertaining the problem under investigation.

4.3 The Role of Venture Capital on Local Sugar Industry

Descriptive statistics were used to analyse this objective with data prepared in 5-Likert scale point. The total of strongly agree and agree responses were regarded as positive response on the variable while the total disagree and disagree were treated as negative responses. Findings are illustrated in Table 4.2.

Table 4.2: Descriptive Statistics Showing Responses on the Role of Venture Capital

Variable	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Financial outlook	3	7.1	4	9.5	1	2.4	17	40.5	17	40.5
Working Team	5	11.9	4	9.5	7	16.7	12	28.6	14	33.3
Market Opportunity	4	9.5	2	4.8	4	9.5	17	40.5	15	35.7
Technology	4	9.5	3	7.1	5	11.9	15	35.7	15	35.7
Competitive Advantage	4	9.5	5	11.9	4	9.5	17	40.5	12	28.6
Deal Structuring Flexibility	8	19.0	1	2.4	2	4.8	15	35.7	16	38.1
Fund Viability and Liquidity	5	11.9	3	7.1	2	4.8	19	45.2	13	31.0
Total	42	100	42	100	42	100	42	100	42	100

4.3.1 The Role of Venture Capital on Financial Outlook of Local Sugar Industry

Respondents were asked to provide their response on whether venture capital has impact on financial outlook of the local sugar industry. Findings in Table 4.2 indicate that, majority 34(41%) of the respondents out of 42 participants disagreed while a few 7(16.6%) agreed, and only 1(2.4%) respondent stayed neutral.

4.3.2 The Role of Venture Capital on Working Team of Local Sugar Industry

The study sought to measure whether the obtained venture capital has impact on working team of local sugar industry. As shown in Table 4.2, many 16(61.9%) respondents out 42 respondents disagreed the fact venture capital has no impact whereas, very few 9(21.4) % agreed, and only 7(16.7%) stayed neutral.

4.3.3 The Role of Venture Capital on Market Opportunity of Local Sugar

Industry

The study sought to assess responses of participants on whether venture capital encouraged market opportunities. It was found that, majority 32(76.2%) out of 42 of respondents did not support this notion while 6(14.3%) of the same total supported venture capital has encouraged market opportunities. Further, 4(9.5%) of the respondents stayed neutral.

4.3.4 The Role of Venture Capital on Technology of Local Sugar Industry

Respondents were asked to provide their views on whether venture capital has impact on development of technology of local sugar industry. Results in Table 4.2 indicate that, majority 30(71.4%) of the respondents claim there was no impact, few 7(16.6%) agreed, and 5(11.9%) were neutral.

4.3.5 The Role of Venture Capital on Competitive Advantage of Local Sugar

Industry

Respondents provided their responses on the role of venture capital in improving competitive advantage. As obtained in Table 4.2, majority 29(69.1%) of the respondents disagreed, 9(21.4%), and 4(9.5%) were neutral.

4.3.6 The Role of Venture Capital on Deal Structuring Flexibility of Local Sugar Industry

The study analysed respondents' views on whether existing venture capital has a deal structuring flexibility. Findings on Table 4.2 shows that, majority 31(73.8%) of the respondents disagreed, 9(21.4%) claim venture capital was flexible with respect to company needs, while only 2(4.8%) stayed neutral.

4.3.6 The Role of Venture Capital on Fund Viability And Liquidity of Local Sugar Industry

Respondents were asked to provide their views regarding the role of venture on stimulating fund viability and liquidity. Findings indicate that, majority 32(76.2%) of the respondents out of 42 respondents disagreed, whereas, 8(19.0%) agreed, and only 2(4.8%) stayed neutral.

4.3.7 The Influence of Long-Term Loans on Local Sugar Industry

The study sought to assess the influence of long-term loans on local sugar industry in terms of long-term sustainability, quality of goods produced, and technology used. Descriptive statistics were employed to analyse the objective prepared on 5-Likert scale point, as shown in Table 4.3.

Table 4.3: Descriptive Statistics Showing Responses on the Influence of Long-Term Loans

Variable	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Long-term sustainability	10	23.8	9	21.4	7	16.7	10	23.8	6	14.3
Quality of goods produced	4	9.5	6	14.3	3	7.1	15	35.7	14	33.3
Technology used	3	7.1	7	16.7	3	7.1	12	28.6	17	40.5
Total	42	100	42	100	42	100	42	100	42	100

4.4 The Influence of Long-Term Loans on Long-Term Sustainability of Local Sugar Industry

Respondents were asked to state their views regarding the effect of long-term loans on long-term sustainability of the firm. Findings in Table 4.3 shows that, 19(45.2%) of the respondents out of 42 participants suggest long-term loans highly influenced long-term sustainability, whereas 16(38.1%) disagreed, and 7(16.9%) stayed neutral.

4.4.1 The Influence of Long-Term Loans on Quality of Goods Produced

Respondents provided their perspectives on whether long-term loans affected quality of goods produced. As obtained in Table 4.3, it was found that, majority 29(69%) of the respondents out of 42 participants did not support this notion, 9(23.8%) claim the effect was high, and 3(7.1%) of the respondents were neutral.

4.4.2 The Influence of Long-Term Loans on Technology Used

Respondents provided their views on the effect of long-term loans on technology employed in local sugar industry. Results revealed that, majority 29(69.1%) of the respondents suggest the loans does not affect technology, whereas, few 10(23.8%) respondent agree the loans affected technology used.

4.5 Strategies used to Manage Economic Exposure on Local Sugar Industry

The study assessed respondents' perspectives on whether strategies employed were effective in managing economic exposure in terms of operational strategies and currency risk strategies. Descriptive statistics were used to analyse the objective as demonstrated in Table 4.4.

Table 4.4: Descriptive Statistics Showing Strategies used to Manage Economic Exposure

Variable	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Diversifying Production Facilities and Markets for Products	2	4.8	3	7.1	3	7.1	20	47.6	14	33.3
Sourcing Flexibility	2	4.8	1	2.4	7	16.7	19	45.2	13	31.0
Matching Currency Flows	1	2.4	5	11.9	2	4.8	13	31.0	21	50.0
Total	42	100	42	100	42	100	42	100	42	100

4.5.1 Diversifying Production Facilities and Markets for Products

Respondents were asked to state whether diversifying production facilities and product markets managed economic exposure in local sugar industry. Findings suggest that, 34(80.9%) of the respondents disagreed, 5(11.9%) agreed, and 3(7.1) were neutral in this strategy.

4.5.2 Sourcing Flexibility on Economic Exposure

The study measured whether sourcing flexibility managed economic exposure based on respondents' views. As shown in Table 4.3, 32(76%) of the respondents disagreed the influence of sourcing flexibility in the study area, whereas, 3(7.1%) agreed, and 7(16.7%) stayed neutral.

4.5.3 Matching Currency Flows on Economic Exposure

The study assessed whether matching currency flows managed economic exposure in local sugar industry. It was found that, majority 34(81%) of the participants rejected this aspect, whereas 6(13.3%) agreed and 2(4.8%) stayed neutral.

4.6 The Effect of Financial Strategies on Self-Sufficiency of Local Sugar

Industry

Multiple linear regression was used to analyse the effect of financing strategies on self-sufficiency. A total of four independent variables were analysed; venture capital, long-term loans, economic exposure, and listing into financial markets against one dependent variable self-sufficiency. The assumptions of multiple regression were checked before conducting the analysis, including linearity, normality, homoscedasticity, autocorrelations, and collinearity.

4.6.1 Assumption of Linearity

This assumption is commonly tested to see if there is a linear link between dependent and independent variables. For the examination of the assumption, the Pearson correlation test was performed. The results reveal that there is a significant association between self-sufficiency ($p \leq .05$) and all four independent factors. However, self-sufficiency showed negative direction on relationship with venture capital, $r(42) = -.24$, $p = .02$, and listing into financial markets, $r(42) = .04$, $p = .03$ as indicated in Table 4.5.

4.6.2 Assumption of Normality

Normality assumption was employed to determine whether data is distributed normally. To evaluate the assumption, kurtosis and skewness test were used. The results suggested that independent variables were normally distributed, since all studied variables had Kurtosis values ranging from -2 to 2, and they were skewed between -1.96 and 1.96. Table 4.6 depicts the results.

Table 4.5: Pearson Correlation Showing Linearity Test

	Venture capital	Economic exposure	Long-term loans	Listing into financial markets	Self-sufficiency
Venture capital	1				
	42				
Economic exposure	-.277	1			
	.076				
	42	42			
Long-term loans	.024	-.041	1		
	.881	.797			
	42	42	42		
Listing into financial markets	-.062	.004	-.039	1	
	.697	.980	.808		
	42	42	42	42	
Self-sufficiency	-.244	.066	.089	-.042	1
	.020	.049	.015	.030	
	42	42	42	42	42

Table 4.6: Kurtosis and Skewness Test Showing Normality Assumption

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Venture capital	42	.039	.365	-1.228	.717
Economic exposure	42	.078	.365	-1.245	.717
Long-term loans	42	-.509	.365	-1.162	.717
Listing into financial markets	42	-.258	.365	-1.402	.717

4.6.2 Assumption of Homoscedasticity

When all levels of predictor variables have the same variance errors, this is referred to as homoscedasticity. The assumption was tested by plotting standardised residuals against predictor value. The assumption was fairly satisfied since the residuals were depicted dispersed across a horizontal line showing an equal distribution. The assumption test is depicted in Figure 4.1.

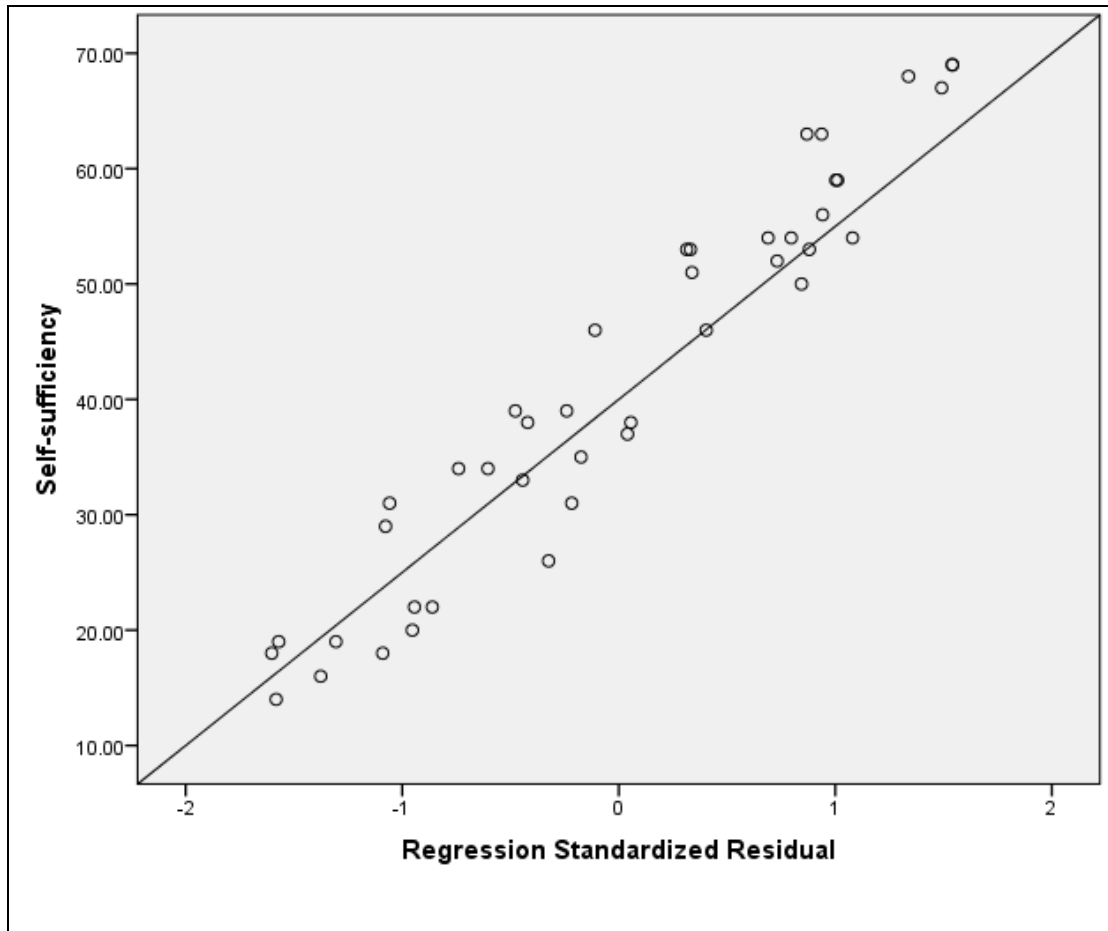


Figure 4.1: Homoscedasticity Assumption Test

4.6.3 Assumption of Autocorrelation

Autocorrelation occurs when one variable's error term is related to another variable's error term over time (Berman & Wang, 2017). Using the Durbin-Watson coefficient, the assumption was examined. Durbin-Watson (DW) = 2.3 was found, indicating that the variables exhibited low autocorrelation. Field (2009) suggests a Durbin-Watson value of 1.5-2.5 for significant autocorrelation observation, as indicated in Table 4.7.

Table 4.7: Durbin-Watson Showing Autocorrelations Test

Model	R	R Square	Adjusted R Square	Std. Error	Durbin-Watson
1	.267	.071	-.029	16.94317	2.301

4.6.4 Assumption of Multicollinearity

It is feasible to assess the substantial effect of independent factors on the dependent variable when the variables are uncorrelated (Keith, 2006). The tolerance rate and the Variance Inflation Factor were used to determine if the variables were collinear. All independent variables demonstrated little collinearity since the tolerance coefficient was above 0.9, indicating the allowed range, while VIF was not greater than 1.0. According to Shieh (2010), the VIF coefficient ranges from 1 to 10, whereas the tolerance rate is 0 to 1, with a high tolerance rate and low VIF indicating little multicollinearity. Table 4.8 shows the results.

Table 4 8: Collinearity Statistics Showing Multicollinearity Assumption

Collinearity Statistics		
Model	Tolerance	VIF
1		
Venture capital	.919	1.088
Economic exposure	.922	1.085
Long-term loans	.997	1.003
Listing into financial markets	.995	1.005

4.7 Multiple Linear Regression Analysis

After satisfactory assumption checks, multiple regression analysis was carried out. The results showed a statistically significant regression model ($p < .000$). Independent variables were found to explain 7.1% of variations of the regression model, as seen in Table 4.9. It indicates that, venture capital, economic exposure, long-term loans, and listing into financial markets accounts for 7.1% of self-sufficiency of local sugar industry.

Table 4.9: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error	Sig.
1	.267	.071	-.029	16.94317	0.000

Each independent variable was examined to determine its variation prediction on self-sufficiency. It was found that, one unit increase in venture capital decreases self-sufficiency by 0.23, one unit increase in economic exposure determines 0.001 increase in self-sufficiency. Also, one unit increase in long-term loans predicts 0.1 increase in self-sufficiency. However, one unit increase in listing into financial markets decreases self-sufficiency by 0.05 as shown in Table 4.10.

Table 4.10: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	48.396	12.989		3.726	.001
	Venture capital	-2.994	1.986	-.249	-1.507	.040
	Economic exposure	.010	1.939	.001	.005	.046
	Long-term loans	1.056	1.804	.093	.585	.002
	Listing into financial markets	-.602	1.767	-.054	-.340	.036

The equation of the regression model was generated from the result of coefficients;

From general multiple regression equation,

$$Y = \alpha + x_1\beta_1 + x_2\beta_2 + \dots x_n\beta_n + \varepsilon$$

Then,

$$Y = \alpha + x_1\beta_1 + x_2\beta_2 + x_3\beta_3 + x_4\beta_4 + x_5\beta_5 + \varepsilon$$

Hence,

$$Y = 48.4 - 3.0x_1 - 0.6x_4 + 0.1x_2 + 1.1x_3$$

Where,

$Y =$ *Self-Sufficiency*

$X_1 =$ *Venture Capital*

$X_2 =$ *Economic Exposure*

$X_3 =$ *Long-term loans*

$X_4 =$ *Listing into financial markets*

$\beta =$ *Regression Coefficient*

$\alpha =$ *Constant*

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Chapter Overview

This chapter provides discussion of the findings. The chapter covers outcomes based on the implications and foundations of empirical literature. Discussion was structured in connection to particular objectives of the study.

5.2 The Role of Venture Capital on Local Sugar Industry

Findings of the study suggest that, venture capital did not bring significant role on various aspects of local sugar industry, including financial outlook, working team, market opportunity, and technology. For instance, 41% of the respondents disapprove the role of venture capital on financial outlook of the sugar industry. This implies that, when a business takes too long to make profit, venture capitalist loose interest in sugar investment as most of the firms have unattractive financial outlook. 62% of the respondents claim that, venture capital has no impact on working team. This gives a notion that; most of the venture capitalists in the study area have no credibility to attract world-class team. 69% of the respondents claim the venture capital does not encourage deal structuring flexibility.

This means that, venture capitalists in the study area lacks enough fund that suffice business needs and are not flexible from an investment point of view, to make it worth. Current findings were in line with Van Deventer & Mlambo (2009) on the fact that, in order to allow the enterprise to create strategy from the formation of the industry to its development expansion, venture capital must sustain in all kinds of competition.

5.3 The Influence of Long-Term Loans on Local Sugar Industry

Based on the findings, long-term loans were revealed to affect sustainability of the company, quality of goods produced, and technology used. Results indicate that, 45.2%) of the respondents suggest long-term loans highly influenced long-term sustainability. This implies that, venture capitalist spends millions of dollars, desiring to repay their investment several times. They are strongly focused on the long-term sustainability of a project. A production firm needs land, construction, machinery etc. Therefore, they pursue long-term loans for the investment.

It was also found that, 69% of the respondents' regards long-term loans did not influence quality of goods and technology advancement respectively. Long-term debt has the disadvantage of limiting monthly cash flow in the short run. The more one commit to paying off debts each month, the greater the debt amounts get. This implies a company have to devote more of on monthly revenue to debt repayment than to new growth initiatives.

Terry and Ogg (2017) was in consistent with present findings as they also revealed that, long-term loans and current liabilities have a substantial influence on return on assets. Nakhoda (2018) also emphasize that, for enterprises, long-term loan offers some funding benefits, which can be utilized to support company expansion. However, a high degree of long-term loans might present a potential to thrive over time with hazards and financial obstacles.

5.4 Strategies used to Manage Economic Exposure on Local Sugar Industry

In regards to the findings, several strategies were found commonly utilised in managing economic exposure at the study area. The strategies were categorized into

two groups namely; operational, and currency risk strategies. Operational strategies include, diversifying production facilities and markets for products, and sourcing flexibility. Currency risk strategy includes matching currency flows. It was found that, 81% of the respondents claim operational and currency risk strategies does not manage economic exposure in the study area. It means that, it would lessen the risk involved with diversifying manufacturing facilities and sales to a variety of markets instead of focusing on one or both areas. Findings also gives an implication that, as unexpected rate fluctuations affect the cash flows of a corporation, economic exposure may lead to substantial negative impacts on operations and profitability of the organisation. Strengthening foreign currency might increase manufacturing costs and lower profitability.

Economic exposure may, in addition, weaken the competitive position of the firm. For instance, local producers would face increased competition from international manufacturers who will have cheaper items if they strengthen local currency. Findings were aligned with Dubb, Scoones, and Woodhouse (2017) on the fact that, economic exposure is greater for companies that are sensitive to currency swings in terms of both product prices and input costs. It is lower if costs and pricing are not subject to fluctuations in currency.

Abdel-Salam (2020) also in line with current findings stressing that, for companies who do not change their market, product mix and source of inputs to the currency fluctuations, economic exposures are larger. Increased economic exposures suggest a flexibility to adjust to currency rate variations.

5.5 Effect of Financial Strategies on Self-Sufficiency of Local Sugar Industry

Based on the findings, financial strategies were found to have significant effect ($p < .05$) on self-sufficiency of local sugar industry. The measured strategies including, venture capital, long-term loans, economic exposure and listing into financial markets explained 7% of variations of self-sufficiency. The contribution of these strategies is very little compared to their significance in a business. This implies that, management of these strategies is not effective, for instance, regression coefficient results indicated venture capital and listing into financial markets as negative predictors of self-sufficiency.

It is therefore important to note that, financing might take the form of debt or investment, and the conditions of the financing might differ substantially. The reimbursement periods, overall capital costs and lender or investor criteria are important aspects to consider in selecting a company's sources of financing. Gupta and Randhawa (2018) supports the study findings stressing that, self-sufficiency of a business requires effective management of financial strategies such as venture capital and listing into financial markets.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of the Findings

First objective revealed that, venture capital has no impact on financial outlook as majority 41% of the respondents out of 42 participants disagreed. Many 61.9% respondents disagreed venture capital had no impact on working team.76.2% of respondents did not support that venture capital has encouraged market opportunities.71.4% of the respondents claim there was no impact of venture capital on development of technology. 69.1% of the respondents disagreed role of venture capital in improving competitive advantage.73.8% of the respondents disagreed existing venture capital has a deal structuring flexibility.76.2% of the respondents disagreed venture capital stimulated fund viability and liquidity.

Second objective revealed that, 45.2% of the respondents out of 42 participants suggest long-term loans highly influenced long-term sustainability. 69% of the respondents did not support long-term loans affected quality of goods produced. 69.1% of the respondents suggest that the loans do not affect technology used.

Third objective revealed that, 80.9% of the respondents disagreed diversifying production facilities and product markets managed economic exposure.76% of the respondents disagreed the influence of sourcing flexibility.81% of the participants rejected the fact that, matching currency flows managed economic exposure in local sugar industry.

Fourth objective shows that, venture capital, economic exposure, long-term loans, and listing into financial markets accounts for 7.1% of self-sufficiency of local sugar industry.

6.2 Conclusions of the Study

The primary purpose of this study was to examine financial strategies of local sugar industry towards self-sufficiency. Findings suggest that, financial strategies (venture capital, long-term loans, economic exposure, and listing into financial market) have significant effect on self-sufficiency of local sugar industry. However, the strategies accounts only for 7% of self-sufficiency, which is statistically very low. On the other hand, venture capital and listing into financial markets had negative effect on self-sufficiency. This reflects poor management of financial strategies and decision making among investors.

With regards to the study hypotheses; venture capital, long-term loans, economic exposure, and listing into financial market had significant effect on self-sufficiency of local sugar industry. It therefore affirms that the null hypotheses were accepted and alternative hypotheses rejected.

6.3 Recommendations of the Study

The following were the recommendations of the study;

With the correct financial plan and budget in place, overall liability will be reduced and the cash flow ratio increased by supporting professional ethics in financial reporting and enhancing customer capacity for improvement and change of companies. This will enhance companies' capacity to pay their suppliers on time,

manage their competitive market and manage their debts and boost its working capital.

Although sugar estates deal with internal variables, which influence financial management, the government should build an environment that enables state enterprises to flourish and meet the standards of the private sector. The government should be politically willing to follow the aforementioned strategies effectively and successfully in order to attain self-sufficiency. Sugar's state-owned companies should be appropriately structured to adopt current advanced technologies, as it is one of the variables impacting financial strategies management.

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APPENDICES

Appendix I: Questionnaires

Introduction

This study is conducted by Rizwani, Abubakari Nassoro, a student of Open University of Tanzania in the Faculty of Business Management. The study will result into a thesis report, which is a partial fulfillment for the award of a Master degree of Business Administration of the Open University of Tanzania. This study is about examining financing strategies of local sugar industry towards self-sufficiency in Tanzania. The survey thus is meant to avail background information about financing strategies and their impact on sugar production in the country. The purpose of the survey is therefore to gather data from different key business leaders in the sugar estates, SBT and TARI-Kibaha. You have been selected because you are key person in the Tanzania sugar industry with more insight. I am requesting you to give me the requested information to accomplish this study. The data collected shall be treated with utmost confidentiality and anonymity.

Thank you for your cooperation

RESPONDENT'S BACKGROUND INFORMATION

Please tick (✓) the age group you are; gender and education level in the most appropriate box provided.

1: Age

- 18-30 years
- 31-45 years
- 45-60 years

2: Sex

- Male
- Female

3: Education qualification

- Secondary Education
- Undergraduate
- Postgraduate

4. Experience

- 1 year- 5 years
- 6 years- 10 years
- Above 10 years

SECTION B

Use the scale provided to each part to make an assessment. Please tick in the table the number that best describes your perception. Each number is presented by statement as shown below.

1-Strongly agree, 2 – Agree, 3 – Neutral, 4 – Disagree, 5 – Strongly disagree

The role of venture capital on local sugar industry

Description	1	2	3	4	5
Financial outlook					
Working Team					
Market Opportunity					
Technology					
Competitive Advantage					
Deal Structuring Flexibility					
Fund Viability and Liquidity					

The influence of long-term loans on local sugar industry

S/N	Description	1	2	3	4	5
	Long-term sustainability					
	Quality of goods produced					
	Technology used					

S/N	Description	1	2	3	4	5
	Long-term sustainability					
	Quality of goods produced					
	Technology used					

The influence of long-term loans on local sugar industry

Strategies used to manage economic exposure on local sugar industry

S/N	Description	1	2	3	4	5
	Diversifying Production Facilities and Markets for Products					
	Sourcing Flexibility					
	Matching Currency Flows					

Self-sufficiency of local sugar industry

Indicate percentage of average increase of productivity in each respective year

Variable	2018	2019	2020
Productivity			

Appendix II: Research Clearance Letter**THE OPEN UNIVERSITY OF TANZANIA****DIRECTORATE OF RESEARCH, PUBLICATIONS, AND POSTGRADUATE STUDIES**

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TO WHOM IT MAY CONCERN

RE: RESEARCH CLEARANCE

The Open University of Tanzania was established by an act of Parliament no. 17 of 1992. The act became operational on the 1st March 1993 by public notes No. 55 in the official Gazette. Act number 7 of 1992 has now been replaced by the Open University of Tanzania charter, which is in line the university act of 2005. The charter became operational on 1st January 2007. One of the mission objectives of the university is to generate and apply knowledge through research. For this reason, staff and students undertake research activities from time to time.

To facilitate the research function, the vice chancellor of the Open University of Tanzania was empowered to issue a research clearance to both staff and students of the university on behalf of the government of Tanzania and the Tanzania Commission of Science and Technology. The purpose of this letter is to introduce to you **Mr. Abubakari Nassoro Rizwani, Reg. No. PG201609021** who is pursuing **Master Degree of Project Management**. We hereby grant this clearance to conduct a research titled: **“Strategic Financing of Local Sugar Industry Towards Self Sufficiency in Tanzania”**, He will collect his data in Morogoro Region between 24th April 2019. The research will be conducted in Morogoro Region.

In case you need any further information, please contact:
 The Deputy Vice Chancellor (Academic); The Open University of Tanzania; P.O. Box 23409;
 Dar es Salaam. Tel: 022-2-2668820

We thank you in advance for your cooperation and facilitation of this research activity.
 Yours sincerely,

Prof Hossea Rwegoshora
For: VICE CHANCELLOR
THE OPEN UNIVERSITY OF TANZANIA