KYAMBOGO UNIVERSITY

DETERMINANTS OF CAPITAL STRUCTURE OF SMALL AND MEDIUM ENTERPRISES:

A Case of Katwe Metal Works and Fabricators in Rubaga Division, Kampala District

BY

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JANUARY, 2014

DECLARATION

I declare that this dissertation is my original work, and it has never been presented to any institution of learning for any award.

Signed: ..... **Date:** 29th Jan. 2014

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APPROVAL

This is to certify that this dissertation has been submitted with our approval as University supervisors.

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DEDICATION

This work is dedicated to my mother and family for the special love and support they provided me through out the entire study period.

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LIST OF ABBREVIATIONS/ACRONYMS

AS	-	Asset Structure
CS	-	Capital Structure
CVI	-	Content Validity Index
EPS	-	Enterprise Program Systems
ET	-	Error Terms
FS	-	Firm Size
GR	-	Growth Rate
KCC	-	Kampala City Council
PL	-	Profitability Level
SMEs	-	Small and Medium Enterprises
SPSS	-	Statistical Package for Social Sciences
UGX	-	Uganda Shillings
US$	-	United States Dollar
WACC	-	Weighted Average Cost of Capital
WC	-	Working Capital

ABSTRACT

The study sought to establish the effect of the determinants of the capital structure of Small and Medium Enterprises (SMEs). The study adopted a cross sectional survey design from which a population of 228 SMEs from which a sample of 140 SMEs was drawn. A self-administered questionnaire was used to collect responses. Measurement of the relationships of the study were done and subjected to rigorous data processing and analysis using the relevant statistical computer software packages.

Findings indicated that there were positive and significant relationships between profitability and capital structure; firm size and capital structure; growth on capital structure; and asset structure and capital structure of SMEs with growth having the highest relationship with capital structure. Results from regression analysis revealed that among all the study variables; profitability, growth, size and asset structure, growth was the strongest predictor of capital structure. Further, the findings revealed that the model could only explain 57.7% in variance of capital structure.

In conclusion, the findings revealed that all the business characteristics were significant predictors of capital structure. This is confirmation that profitability, growth, size and asset structure are key determinants of the capital structures of SMEs. The study recommends that SME owners or managers should develop strategies that foster capital structure with emphasis on the business determinants that were used by the researcher to study firm capital structure. Likewise, the management of SMEs should put a lot of attention on growth as a business determinant of \SMEs since it was the strongest predictor of capital structure. Similarly, in order to promote desirable capital structures, firm owners need to put in place effective internal controls that support firm capital structures.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This chapter will comprise the background to the study, the statement of the problem, the theoretical/conceptual framework, purpose of the study, objectives of the study, the hypotheses, the scope of the study, the significance and operational definition of terms and concepts presented. The study will be an assessment of the determinants of capital structures of Small and Medium Enterprises (SME's) in Rubaga division, Kampala - Uganda. The determinants of capital structure will be the independent variables and capital structure will be the dependent variables.

1.1 Background to the Study

Small and Medium Enterprises (SMEs) play a major role in economic development in every country, including African countries. Studies indicate that in both advanced economies and developing countries SMEs contribute on average 60 percent of total formal employment in the manufacturing sector (Antoniou, Guney and Paudyal, 2002). For African economies, the contribution of the SME sector to job opportunities is even more important. Taking into account the contribution of the informal sector, SMEs account for about three-quarters of total employment in manufacturing (Abor, 2005).

A crucial element in the development of the SME sector is access to finance, particularly to bank financing, given the relative importance of the banking sector in serving this segment. Firm-level data collected by the World Bank show that access to finance is perceived as one of the main obstacles to doing business (World Bank, 2008, 2009, 2010). A number of studies

have shown that financing is a greater obstacle for SMEs than it is for large firms, particularly in the developing world, and that access to finance adversely affect the growth of the SME sector more than that of large companies (Bancel and Mittoo, 2002). It is, therefore, unsurprising that the international development community has listed SME access to finance as an important policy priority.

Winborg (2000) also indicated that small business managers experience problems in raising capital for the development of their businesses. Bhaird and Lucey (2006) have frequently referred to the concept of a 'financial gap', in order to explain why many small businesses face this sort of problem. Access to finance has been also identified as a key element for the Small and Medium Enterprises (SMEs) to succeed in their drive to build productive capacity, to compete, to create jobs and to contribute to poverty alleviation in developing countries. Despite their dominant numbers and importance in job creation, SME's traditionally have faced difficulty in obtaining formal credit or equity.

Traditional commercial banks and investors have been reluctant to service SME's for a number of reasons such as; SME's are regarded by creditors and investors as high- risk borrowers due to insufficient assets and low capitalization, vulnerability to market fluctuations and high mortality rates (Tang and Jang, 2007); information asymmetry arising from SME's' lack of accounting records, inadequate financial statements or business plans makes it difficult for creditors and investors to assess creditworthiness of potential SME proposals; and high administrative/transaction costs of lending or investing small amounts do not make SME financing a profitable business (Cardone-Riportella and Cazorla-Papis, 2001). Viewed from the owner and managers' perspective, major financial problems are: inadequate availability of

Working Capital (WC), a wide gap between WC and term loans, banks' insistence on collateral and third party guarantees, a risk averse banking system for small projects and delayed payments of bills by large firms (Winborg & Landstrom, 2001). These are well known problems of SMEs. However, what is little addressed is the capital structure of the SMEs.

Capital structure refers to the elements of working capital and it shows which of the components is responsible for the sizeable amount of investment in working capital (Fanelli & Keifman, 2002). In simple terms capital structure is the composition of equity and debt of a firm (debt ratio). It is encapsulated in the concept of working capital management, which refers to the financing, investment and control of net current assets within the policy guidelines. It may be regarded as the lifeblood of the business and its effective provision can do much to ensure the success of the business, while its inefficient management or lack of attention may lead to the downfall of the enterprise. In this particular study capital structure refers to a combination of an enterprise's sources of funds which include retained earnings, debt and equity.

One of the most important differences between large, small and medium-sized companies is the unavailability of long-term funding through capital markets for SME's and therefore the absence of market prices permitting objective assessment of their value. Such differences suggest the need to take a new look at capital structure drivers for SME's. The credit constraints faced by SME's make credit markets their only available source of financing. Lending relationships (LR) are critical mechanisms of assessment and control, even though credit markets are certainly not efficient. The existence of information asymmetries and opposing interests between lenders and borrowers, lead to 'credit rationing' (Bevan and

Danbolt, 2004). Therefore, the SME's' smaller size, lack of credit ratings, along with concentration of ownership and control in the entrepreneur's hands, increase information asymmetries, preventing SME's from attaining better funding terms and conditions in the credit market (Bevan and Danbolt, 1999).

An important question with regard to SMEs is the definition of what is really considered as SMEs. There are various definitions across different countries. In the European Union (EU) "The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro" Extract of Article 2 of the Annex of Recommendation 2003/361/EC. In Kenya SMEs are defined using the criteria of number of taxpayers not exceeding 50, turnover not exceeding Pound 10 million and assets not exceeding Pound 10 million.

In Uganda, "a small enterprise is defined as an enterprise employing maximum 50 people; annual sales/revenue turnover of maximum Ugandan Shillings 360 million and total assets of maximum Ugandan Shillings 360 million. A Medium Enterprise is defined as an enterprise employing more than 50 people; annual sales/revenue turnover of more than Ugandan Shillings 360 million and total assets of more than Ugandan Shillings 360 million", Uganda Investment Authority Baseline Survey Report (2010).

Small and Medium Enterprises (SMEs) are increasingly taking the role of the primary vehicles for the creation of employment and income generation through self-employment, and therefore, have been tools for poverty alleviation. Due to their characteristics, however, SME's in Uganda with a bias of those in Rubaga division, suffer from constraints of favourable capital

structures which have prevented them from growing and attaining economies of scale. The major challenges are the lack of access to working capital, market access, and access to modern technology and information. Access to financial resources is constrained by the lack of creditworthiness and management capacity, so they have trouble securing funds for their business activities such as procuring raw materials and products, and investing in plant and equipment.

Generally, the smaller the enterprise, the less likelihood its management will understand the need for financial management and the poorer the understanding of financial management. The size and the distance from major cities/urban centers are negatively related to the level of awareness of financial instruments. That is, the smaller the size of the enterprise and the farther away from the city/urban centre the enterprise is, the less aware the firm is of the financial instruments available. From the external perspective, SME's are regarded as insecure and costly businesses to deal with because they lack required collateral and have the capacity to absorb only small amount of funds from financial institutions (KCC Annual Report, 2008;2009).

SMEs are rationed out in their access to credit because of high intermediation costs, including the cost of monitoring and enforcement of loan contracts. Financial and accounting records are rarely in place, and where they are available, their accuracy is usually doubted. This makes them vulnerable to shocks of revenue or costs and, therefore, are unlikely to expand beyond the rate allowed by investment of earnings. This explains why the turnover of a typical SME in Uganda is estimated, on average at only UGX.10 million (US$6000) a year. Thus, poor returns, lack of good financial records, and lack of collateral make them not creditworthy. The Bank of

Uganda Sector Report, (2007) reported that SMEs in Rubaga Division and in particular Katwe have been facing challenges of servicing their loans besides getting more loans because of over burden debt levels.

1.2 Statement of the Problem

Despite some general perception of the contributions of SMEs in developing countries, there is more emphasis on corporate capital structure and the emphasis on large companies with less study on financial decisions of SMEs. There is still lack of awareness of a comprehensive study of how SMEs especially in metal work fabrication in Uganda decide their strategic financing, and what determines their capital structure. There is therefore a gap that this study is intended to address with specific reference to determinants of capital structure of SMEs in Rubaga Division, Uganda.

1.3 Purpose of the Study

The study sought to establish the influence of profitability, size, growth asset structure on the capital structure of Small and Medium Enterprises (SMEs).

1.4 Research Objectives

i) To assess the effect of growth on capital structure of SMEs.

ii) To establish the effect of profitability on capital structure of SMEs.

iii) To examine the effect of firm size on capital structure of SMEs.

iv) To examine the effect of asset structure on capital structure of SMEs.

1.5 Hypotheses

H_1: growth significantly affects capital structure of SMEs.

H_2: there is a significant relationship between profitability and capital structure of SMEs.

H_3: firm size significantly influences capital structure of SMEs.

H_4: asset structure has a significant effect on capital structure of SMEs.

1.6 Scope of the Study

Geographical scope: The study was carried out on the SMEs in the Rubaga Division Kampala District. Selected metal works workshops included SMEs in Katwe metal works fabricators comprised the scope. Katwe was selected as the area of the study because this is where SMEs originally started carrying out business before SMEs moving to other areas in the city.

Content scope: The study sought to investigate the nature of capital structure of SMEs, challenges faced by SMEs and the relationship between business characteristics and capital structure of the SMEs in Rubaga division.

Time scope: The study covered a period of 4 years from 2009-2012. The researcher considered that period to be long enough for proper assessment of the determinants of capital structures of SMEs. Likewise, during the same period government through the Uganda Investment Authority started offering training programmes in business management to SMEs since they form Uganda's economy backbone (Bank of Uganda, 2009).

1.7 Significance of the Study

i) The findings of the study will give a descriptive analysis on the relevance of different capital structure theories for economists and Ugandan small scale firms.

ii) The findings of the study will contribute and add useful information to that which already exists in regard to determinants of capital structures of the different small-scale firms due to size differences.

iii) The findings of the study will give a better understanding of the determinants of capital structure of Ugandan small scale firms that requires the usage of firm level micro data as opposed to macro level data. This will test the robustness of the evidence brought forward by studies on other countries.

1.8 Conceptual Framework

The framework shows the different determinants of capital structures of Small Scale Enterprises in Uganda. This shows the relationship between independent variable and dependent variable as well as moderating variables. According to Mugenda and Mugenda (1999), an independent variable is a variable that has an influence on the dependent variable. When the independent variable is present, the dependent variable is also present and with each unit of increase in the independent variable, there is an increase or decrease on the dependent variable as well. In other words, the variance in the dependent variable is accounted for by the independent variable. In this study, capital structure will be the variable of primary interest for investigation and it is the dependent variable. Capital structure will be measured according to debt and equity. According to Sekaran (2003), a moderating variable is the one that emerges between the independent variable and dependent variable. The presence of a third variable (moderating variable) modifies the original relationship between the independent and

dependent variable. The dependent variable is the capital structure (debt and equity) and the independent variables are the determinants of capital structure (profitability, size, growth and asset structure). In this study economic factors and government policies were identified as the moderating variables as outlined in Figure. 1 below

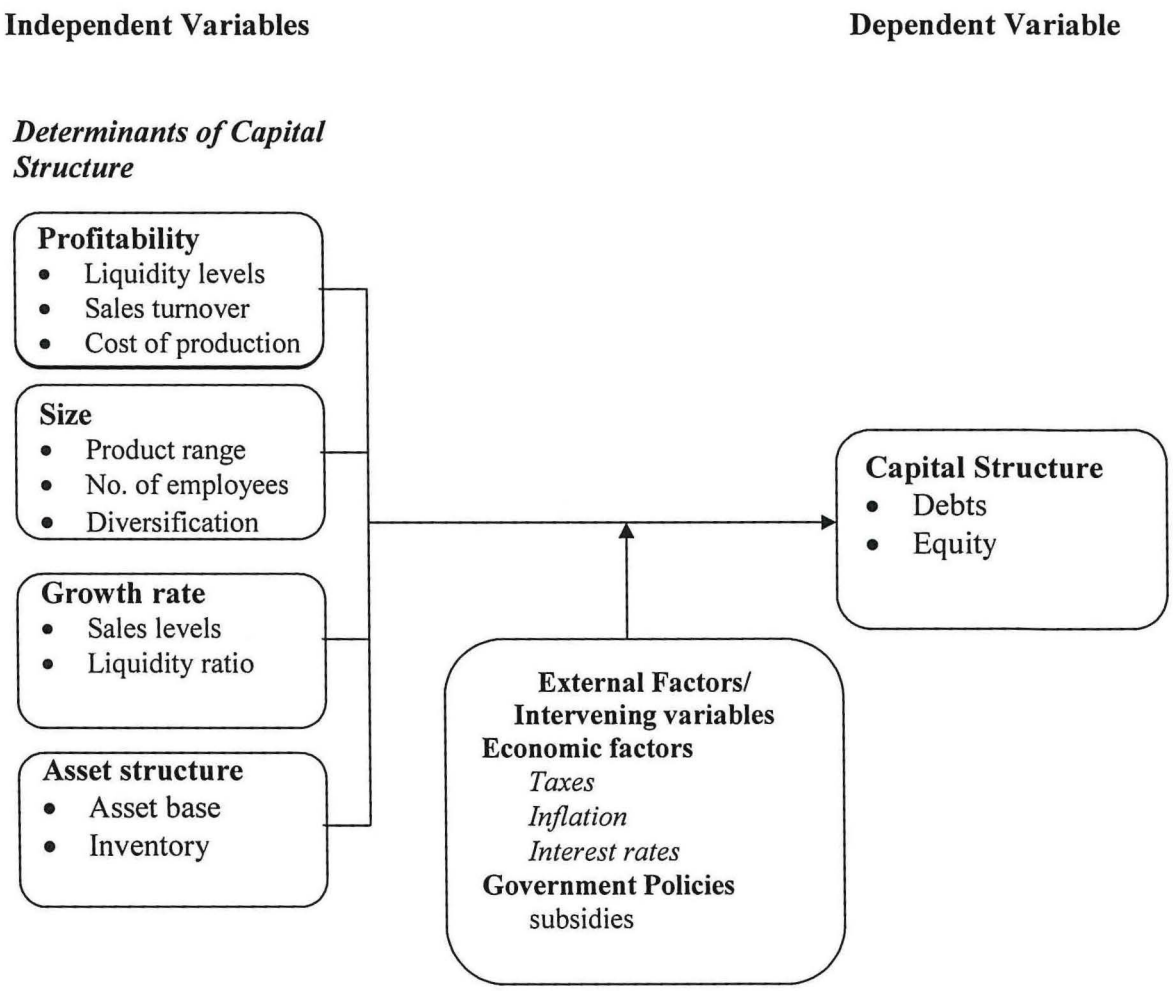

Figure 1: Conceptual Framework

Source: *Adapted from Green, Kimuyu, Manos and Murinde (2002)*

The above conceptual framework was underpinned by the determinants of capital structure which include profitability, size, growth and asset structure and the capital structure theory. The determinant of capital structure were generated where profitability was measured

according to liquidity levels, sales turnover and cost of production; SME size was measured according to product range, number of employees and diversification; growth was measured according to sales levels and liquidity ratio, whereas, asset structure was measured according to asset base and inventory.

1.9 Operational Definitions

Asset refers to any item of economic value owned by an individual or corporation, especially that which could be converted to cash.

Capital structure refers to the elements of working capital and it shows which of the components is responsible for the sizeable amount of investment in working capital (Fanelli & Keifman, 2002).

Growth rate refers to an increase in some quantity over time.

Profitability is the arithmetic difference between earned revenues and associated costs where revenues and costs are measured on an accrual basis such as a year and not a cash basis (Knie-Andersen, 2001).

Size refers to the state of a firm whether micro business, small business, medium business or large-sized business.

1.10 Structure of the Report

The thesis was organized in five chapters. Chapter one, comprised the introduction to the study which included; background to the study, statement of the problem, purpose of the study, research objectives, scope of study, significance of the study, conceptual framework, and organisation of the study. Chapter two consisted of a review and critique of relational literature of the study variables. Chapter three was the methodology of the study. It included the research

design, survey population, sampling design, data collection, measurement of variables, data analysis and limitations of the study. Chapter four comprised the presentation and interpretation of findings. Lastly, the discussion of the findings was carried out, conclusions drawn and recommendations made.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This study aims at contributing to the discussion on the capital structures of small scale enterprises by considering not only the quantitative variables already mentioned in the framework, but also those of a qualitative or strategic nature. It is structured starting with a brief summary of the different theoretical approaches analyzing the decision on capital structures. Then, the peculiarities of capital structures determinants for small scale enterprises and finally their relationship with capital structure of small firms.

2.2 Theoretical Review

According to Booth, Aivazian, Demiguc-Kunt and Maksimovic (2001), capital structure refers to the elements of working capital and it shows which of the components is responsible for the sizeable amount of working capital. Capital structure is embedded in the concept of working capital management, which refers to the financing, investment and control of net current assets within the policy guidelines (Sato, 2002). It may be regarded as the lifeblood of the business and its effective provision can do much to ensure the success of the business, while its inefficient management or lack of attention may lead to the downfall of the enterprise.

Firm size has been found to be a factor in determining capital structure (Booth et al., 2001). In a study of factors influencing capital structure in developed countries, Fanelli and Keifman, (2002) reported that a firm's profitability in terms of liquidity levels, sales turnover and cost of

production influenced a firm's capital structure. One firm variable which impacts upon agency and bankruptcy costs exposure is firm operating risk, in that the more volatile a firm's earnings streams, the greater the chance of the firm defaulting and being exposed to such costs. Firms with relatively higher operating risk will have incentives to have lower leverage than more stable earnings firms. Whereas, the extent to which the firm's assets are tangible and generic would result in the firm having a greater liquidation value (Eriotis, Vasilou and Neokosmidi, 2007). This is consistent with Myers, (2001) argument that tangible assets, such as fixed assets, can support a higher debt level as compared to intangible assets, such as growth opportunities. On the other hand, firms with high growth will tend to look for external funds to finance the growth. Firms would, therefore, look for short-term, less secured debt then to longer-term more secured debt for their financing needs.

2.3 Capital Structure

The theoretical principles underlying the capital structure, financing and lending choices of firms can be described either in terms of a static trade-off choice or pecking order framework. The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Cardone-Riportella and Cazorla-Papis, 2001). Owing to the presence of information asymmetries between the firm and potential financiers, the relative costs of finance vary between the financing choices. Where the funds provider is the firm's retained earnings, meaning more information than new equity holders, the new equity holders will expect a higher rate of return on capital invested resulting in the new equity finance being more costly to the firm than using existing internal funds. A similar argument can be provided between the retained earnings and new debt-holders. In addition, the greater the exposure to the risk associated with the information asymmetries for the various financing choices besides

retained earnings, the higher the return of capital demanded by each source. Thus, the firm will prefer retained earnings financing to debt, short-term debt over long-term debt and debt over equity. Debt and equity are the two different sources of funds for a company.

As both involve costs to the company, there is a need for the company to choose the right option that minimizes its costs and in most cases, companies tend to choose to create the right combination of debt and equity that might result in the lowest costs. Thus, the use of debt and equity proportions are the measurement tools for capital structure. Drobetz and Fix, (2003) describes that determining debt and equity is an important financial decisions faced by companies. Capital structure is defined as total debt to total assets at book value, influences both the profitability and riskiness of the company (Eriotis, Vasilou and Neokosmidi, 2007). Hence, capital structure concerns the relative proportions of debt and equity financing that helps companies to minimize their overall financing cost (cost of capital).

However, lowest cost (discount rate) is actually maximizing their market values (maximizing the present value of dividends). With this view, the discount rate is the cost of capital that can also be formulated as Weighted Average Cost of Capital (WACC). Financial risk refers to an increase in volatility or uncertainty of a company's earnings due to borrowing. Studies indicate that companies without borrowings (unlevered firms) show less fluctuation in their earnings, whereas, companies with borrowings (levered companies) show greater fluctuation in their earnings when there are changes in their financial performance. Hence, some specific implications of borrowing on levered firms could be outlined as follows; borrowings require interest payments that in effect, slash firms' net incomes, interest expenses as fixed costs that increase the volatility of net incomes and thus, affect Enterprise Program Systems (EPS) and

borrowings also relatively reduce the proportion of the equity in a company's capital structure and hence, reduce the number of shares outstanding.

2.4 Business Determinants

Theoretical constructs of any empirical research are proxies indirectly through the use of firm characteristics which include profitability, growth, tax, asset structure, risk and size.

2.4.1 Profitability

Corporate performance has been identified as a potential determinant of capital structure. The tax trade-off models show that profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk (Norvaisiene and Stankeviciene, 2007). However, Myers (1984) prescribes a negative relationship between debt and profitability on the basis that successful companies do not need to depend so much on external funding. They, instead, rely on their internal reserves accumulated from past profits. Mutenheri and Green, (2003), agree that firms with high profit rates, all things being equal, would maintain relatively lower debt ratio since they are able to generate such funds from internal sources.

2.4.2 Growth

Applying pecking order arguments, growing firms place a greater demand on their internally generated funds. Consequentially, firms with high growth will tend to look to external funds to finance the growth. Firms would, therefore, look to short-term, less secured debt then to longer-term more secured debt for their financing needs. Myers, (2001) confirms this and concludes that firms with a higher proportion of their market value accounted for by growth opportunity will have debt capacity.

2.4.3 Tax

Different authors on capital structure have given different interpretations of the impact of taxation on corporate financing decisions in the major industrial countries. Some are concerned directly with tax policy. For instance Lööf, (2004), etc. studied the tax impact on corporate financing decisions. The studies provided evidence of substantial tax effect on the choice between debt and equity. They concluded that changes in the marginal tax rate for any firm should affect financing decisions. A firm with a high tax shield is less likely to finance with debt. The reason is that tax shields lower the effective marginal tax rate on interest deduction. Myers, (1977) on his part concluded that, in general, taxes do affect corporate financial decisions, but the extent of the effect is mostly not significant.

2.4.4 Assets structure

Asset structure is an important determinant of the capital structure of a new firm. The extent to which the firm's assets are tangible and generic would result in the firm having a greater liquidation value (Eriotis, Vasilou and Neokosmidi, 2007). This is consistent with Myers, (2001) argument that tangible assets, such as fixed assets, can support a higher debt level as compared to intangible assets, such as growth opportunities. Assets can be redeployed at close to their intrinsic values because they are less specific.

2.4.5 Risk

Given agency and bankruptcy costs, there are incentives for the firm not to utilise the tax benefit of debt within the static framework model. As a firm is exposed to such costs, the greater its incentive to reduce its level of debt within its capital structure. One firm variable which impacts upon this exposure is firm operating risk, in that the more volatile a firm's

earnings streams, the greater the chance of the firm defaulting and being exposed to such costs. Firms with relatively higher operating risk will have incentives to have lower leverage than more stable earnings firms.

2.4.6 Size

Size plays an important role in determining the capital structure of a firm. Researchers have taken the view that large firms are less susceptible to bankruptcy because they tend to be more diversified than smaller companies (Myers, 1977). Following the trade-off models of capital structure, large firms should accordingly employ more debt than smaller firms. According to Myers, (2001), lending to small businesses is riskier because of the strong negative correlation between the firm size and the probability of insolvency.

2.5 Business Determinants and Capital Structure

Firm size has been found to be a factor in determining capital structure Booth, Aivazian, Demiguc-Kunt and Maksimovic (2001). In a study of factors influencing capital structure in developed countries, Fanelli and Keifman, (2002) reported that an increased debt ratio is associated with firm size in all the G-7 countries with the exception of Germany. It is thus argued that large firms tend to be well diversified and hence are less likely to go bankrupt. Therefore, lower expected bankruptcy costs enable large firms to take on more debts. Firms have a corporate personality but from the outside they are assumed to have an impersonal appearance. However, on the inside, the personalities of the owners and managers have a strong impact on firm behaviour. Struggles over control of the firm are frequent for one obvious reason: with control comes access to the firm's earnings, not to mention various nonpecuniary benefits. As a result, maintaining control can preoccupy management (owners if

they are different) whenever capital structure decisions are being made and the choice between debt and equity can at times tilt in favour of debt on the basis of control, even when cost considerations would favour equity. Past empirical efforts on factors influencing capital structure have included industry classification argues that industry classification is a relevant factor.

Control in a joint venture can be defined as a process through which parent companies ensure that the way the Joint Venture is managed conforms to their interests (Drobetz, Pensa and Wanzenried, 2007). Closely allied with control is the level of ownership of each partner in that, the split of ownership between the partners of a Joint Venture influences the level of resource commitment, control and consequently the strategic direction of the Joint Venture (Drobetz, Pensa and Wanzenried, 2007). Ownership level of partners to a Joint Venture may be an important influence of capital structure in that, Africa, is perceived to be a risky place to do business (Booth *et al.*, 2001). Consequently, it may be argued that one of the tools available to the foreign partner is to manage this risk by debt policy. It is, therefore, expected that a foreign partner would finance its capital contribution to the Joint Venture mostly through borrowing in order to minimise the risk. This is because debt financing offers significant advantages over equity financing as interest payment on debt are not subject to tax whereas dividend payments to equity shareholders are taxable. Given the fact that foreign investors constitute a substantial source of capital inflows in developing countries, it is likely to affect the capital structure.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter focuses on the techniques that were used to obtain the required data for the study. It includes the research design, location of the study, population of the study, sample size, sampling techniques, sampling procedure, and data collection methods, instruments for data collection, validity and reliability of the instruments, data analysis and measurement of variables.

3.1 Research Design

A cross sectional survey design was used to investigate the effect of business determinants on capital structure of SMEs. According to Mugenda and Mugenda (2003), a cross sectional design is investigative and attempts to capture people's attitudes, feedback and their patterns of behaviour. Mugenda and Mugenda (2003) continue to argue that a cross sectional design makes a detailed examination of a single subject, group or phenomenon and enables collection of sufficient data regarding study variables. The study used both qualitative and quantitative approaches. Qualitative approaches provided in-depth explanations while the quantitative approaches provided the data needed to meet required objectives and to test hypothesis.

3.2 Population of the study

The study targeted SME's in Katwe industrial park dealing in metal works and the business owners comprised the population of the study. The study population included the 228 SME that had the well established SME's dealing in metal and fabrication works located in Katwe.

3.3 Sample Size

A sample was selected to represent the population given that the study population is large. The sample size was determined scientifically using the table for determining sample size developed by Krejcie and Morgan, (1970). The table provides a sample size for a given population of the study. The sample size was 140 SMEs taken from a population of 228 metal works taken in Katwe. For each SME, a manager or owner of the SME was selected purposively to provide information on behalf of the SME.

3.4 Sampling Technique

Mugenda and Mugenda (2003) define sampling as a formulation of a procedure of selecting the subjects or cases to be included in the sample. In other words, a sampling technique is a plan for obtaining a sample from a given population. This study used the simple random sampling and purposive sampling methods to select the SMEs and mangers/owners respectively. According to Mugenda and Mugenda (2003), simple random sampling involves allocating equal chance to the selected elements in the population. This method involved giving a number to every respondent in the accessible population, placing the numbers in a container and then picking any number at random. Simple random sampling was used because it allocates equal chance for each respondent during the election process. This was used during the selection of owners and managers.

Purposive sampling is a sampling technique that allows a researcher to use cases that have required information with respect to the objectives of one's study. Cases of subjects are therefore handpicked because they possess the required information. Purposive sampling technique was used to select key informants who are the managers and or owners. This

category of respondents was chosen since they are concerned with the decision making and planning processes of the SMEs and possess the required information with respect to objectives of the study.

3.5 Data Sources

The study adopted both primary and secondary data sources. Primary data was obtained from the field and in particular from the enterprise owners and managers in the geographical scope of the study which is Katwe in Rubaga division. Similarly, secondary data was obtained through the already existing firms' literature and any other literature from sector reports and journals. Primary data was obtained through the use of self-administered questionnaires and interview to respondents following systematic and established academic procedures, as suggested by (Nunnally and Bernstein, 1994). The questionnaires were used for the collection of data from enterprise owners while the interview guides for collection of data from managers. Secondary data was obtained through the use of historical analysis of already existing literature on SMEs. Here existing records and accounts that are published by the SMEs were used as a means of acquiring secondary data.

3.6 Data Collection Instruments

3.6.1 Structured Questionnaire

Questionnaires were used to collect information during the study. The questions covered policies and legal framework, responsibilities and governance confidentiality, privacy and sharing information. These were compared against the service delivery of the Authority in terms of measures of responsiveness, reliability, assurance, timeliness and tangibility. The items were anchored on a 5 Likert scales ranging from strongly disagree (1) to strongly agree

(5). The questionnaire also contained the demographic characteristics such as gender, age, qualification and years in service.

3.6.2 Interview Guide

The interviews were conducted with people who are in directorship positions for information about capital structure and managers for information on business characteristics. This was done to get in depth information around the topic. Interviews aimed to extract information on how they perceive issues of their sources of finance and credit availability for their enterprises. Open ended questions were asked during the interviews with business owners.

3.7 Data Collection Procedure

The researcher obtained an introductory letter from Kyambogo University introducing her to the SMEs to allow her to carry out research. The researcher then introduced herself to the SME owners/managers, where the study was carried out. On being granted permission the researcher first of all carried out a pilot study of the questionnaire and finally collected data from the respondents. The researcher personally distributed, administered and collected data from the respondents.

3.8 Validity and Reliability of Instruments

3.8.1 Validity Test

According to Mugenda & Mugenda, (2003), there are three techniques of validity in data; construct validity, content validity and criterion-related validity. Content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain of indicators or content of a particular concept. Content validity can be assessed by using two different instruments which must measure the same concept. If the measurements are

consistent with the theoretical expectation, then the data have construct validity. Validity was measured basing on a factor analysis which confirms the dimensions of the concept that have been operationally defined, to ensure appropriateness of results. According to Nunnally (1972), values of 0.6 were acceptable when testing for validity. Validity of the instrument was obtained using the Content Validity Index (CVI) as presented in table 3.2.

Table 3.1: Validity Test

Variable	Anchor	Content Validity Index
Profitability	5 Point	.789
Size	5 Point	.854
Growth	5 Point	.898
Asset structure	5 Point	.754
Capital structure	5 Point	.808
Average		.821

Source: *Primary data*

According to Nunnally (1972), content validity indices of 0.7 and above are considered adequate. From the results, the average content validity index was .821, therefore meeting the acceptable standards.

3.8.2 Reliability Test

Reliability in research is influenced by random error (Mugenda and Mugenda, 2003). They continue to argue that random error may arise from inaccurate coding; ambiguous instructions to the subjects, interviewer's fatigue and interviewer's bias to mention a few and these errors are deviations from a true measurement due to factors that have not been addressed by the researcher. The researcher therefore has to ensure that the instruments minimize random error and hence increase the reliability of the data collected. In order to measure reliability, a score obtained in one item is correlated with scores obtained from other items in the instrument. Cronbach's Coefficient Alpha is then computed to determine how items correlate among

themselves. Reliability of the instrument was ascertained using the Cronbach's coefficient alpha (Cronbach's alpha (α) 0.5) test (Cronbach, 1946). To test for the internal consistencies of the scales used to measure the variables.

Table 3.2: Reliability Test

Variable	Anchor	Cronbach Alpha Value
Profitability	5 Point	.858
Size	5 Point	.897
Growth	5 Point	.959
Asset structure	5 Point	.858
Capital structure	5 Point	.797
Average		.874

Source: *Primary data*

According to Cronbach (1950), coefficient alpha of 0.7 and above is considered adequate. From the results, the average Cronbach alpha coefficient was .874, therefore meeting the acceptable standards.

9 Data Processing and Analysis

Data from the field was compiled, sorted, edited and coded to have the required quality, accuracy and completeness for research. It was then entered into the computer with the facilitation of Statistical Package for Social Sciences (SPSS) for analysis. SPSS is a data management and analysis program. It allowed the researcher to store and analyze very large amounts of large data. The statistics that SPSS is capable of handling are far more complex than the statistics that are provided by excel which makes it more desirable as an analysis tool. Also, SPSS allows us to store our data, protocols (syntax) and results (output) in separate files, which makes analysis of large amounts of data much less cumbersome than excel. The data was cleaned and analyzed according to the research objectives and specific analytical tools

were used during the analysis. For summary statistics, item means, frequency tabulation, correlations and regression analysis were generated to describe the sample characteristics and the objectives of the study.

3.10 Limitations to the study

The researcher encountered the following limitations

i) Bias from the respondents who simply filled the questionnaires to please the researcher. The researcher conducted a face to face interaction to clarify the purpose and objective of the study.

ii) On looking at the limited time which the researcher had to conduct the study, respondents suspected that the research findings were to be used for other purposes while others delayed with the questionnaires because of busy schedules. Here the researcher obtained permission from the owners and managers of SMEs to protect the respondents and uncompleted questionnaires were followed up by the researcher.

iii) The scales in the questionnaire that were adopted from other studies conducted in different environments from that of Uganda, this could have caused bias among the respondents. Here the researcher indulged experts in the field of Entrepreneurship to moderate the scales adapted to fit the local environment.

iv) Fear of giving confidential information by respondents, the researcher ensured at most good faith and anonymity by providing the letter seeking permission to carry out the study and also assured them that the information they provided would remain confidential and their permission would be sought in case it was to be published.

CHAPTER FOUR

ANALYSIS, PRESENTATION AND INTERPRETATION OF DATA

4.1 Introduction

This chapter presents results of the analysis and interpretation of findings. The chapter comprised of three sections. Section one presents the sample characteristics showing, gender, level of education, tenure in business, age group and marital status. Out of the 140 questionnaires distributed, one hundred and twelve (112) usable ones were collected, giving a response rate of 80%. The presentation begins with a description of the sample characteristics using frequency tabulation. The second section of the chapter presents statistics on the relationship between the study variables using the correlation matrix. Section three presents the results of the impact of the independent variable on the dependent variable using the regression analysis.

4.2 Sample Characteristics

To present sample characteristics, frequency tabulations were used to indicate variations of respondents based on, gender, level of education, tenure in business, age group and marital status. The sample characteristics were presented based on the responses from the respondents. The sample characteristics are presented in tables 4.1 to 4.9.

4.2.1 Gender distribution

Frequency tabulation was used by the researcher to present gender respondent category distribution. Table 4.1 presents the results:

Table 4.1: Respondent Category by Gender

		Frequency	Percent
	Male	60	53.6
	Female	52	46.4
	Total	112	100.0

Source: primary data

From the results, 53.6% of the respondents were male whereas 46.4% were female as shown in the table 4.1. This implies that there was almost equal representation of both female and male respondents which is indication that both women and men owned businesses.

4.2.2 Marital Status distribution

Frequency tabulation was used by the researcher to present marital status respondent category distribution. Table 4.2 presents the results:

Table 4.2: Respondent Category by Marital Status

		Frequency	Percent
	Single	45	40.2
	Married	67	59.8
	Total	112	100.0

Source: primary data

According to the results, 59.8% of the respondents were married whereas 40.2% were single as shown in table 4.2. This is indication that the majority of the business owners and managers had responsibility. Where the owners attracted too much debt for investment, the effect of servicing the debts would also be translated to their families.

4.2.3 Age Group of respondent

Frequency tabulation was used by the researcher to present the age group respondent category distribution. Table 4.3 below presents the results:

Table 4.3: Age Group of respondent

		Frequency	Percent
	18-24 years	4	3.6
	25-29 years	10	8.9
	30-34 years	22	19.6
	35-39 years	51	45.5
	40 and above years	25	22.4
	Total	112	100

Source: primary data

According to the results in table 4.3 above, 45.5% of the respondents were in the 35-39 years age group, 22.4% were in the 40 years and above, 19.6% were in the 30-34 years age group, 8.9% were in the 25-29 years age group whereas, 3.6% were in the 18-24 years age group. The results above indicate that the majority of the respondents representing 96.4% were aged 25 years and above and hence were mature enough to take an informed decision.

4.2.4 Level of Education

Frequency tabulation was used by the researcher to present the level of education respondent category distribution. Table 4.4 below presents the results:

Table 4.4: Level of Education

		Frequency	Percent
	No education	3	2.7
	Primary	5	4.5
	Secondary	24	21.8
	Bachelors degree	64	58.2
	Masters	14	12.7
	Total	110	100.0

Source: primary data

From the results in table 4.4 above, 58.2% of the respondents were holders of a Bachelors degree, 21.8% had obtained secondary level education, 12.7% were masters holders. This therefore confirms that majority of the respondents are educated and are likely aware of the issues discussed.

4.2.5 Duration in business

Frequency tabulation was used by the researcher to present the duration in business of SMEs. Table 4.5 below presents the results:

Table 4.5: Duration in business

		Frequency	Percent
	Less than 5 years	21	19.1
	5-10 years	58	52.7
	Over 10 years	31	28.2
	Total	110	100.0

Source: primary data

The results revealed that 52.7% of the respondents had operated business for 5-10 years, 28.2% had carried out business for over 10 years and 19.1% had carried out business for less than 5 years. This implies that the majority of the SMEs in the region under study had carried out business for 5 years and above which is implication that the SMEs had acquired enough experience in financial reporting.

4.3 Specific Results

The findings were presented using summary statistics, frequency tabulation, correlations and regression analysis in line with research objectives as below.

4.3.1 Profitability

Item mean analysis was used to show the average response from the respondents for each item in relation to profitability. The items were rated on the 5 point Likert Scale ranging between strongly disagree, disagree, not sure, agree and strongly agree. The findings are shown in table 4.6. The standard deviations were used to ascertain whether this was the case among the SMEs or not. The findings are shown in table 4.6:

Table 4.6: Profitability

Items	Min	Max	Mean	SD
Our level of education is relevant in running this business	1	5	3.97	.972
Educated business owners are more reliable	1	5	3.78	.875
The financial position of our firm has improved over the last 3 years	1	5	3.59	.789
Over the last 3 years the profits of our firm have been steadily increasing	1	5	3.99	.705
Over the last 3 years the profit margins of our firm have increased	1	5	4.01	.845
The return on investment has increased over the last three years.	1	5	3.88	.745
At our company the total cost of operation is reducing over the years	1	5	3.87	.558

Source: primary data

From the item mean results on profitability presented in table 4.6 above, the respondents revealed that the level of education was relevant in running their businesses (Mean=3.97), educated business owners were more reliable (Mean=3.78) and the financial positions of the firms had improved over the last 3 years (Mean=3.59). In regard to whether over the last 3 years the profits of their firms had increased, the respondents were in agreement (3.99), they also agreed that their profit margins had increased (Mean=4.01), consented to the fact that their firms' return on investment had increased over the last three years (Mean=3.88) and that their company total cost of operation were reducing over the years. The standard deviation results of less than 1 provide evidence that the results obtained on profitability applied to the firms.

This position was supported by the interview results provided by a section of business owners who revealed that *"much as their businesses were profitable, they were being affected by the tax burden. Yet government was offering tax holidays to foreign investors. Similarly they also revealed that there was a lot of competition from imported goods and the locally produced goods"*. From the qualitative results confirm that profitability influenced the capital structures of SMEs in relation to equity and debt. Therefore, the owner needed to put in place strategies that promote business profitability as this would help in the improvement of firm capital structures.

4.3.2 Firm Size

In order to assess the firm size, item mean results were generated to show the average response of the respondents on each item. The items were anchored on a 5 point Likert scale ranging between strongly agree, agree, undecided, disagree and strongly disagree. The findings are shown in table 4.7.

Table 4.7: Firm Size

Items	Min	Max	Mean	SD
The number of the products/services we offer is still small	1	5	3.53	.657
we offer a wide assortment of products/services	1	5	3.65	.789
My business has tailor made services for people in all income categories	1	5	3.66	.698
We offer tailor made services for clients of all income categories	1	5	3.60	.876
We adequately offer tailor made services for our customers	1	5	3.75	.775
Overtime, our product/services range has been increasing	1	5	2.78	.724
We offer useful services to the public	1	5	3.77	.660
At our company, we deliver valuable services to the public	1	5	3.44	.794
we have the required staff at our company	1	5	3.51	.784
Decision to diversify is taken only by management	1	5	3.08	.856
We invest in different loan products	1	5	3.99	.841

Source: primary data

The results in table 4.7 above on size revealed that the number of the products/services SMEs offered was still small (Mean=3.53), SMEs offered a wide assortment of products/services (Mean=3.65), their businesses had tailor made services for people in all income categories (Mean=3.66), supported the notion that they adequately offered tailor made services for their customers (Mean=3.75), they offered useful services to the public (Mean=3.77) and they invested in different loan products (Mean=3.99), The standard deviation results of less than 1 provide evidence that the results obtained on firm size applied to the SMEs.

The interview results provided by business owners revealed that *"the size of their firms in regard to turnover, product/service range, number of staff, etc was still small. They further revealed that because of their small sizes, they were finding it difficult to access financial help from government and debt from financial institutions"*. From the qualitative results it is clear that firm size influenced the capital structures of SMEs in regard to debt acquisition from financial institutions, product range and human resources.

4.3.3 Growth Rate

Item mean analysis was used to show the average response from the respondents for each item in relation to firm growth rate. The items were rated on the 5 point Likert Scale ranging between strongly disagree, disagree, not sure, agree and strongly agree. The findings are shown in table 4.6. The standard deviations were used to ascertain whether this was the case among the SMEs or not. The findings are shown in table 4.8.

Table 4.8: Growth Rate

Items	Min	Max	Mean	SD
There is effective revenue absorption by our company	1	5	2.79	.991
Our sales volume have steadily increased in the last three years	1	5	2.99	.859
The sales turnover of our products has increased over the years	1	5	3.54	.867
we are witnessing demand of our products from customers who never bought from us before	1	5	3.56	.776
Our customers have increased on their purchasing volumes	1	5	3.54	. 556
Our customers have increased on their purchasing frequencies	1	5	3.62	.571

Source: primary data

According to the results in the table above on growth, the respondents agreed that the sales turnover of SME products had increased over the years (Mean=3.54), SMEs were witnessing demand of their products from customers who never bought from them before (Mean=3.56), their customers had increased on their purchasing frequencies (Mean=3.62) and their customers had increased on their purchasing volumes (Mean=3.54). The standard deviation results of less than 1 provide evidence that the results obtained on growth applied to the firms.

This position was supported by the interview results which revealed that *"over the years SMEs had registered growth in their sales, products/services, repeat sales, number of customers among others. Much as there was still room for growth"*. The results support the notion that for firms to improve their capital structures, corresponds to their growth in terms of sales, inventory, customers among others. Therefore, firm owners need to come up with strategies that foster firm growth as this will cause the realization of desired capital structures.

4.3.4 Asset Structure

In order to assess the asset structure, item mean results were generated to show the average response of the respondents on each item. The items were anchored on a 5 point Likert scale ranging between strongly agree, agree, undecided, disagree and strongly disagree. The findings are shown in the table 4.9:

Table 4.9: Asset Structure

Items	Min	Max	Mean	SD
The investment policy of the company encourages investing in appropriate products/services	1	5	2.79	.991
The current investment levels at the company have enhanced the quality of products	1	5	2.99	.859
We have always bought fixed assets from our cash flows	1	5	3.54	.867
Our business is a cash based one, with no debtors	1	5	3.56	.776
We prepare cash budgets on a monthly basis	1	5	2.97	.754
There is a well set procedure for cash control and expenditure	1	5	3.50	.892
The management are knowledgeable about money market instruments.	1	5	3.58	.852
There is a centralized cash control mechanism	1	5	2.97	.754

Source: primary data

According to the results in table 4.9 on asset structure, the respondents agreed that they bought fixed assets from their cash flows (Mean=3.54), their businesses were cash based, with no debtors (Mean=3.56), there was a well set procedure for cash control and expenditure (Mean=3.50) and management were knowledgeable about money market instruments (Mean=3.58). On the other hand, the respondent disagreed that the investment policies of the firms encouraged investing in appropriate products/services (Mean=2.97) and that their current investment levels had enhanced the quality of products (Mean=2.99). The standard deviation results of less than 1 provide evidence that the results obtained on asset structure applied to the firms.

This position was supported by the respondents who provided the qualitative data who revealed that *"the more the firm's assets were liquid, the possibility to attract financing from financial institutions. However, the assets of the majority of firms were less liquid"*. This is evidence that in order to reduce, transfer and share risk, financial institutions offering credit needed to assess the viability of the firms before extending them credit. Here, the financial institutions study the cash flows of the firms and the available collateral as security of the funds they lend to the firms.

4.4 Inferential statistics

In this section, the results that address the research objectives are presented and Pearson's Correlation Test was used to answer the research questions of the study. Correlation is a measure of association between two variables. To investigate the relationship among the constructs a Zero-order correlation table was generated. The Pearson correlation coefficient (r) was employed to establish the relationship between profitability, growth, size, assets structure and capital structure.

Table 4.10: Correlation matrix

	1	2	3	4	5
Profitability (1)	1.00				
Size (2)	382**	1.00			
Growth (3)	.380**	.340**	1.00		
Asset structure (4)	.418**	.518**	.328**	1.00	
Capital structure (5)	.582**	.469**	.775**	.325**	1.00
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: primary data

4.4.1 Profitability and Capital Structure

The correlation results in table 4.10 indicate a significant positive relationship between profitability and capital structure ($r = 0.582^{**}$, $p<.01$). Thus the hypothesis that profitability affects/changes capital structure of SMEs is substantiated. The correlation results between profitability and capital structure are supported by the multiple regression results in table 4.11, Beta.379 which revealed that profitability determined a change in capital structure. This is implication that a unit change in profitability would cause a corresponding 58.2% change in the capital structure. This is evidence that for the SMEs to achieve favourable capital structures, their business needed to be profitable in regard to liquidity levels, sales turnover and reduced cost of production. This could be done through SMEs striking the right capital structure ratios of debt and equity.

4.4.2 Firm Size and Capital Structure

Correlation results indicated a statistically significant and positive relationship between size and capital structure ($r = 0.469^{**}$, $p<.01$). The results in the above table indicate that there was a moderate and statistically significant positive correlation between size and capital structure at 0.469** with a significance of 0.000 at the level of 0.01. This is confirmation that SME sizes in regard to product range, number of employees and diversification was paramount in enhancing their capital structures. The results imply that if SMEs invest in product development and employment of qualified staff, this would have a positive effect on their debt and equity structures.

4.4.3 Growth and Capital Structure

Correlation results indicated a statistically significant positive relationship between growth and capital structure ($r = 0.775^{**}$, $p<.01$). The results indicate that there is a strong and highly significant positive correlation between growth and capital structure at 0.775** with a significance of 0.000 at the level of 0.01. This is indicative of the fact that when the SME sales and liquidity levels improved, the more this would cause desirable capital structure of the entities. The growth in the sales and revenues will result into stable capital structures for the SMEs. This implies that a positive change in sales and revenue growth enhances the capital structures of SMEs.

4.4.4 Asset Structure and Capital Structure

Correlation results indicated a significant positive relationship between asset structure and capital structure ($r = 0.325^{**}$, $p<.01$). According to the results, it is clear that asset structure had a positive effect on the capital structures of SMEs. This implied that when there is improvement in the SME asset base and inventory management, this would cause a corresponding improvement in their capital structures. Therefore, SMEs should draw a lot of emphasis on inventory and asset base management so as to realize favourable capital structures.

4.5 Multiple Regression Model

A regression analysis was carried out to examine the extent to which profitability, size, growth and asset structure determined capital structure. The overall ability of profitability, size, growth and asset structure to explain capital structure, was presented using the regression model in table 4.11.

Table 4.11: Prediction Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.875	.679		2.761	.006
	Profitability	.456	.085	.379	5.381	.000
	Growth	.554	.093	.451	5.972	.000
	Size	.065	.093	.040	.696	.487
	Asset structure	.248	.099	.128	2.506	.013
Dependent Variable: capital structure						
R Square=.585						
Adjusted R Square = .577						
Sig.= .000						

Source: primary data

According to the results, there was a linear relationship between profitability, size, growth, asset structure and capital structure. The model revealed that 57.7% of the increment or decrease in capital structure can be explained by profitability, size, growth and asset structure since the Adjusted R Square value is .577. Growth had the greatest capacity to influence capital structure (Beta = .451), followed by profitability (Beta = .379), followed by asset structure (Beta = .128) and then size (Beta = .040).

Change in growth led to .451 increase in capital structure, a change in profitability led to .379 enhancement in capital structure, a change in asset structure led to .128 increase in capital structure and a change in size led to .040 increase in capital structure. These results were in line with correlation results implying that capital structure significantly depends on profitability, size, growth and asset structure in SMEs.

Model

CS= 1.875+ 0.456P + 0.554G+0.065S+0.248AS + e

Where CS= capital structure, P=Profitability, G=Growth, S=Size, AS=Asset Structure, e-error

A change in profitability led to 0.456 increase in capital structure; a change in growth led to 0.554 increase in capital structure; a change in size led to 0.065 increase in capital structure; a change in asset structure led to 0.248 increase in capital structure; and capital structure was fixed at 1.875 without profitability, size, growth and asset structure.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion, conclusions, and recommendations arising out of the research findings in chapter four and suggests areas for further study.

5.2 Summary

The study sought to investigate the determinants of capital structure of Small and Medium Enterprises (SMEs) in Rubaga Division. This was carried out by way of unpacking the factor components of business characteristics and thereafter related them to capital structure. Data was collected by way of a self administered questionnaire and interview guide which were both open and closed ended and the data was analyzed with use of the Statistical Package for Social Scientists which was used to present results in tabulations of frequencies, percentiles, item means, correlations and regression analysis.

From the findings on the demographic characteristics, the majority of the respondents were male, with the results showing that the majority of the respondents were married. According to the results, a sizeable number of respondents had stayed in business for 5-10 years. The majority of the respondents belonged to the 35-39 years age group and the highest level of education possessed by the majority of the respondents was degree level of education.

The findings on the effect of profitability and capital structure revealed a significant relationship. This is confirmation that the more SMEs become profitable, this would translate

5.3.1 Profitability and Capital Structure

The findings revealed that the majority of the respondents agreed that education was relevant in running their business, educated business owners were more reliable, the firms' profits and ROI had improved, whereas, their total cost of operation had reduced. The findings are further supported by the correlational results which indicated a significant and positive relationship between profitability and capital structure. The findings are in line with the assertions of Norvaisiene and Stankeviciene (2007) who posits that profitability is a potential determinant of capital structure where profitable firms will employ more debt since they are more likely to have a high tax burden and low bankruptcy risk. On the other hand, successful companies do not need to depend so much on external funding and therefore, rely on their internal reserves accumulated from past profits. This notion is supported by Mutenheri and Green, (2003) who posit that firms with high profit rates would maintain relatively lower debt ratio since they are able to generate such funds from internal sources. Therefore profitability in regard to liquidity levels, sales turnover and cost of production was a determinant of a firm's capital structure.

5.3.2 Size and Capital Structure

The findings revealed that SMEs offer few products/services, businesses had tailor-made services for people in all income categories, they adequately offered tailor made services for their customers and offered useful services to the public. This is in line with the correlational results which indicated a significant and positive relationship between size and capital structure. Myers (1977) asserts that size plays an important role in determining the capital structure of a firm. Unlike small firms, large firms are less susceptible to bankruptcy because are more diversified than smaller companies. According to Myers, (2001), lending to small businesses is riskier because of the strong negative correlation between the firm size and

capital structure. This could partly be due to the limited portfolio management skills and partly due to the attitude of lenders. In regard to the discussion on size and capital structure, the size of the firm in relation to product range, staff and diversification was a determinant of the firm's capital structure.

5.3.3 Growth and Capital Structure

The findings revealed that the sales turnover of SME products had increased over the years; SMEs were witnessing demand of their products from customers who never bought from them before; and their customers had increased on their purchasing frequencies and customers had increased on their purchasing volumes. This is in agreement with the correlational results which indicated a significant and positive relationship between growth and capital structure. In support of the findings, Myers, (2001) asserts that growing firms place a greater demand on their internally generated funds. Therefore, firms with high growth rate will tend to look to external funds to finance the growth. Myers, (2001) confirms this and concludes that firms with a higher proportion of their market value accounted for by growth opportunity will have debt capacity. From the findings, growth was the strongest predictor of firm capital structure where, a change in the sales levels of the firm and the liquidity ratio caused a corresponding effect on the equity/debt ratio of the firm.

5.3.4 Asset Structure and Capital Structure

The findings revealed that SMEs bought fixed assets from their cash flows, operated cash based business, possessed well set procedures for cash control and expenditure and management were knowledgeable about money market instruments. This is in agreement with the correlational results which indicated a significant and positive relationship between asset

iii) **Size and Capital Structure**

The findings confirmed that size was a determining factor on capital structure which is implication that management's willingness to increase and improve on SME product/service range, diversification and number of skilled staff, would enhance their capital structures.

iv) **Asset Structure and Capital Structure**

The findings posit to the fact that asset structure was paramount in having a positive significant effect on capital structure. The positive significant relationship between asset structure on capital structure is justification that the more SME assets were tangible and of value, this would make them liquid hence the ability to attract financing from financial institutions

5.5 Recommendations

In light of the research findings, the following recommendations are made:

i) According to the findings, growth and profitability were found to be the major predictors of capital structure. Therefore, the management of SMEs should put a lot of emphasis on promoting sales growth, working capital management and reduce cost of production for their companies. This can be achieved through ensuring proper management of cash, inventory, accounts receivables and accounts payables which will in turn help management in deciding on the required equity debt ratios when financing the operations of their companies.

ii) According to the findings on the relationships between the factor components of business characteristics and capital structure, positive and significant relationships were observed. Therefore, the management of SMEs need to develop strategies inclined on

how to promote growth and profitability which at the same time expand the operations of the companies in regard to size and asset structure. This will have a positive effect on the capital structure of the SMEs in regard to attracting financing from financial institutions/development partners/government and also held them enjoy economies of large scale production.

iii) The results of the study point to a number of opportunities for strategy review in regard to business characteristics so as to improve the capital structures of SMEs. The management of SMEs should therefore, assess regularly the performance of their current capital structures in regard to debt and equity and carry out review of the strategies being used to promote their capital structures through proper management of business characteristics.

iv) From the findings, it was clear that in order to shape the capital structures of SMEs, the enterprises needed to have attractive commodity prices, have variety, quality products/services and at the same time seek advice on the selection on favorable capital structures so as to have a positive influence on their debt equity ratios.

5.6 Areas for Further Research

i) This study concentrated on profitability, size, growth, asset structure and capital structure among SMEs in Kampala district. Future research should attempt to widen the scope of the study to cover other regions other than Kampala district to ascertain the findings.

ii) The study adopted a cross sectional design which studied the issues concerning the determinants of capital structures at among SMEs at a point in time. To study the true

nature and quality of the effect of profitability, size, growth and asset structure on capital structure, a longitudinal study is more appropriate.

iii) From the findings, the regression analysis revealed that the model could only explain 57.7% in variance of capital structure; a study should be carried out comprising of other factors which were not part of the model.

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APPENDIX I

QUESTIONNAIRE

Dear Respondent,
This questionnaire is intended to facilitate the study on "Determinants of Capital Structure of Small and Medium Enterprises (SMEs): The Case of Katwe Metal Works Sub-Section in Rubaga Division Kampala District. Your response will also be treated with utmost confidentiality.

Thank you for your time and cooperation

SECTION I: GENERAL INFORMATION

Please tick the appropriate box for the questionnaire that follow below:

Demographic Characteristics

1. Gender: Male ☐ Female ☐

2. Marital Status: Single ☐ Married ☐

3. Age group

Years old	18-24 (1)	25-29 (2)	30-34 (3)	34-39 (4)	40+ (5)
Tick					

4. Level of Education

Years old	No Education (1)	Primary (2)	Secondary (3)	Bachelors degree (4)	Masters (5)
Tick					

5. How long have you been working in the same business?

Business period	Less than 5 years (1)	5-10 years (2)	Over 16 years (3)
Tick			

SECTION II: BUSINESS CHARACTERISTICS

The table below shows the alternative responses and the number assigned in each response. Please evaluate the Statements by ticking in the box with the number that best suits your company

strongly disagree (SD) **disagree (D)** **not sure (NS)** **Agree (A)** **strongly agree (SA)**

1 **2** **3** **4** **5**

	Profitability (Liquidity levels, Sales turnover, Cost of production)	**SD**	**D**	**NS**	**A**	**SA**
1	Our level of education is relevant in running this business	1	2	3	4	5
2	Educated business owners are more reliable	1	2	3	4	5
3	The financial position of our firm has improved over the last 3 years	1	2	3	4	5
4	Over the last 3 years the profits of our firm have been steadily increasing	1	2	3	4	5
5	Over the last 3 years the profit margins of our firm have increased	1	2	3	4	5
6	The return on investment has increased over the last three years.	1	2	3	4	5
7	At our company the total cost of operation is reducing over the years	1	2	3	4	5
	Size (Product range, Number of employees, Diversification)	**SD**	**D**	**NS**	**A**	**SA**
1	The number of the products/services we offer is still small	1	2	3	4	5
2	we offer a wide assortment of products/services	1	2	3	4	5
3	My business has tailor made services for people in all income categories	1	2	3	4	5
4	We offer tailor made services for clients of all income categories	1	2	3	4	5
5	We adequately offer tailor made services for our customers	1	2	3	4	5
6	Overtime, our product/services range has been increasing	1	2	3	4	5
7	We offer useful services to the public	1	2	3	4	5
8	At our company, we deliver valuable services to the public	1	2	3	4	5
9	we have the required staff at our company	1	2	3	4	5
10	Decision to diversify is taken only by management	1	2	3	4	5
11	We invest in different loan products	1	2	3	4	5
	Growth (Sales levels, Liquidity ratio)	**SD**	**D**	**NS**	**A**	**SA**
1	There is effective revenue absorption by our company	1	2	3	4	5
2	Our sales volume have steadily increased in the last three years	1	2	3	4	5
3	The sales turnover of our products has increased over the years	1	2	3	4	5
4	we are witnessing demand of our products from customers who never bought from us before	1	2	3	4	5
5	Our customers have increased on their purchasing volumes	1	2	3	4	5
6	Our customers have increased on their purchasing frequencies	1	2	3	4	5
	Asset structure (Asset base, Inventory)	**SD**	**D**	**NS**	**A**	**SA**
1	The investment policy of the company encourages investing in appropriate products/services	1	2	3	4	5
2	The current investment levels at the company have enhanced the quality of products	1	2	3	4	5
3	We have always bought fixed assets from our cash flows	1	2	3	4	5
4	Our business is a cash based one, with no debtors	1	2	3	4	5
5	We prepare cash budgets on a monthly basis	1	2	3	4	5
6	There is a well set procedure for cash control and expenditure	1	2	3	4	5
7	The management are knowledgeable about money market instruments.	1	2	3	4	5
8	There is a centralized cash control mechanism	1	2	3	4	5

SECTION III: CAPITAL STRUCTURE

The table below shows the alternative responses and the number assigned in each response. Please evaluate the Statements by ticking in the box with the number that best suits your company

strongly disagree (SD) disagree (D) not sure (NS) Agree (A) strongly agree (SA)

1 2 3 4 5

		SD	D	NS	A	SA
1	The board and management always have influence on the capital structure choice	1	2	3	4	5
3	The board and management determine the capital structure to be used	1	2	3	4	5
4	The board always reviews the capital structure of the firm	1	2	3	4	5
5	The board is always adequately advised on the capital structure of the firm	1	2	3	4	5
6	The decisions on capital structure are timely communicated	1	2	3	4	5
7	Decisions of capital structure are always done by experts	1	2	3	4	5
8	We always have the appropriate capital structure for our business	1	2	3	4	5
9	We adequately measure our long-term capital structure	1	2	3	4	5
10	We can easily access funds from each of our sources	1	2	3	4	5
11	We have always had the prerequisite for loans	1	2	3	4	5
12	We always raise funds from bank loans easily	1	2	3	4	5
13	We always raise funds from owners personal savings	1	2	3	4	5
14	It is easy raising funds from friends and relatives	1	2	3	4	5
15	It was easy raising funds from external parties	1	2	3	4	5
16	Our capital structure choice always guarantees financial flexibility to the firm	1	2	3	4	5
17	Our capital structure choice always guarantees financial stability to the firm	1	2	3	4	5
18	Our capital structure choice always guarantees low financing costs	1	2	3	4	5

APPENDIX II

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Source: Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.