THE EFFECT OF CREDIT FINANCING ON PROFITABILITY OF SMALL AND MEDIUM SIZED ENTERPRISES IN NAIROBI COUNTY

BY

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DECLARATION

I, the undersigned declare that this research project is my original work and has not been presented for an academic award in any other University.

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This research project has been submitted for examination with my approval as the University Supervisor.

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To all, may God bless you.

DEDICATION

I dedicate this research project to my parents, Mr & Mrs Njeru, for their support throughout my academic endeavours. I will forever remain grateful.

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LIST OF ABBREVIATIONS

ANOVA   Analysis of Variance

EU   European Union

FSD   Financial Deepening Sector

GDP   Gross Domestic Product

GoK   Government of Kenya

KAM   Kenya Association of Manufacturers

OECD   The Organization for Economic Co-operation and Development

ROA   Return on Assets

SMEs   Small and Medium Sized Enterprises

SPSS   Statistical Package for Social Science

ABSTRACT

Small and Medium Enterprises (SMEs) play an important role in Kenya's economy by contributing to economic growth through job creation, stimulating competition and innovation. Statistics in previous studies have indicated stagnation in growth and mortality of about fifty per cent of SMEs within their first two years of operation. In recent years, the Government of Kenya and Financial institutions have been laying in place measures to ensure that SMEs profitability is sustained and growth accelerated through policy and access to credit facilities. This study sought to examine the effect of credit financing on the profitability of SMEs in Nairobi County.

The study adopted a descriptive research design. The target population was SMEs licensed to operate in Nairobi County. The study utilized both primary and secondary data. Primary data was collected through questionnaires that were administered through interviews while secondary data was obtained from SMEs financial statements for years 2009 to 2013. A total of 100 questionnaires were administered with 97% response rate being obtained. 3% accounted for the three firms that did not provide information due to their internal policies. Data was analysed using Statistical Package for Social Sciences (SPSS) version 21. The significance of the results was tested at 95% significance level.

The study found that credit financing had positive effect on profitability of SMEs in Nairobi County with a coefficient of correlation of 0.6029. SMEs industry, legal formation and age were all found to have positive and significant effect on profitability and that they could account for 67.19% of changes in SMEs profitability. The main factor hindering SMEs access to credit financing were found to be high costs of the source of finance and collateral requirement. The respondents were found to finance their assets substantially using credit. Access to credit finance by respondents was found to increase through the years from 2009 to 2013.

The research recommended that financial lending institutions to establish less stringent collateral requirements to increase SMEs access to credit finance. Secondly, SMEs should consider forming limited liability companies as opposed to partnerships and sole proprietorships. This is because companies are said to be well structured and professionally managed hence have a positive image to credit lending institution. In addition, a firm constituted such that the owners enjoy limited liability are known to pursue more risky projects that would be more rewarding.

CHAPTER ONE

INTRODUCTION

1.1   Background of the Study

Small and Medium Enterprises (SMEs) are recognized as one of Kenya's core growth pillars in achieving the country's long-term national development strategy (Government of Kenya, 2007). Access to credit financing has been identified as essential for SMEs to succeed in their drive to build productive capacity, compete and contribute to poverty alleviation in developing countries (Steijvers, 2008). Without finance, SMEs may not have capacity to acquire and absorb new technologies or expand to compete in global markets. Further, without finances SMEs may not have capacity to strike business linkages with larger firms (Alexander & Hall, 2003). As a result, lending institutions must improve their ability to provide financial services to SMEs through commercial mechanisms that lower costs and minimize their risk exposure. Only in this way will lending institutions find lending to SMEs profitable, and thus be encouraged to construct lending programmes targeted at SMEs (Hussain, 2000).

SMEs ability to easily access finance to expand business is restricted by collateral requirements and unexplained bank charges (Garikai, 2011). This means that a majority of SMEs are not able to access finance to enable them grow. Collateral, interest rates, extra bank charges, inability to evaluate financial proposals and lack of financial management skills also hinder the growth of SMEs (Stiglitz & Weiss, 1981). Informal sources of credit though with high interest rates, constitute very substantial contributions to business start-ups in developing countries (Mwangi et al, 2013).

Interest rates, according to early economists view was not seen as hindering access to financing but to serve other roles such as screening the quality of investments. Low interest rates lead to excess demand for credit inevitably leading to credit rationing (Karlan and Morduch, 2009). Goldsmith (1969) posited that interest rate caps undermine the average quality of investment, yielding financial repression. The notion of financial repression was extended by McKinnon (1973) and Shaw (1973) who propounded that interest rate caps reduce returns on saving which ultimately reduce both the quality and quantity of investment.

SMEs must overcome the financing hurdle in order to set up and stay in business. This can be overcome with access to external capital (Otieno et al, 2011). SMEs can obtain credit from finance lending institutions or from their suppliers. Internal sources of funding such as

retained earnings are a more convenient source of financing for SMEs (Hallberg, 2001). However, with the high costs of living due to inflation, retained earnings may simply remain a dream since whatever one earns is used to meet the more urgent physiological needs such as food, shelter and clothing as proposed by Maslow's hierarchy of needs (Enos, 1992). Commercial banks and Micro Finance Institutions are the most significant source of external financing to SMEs hence can exert considerable influence on them. When lending to SMEs, credit lending institutions consider the quality of management among other factors in deciding whether to extend credit or not (Mwangi et al., 2013). Credit lending institutions can tailor products in a manner to reduce obstacles that SMEs come across in accessing credit (Garikai, 2011).

Notably, Potential entrepreneurs with good business ideas may end up not implementing them due to lack of capital. Many of them also lack collateral to enable them access credit from credit lending institutions. Still, others shy off from approaching lending institutions for credit facilities for fear of the consequences that may arise if the business fails and they are not able to repay. This is due to the high level of uncertainty associated with businesses and the unpredictable nature of the current dynamic business environment.

Lending policies have been cited as one of the limiting factors for SMEs to access credit. Schiantarelli (1996) further argues that the type of financial institution's lending policy will often determine SMEs accessibility to credit facilities. Where credit duration, terms of payment, required security and the provision of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists and when they do, they are denied access.

1.1.1 Credit Financing

Financing is an essential element for profitability of a business enterprise irrespective of its size or industry where it operates (Stierwald, 2009). Financing facilitates the primary economic functions of production and distribution. Financing ensures that a firm is liquid enough to meet working capital needs. With availability of financial resources, industrial development is initiated since it is possible to take advantage of new investment opportunities as they arise (Karlan & Morduch, 2009). Debt and Equity are the formal sources of finance for investment. Informal financing for entrepreneurs involves accessing their own savings and those of family, friends, and even neighbours. Entrepreneurs seek informal 'angel'

investors who provide financial capital as well as business expertise for running a firm. Business owners who seek financing face a fundamental choice: should they borrow funds or take in new equity capital? Since debt and equity have very different characteristics, each has a different impact on earnings, cash flow, balance sheet presentation and taxes. Each also has a different effect on a Company's leverage, dilution, and a host of other metrics by which businesses are measured. Each financing option brings a different type of relationship with the respective financing source. The Company's planned use of funds, desired relationship with the capital source, and type or stage of the company will largely determine the optimal form of financing for a given situation. Reasonable terms of financing induce or encourage entrepreneurs to expand their horizon of conceivable opportunities.

Access to credit financing attracts those who are inhibited by lack of capital thus the process of economic development sets in (Goldsmith, 1969). This tends to increase the capacity of enterprises to take advantage of investment opportunities. Credit financing boosts a firm's capital base enabling it undertake opportunities that arise in its operating environment (Stiglitz & Weiss, 1981). Size of a firm has been cited as a determinant to access of credit facilities by an enterprise. Studies show that SMEs face greater hurdles in accessing credit financing than larger firms. For start-ups, which are regarded as informational opaque, often receive a smaller fraction of lending institutions finance as they are regarded riskier than more established firms (Franck & Huyghebaert, 2009). This leaves SMEs with a shortfall in funding. One of the measures that credit lending institutions undertake to mitigate against risk of default is obtaining collateral that acts as a security on the credit facilities.

In Kenya, Small and Medium Enterprises (SMEs) are commonly believed to have limited access to deposits, credit facilities and other financial support services provided by Formal Financial Institutions. This is because most SMEs cannot provide the necessary collateral security demanded by these formal lending institutions. Further, stringent requirements and bureaucratic lending procedures by the formal lending institutions compel most SMEs to resort to informal lenders such as traditional money lenders, friends and relatives. In addition to this, the associated risks involved in lending to SMEs make it unattractive to the banks to deal with Small enterprises (World Bank, 1994). Statistically, small enterprises are reported to have high failure rates making it difficult for lenders to assess accurately the viability of their enterprises, the abilities of the entrepreneur, and the likelihood of repayment.

Microfinance Institutions (MFIs) have emerged to offer credit solutions to SMEs. MFIs, as part of their core business, provide credit to SMEs. In addition to these financial services, MFIs also provide non-financial services like business training, financial and business management to help improve the capacity of their clients in managing the loan resources granted them. Finance has a prominent role in the endogenous growth theory, through its positive impact on the levels of capital accumulation and savings (Romer, 1986).

1.1.2 Profitability

Profitability is the state or condition by which a business enterprise exceeds its overall revenue from its total expenses. Gross profit is calculated by deducting the cost of sales of a business from its sales revenue (turnover). Operating profit is then derived by taking away overhead expenses from gross profit. A business must achieve profitability in order to sustain its operations. Profitability measures the efficiency of a business enterprise. Profitability differs from one firm to another depending on specific factors like the level of capital investment and managers' characteristics as well as the industry factors like level of competition and regulation.

Profitability is necessary for firm survival in the long run in a competitive environment, but not a precondition for growth. Long-term profitability derives from the relations between cost and revenue. A low-profit firm will lack the finance for expansion, but a high-profit business may have funds for further investments leading to expansion. A business proprietor may trade profitability today against profitability tomorrow. Sequential investment projects may require initially lower profits in order to obtain higher future pay-offs from greater market penetration. The management's time preference is likely to determine the inter-temporal profit trade-off (Foreman, Gerry, and Morgan, 2006).

Profitability is positively related to growth and has over time been used as an indicator of firm's growth. The rationale is that a profitable firm is able to achieve growth in market share, number of products, employees and assets base (Ansoff, 1965). It is unlikely that firm growth can be sustained without profits being available for reinvestment in the firm. Enterprise growth is a multidimensional construct operationalized by a variety of growth measures which include sales, value of net assets, profit, number of workers, and market share among others. In addition, factors such as overall satisfaction and non-financial goals of the owners are also very important in evaluating performance, especially among privately

held firms (Ngugi, 2013). This is consistent with the view of Zahra (1993) that both financial and nonfinancial measures should be used to assess organisational performance.

Profitability is the primary goal of all business ventures. Without profitability, a business cannot sustain itself in the long run. Some authors hold that growth is the very essence of entrepreneurship (Sexton, 1997). This makes the relationship between Profitability, growth and entrepreneurship a relevant question. Other scholars make differences in sales growth the criterion for distinguishing between entrepreneurial and non-entrepreneurial firms (Birch, 1987; McDougall, Covin, Robinson & Herron, 1994). Often suggested indicators are of growth are growth in Profits, sales, number of employees, assets, physical output and market share (Ardishvili et al, 1998).

While profits are universally relevant they reflect many other aspects of a firm apart from its size. Besides, it is perfectly possible for a large and/or growing firm to be unprofitable (Davidsson, Steffens & Fitzsimmons, 2005). Return on assets (ROA) of a firm measures its operating efficiency in generating profits from its assets. An indicator of how profitable a firm is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. ROA is derived by dividing a firm's net income by its average total assets. ROA is displayed as a percentage. Sometimes this is referred to as return on investment.

1.1.3   Effect of Credit Financing on Profitability

Theoretical review propounds that credit financing plays a crucial role on firm's profitability. Economists view credit constraints and other credit market imperfections as severely limiting the investment and operations of firms. Credit constraints limit the size of firms, as well as their growth, profits, activations and liquidations; their scope of operations may also be limited. Understanding the implications of credit constraints is of first-order importance for the performance of aggregate economies, especially for developing economies, as capital market imperfections can therefore impair the aggregate accumulation of capital, the rate of return of investments, innovations and accumulation (Alexander and Hall, 2003).

Access to finance is seen as necessary condition for SMEs success in their drive to build productive capacity, to compete and to contribute to poverty alleviation in developing countries. Without finance, SMEs can neither absorb new technologies nor can they expand to compete in global markets or even strike business linkages with larger firms (Idowu,

2010). Credit financing improves firm performance mostly in the first few years after start-up and financial leverage has a positive effect on the firm's return on equity provided that the earning powers of the firm's assets exceeds the average interest cost of debt to the firm (Franck and Huyghebaert, 2009).

The gains from leverage are significant, and that the use of debt increases the market value of a firm (Ruland and Zhou, 2005; Robb and Robinson, 2009). A firm's debt level and its value are positively related especially when shareholders have absolute control over the firm. The impact of debt on value of firms therefore, depends on the balance of power within a firm. If owners have more power, a positive leverage will prevail. Small businesses especially in Africa can rarely meet the conditions set by formal finance lending institutions, which view SMEs as a risk because of poor guarantees and lack of information about their ability to repay loans Idowu (2010). Constraints in credit access limit the growth of a firm, its liquidity and scope of operations. Understanding the implications of credit financing constraints on the growth of SMEs is of first-order importance for the performance of economies, especially for developing countries, as capital market imperfections can impair aggregate accumulation of capital, rate of return on investments and innovations (Alexander & Hall, 2003).

Since SMEs typically rely on credit more than large firms, tightening of credit policies is expected to adversely affect SMEs more than larger firms which have access to national and even international credit markets (Mwangi, et al., 2013). Udell (1997) describes SMEs as 'informational opaque' when compared to large firms which are deemed to be 'informational transparent'. SMEs are considered informational opaque because often being relatively young firms, they lack an extensive history from which future firm or management performance can be extrapolated, even though the firm may have high growth potential. For this reason, such firms have virtually low access to external funds from national markets such as through the issuance of commercial paper or publicly traded equity. In addition, most finance lending institutions provide asset backed financing. Therefore, for a small informational opaque firm with few tangible assets, unsecured loans may be the only source of external credit.

Firms that are informational opaque or have a low credit standing require close monitoring by a financial intermediary hence may not have direct access to the credit markets (Karlan & Morduch, 2009). On the other hand, large, highly rated firms can directly access public credit markets by issuing instruments such as commercial papers. SMEs access to credit finance is constrained by in-availability of information on their credit worthiness. Public and private

credit registries exist to improve the information available on borrowing in an effort to ease financing constraints (OECD, 2012). Advancing credit can be vitiated by adverse selection, explaining part of the difficulties encountered by SMEs in access to credit.

1.1.4 Small and Medium Sized Enterprises in Nairobi County

The term SME covers a wide range of definitions and measures, varying from country to country. Although there is no universally agreed definition of SME, some of the commonly used criteria are the number of employees, value of assets, value of sales and size of capital as well as turnover. The most common definition basis used is the number of employees because of the comparative ease of collecting information. There is variation in defining the upper and lower size limit of an SME (KAM, 2008). The European Union (EU) categorizes firms with fewer than 50 employees as small and those with fewer than 250 employees as medium (EU Commission, 2003). This is the definition of SMEs adopted in this study. The terms 'firm' and 'enterprise' are used interchangeably.

According to KAM (2008), SMEs in Nairobi and Kenya at large have the following features in varying degrees; they are small units, often family owned, most of them are small independent enterprises, standing alone and producing for a well-defined market, some are specialized firms, producing specialized products, selling to the international and /or local markets, they rely on low cost raw materials, low energy costs, low labour costs, and are characterized by low division of labour, flexible and often small production runs, they have low capital formations and finally, they are largely labour intensive units with low–level technologies; but one needs to note the emergence of high skill and technology-intensive SMEs.

The importance and contribution of SMEs to achieving macroeconomic goals of nations, especially in developing nations, has attracted the attention of scholars in the entrepreneurship discipline in recent years (Shelley, 2004). According to annual Kenya Economic Survey, out of the total new jobs created in 2008, SMEs contributed up to 89.9% and in 2009, out of the total jobs created, SMEs contributed up to 79.9% (GoK, 2010). In 2010, the sector contributed up to 59% of Kenya's total GDP (GoK, 2010). In 2012, SME sector contributed up to 79.8% of new jobs created in that year (GoK, 2012). Consequently, Kenya's development plan recognizes the SMEs sector as a pillar to achieving middle income status by 2030.

Despite the SMEs significance, statistics indicate that three out of five businesses fail within the first two years of operation (GoK, 2007). Lack of credit access has been cited as a major constrain hindering SMEs growth (Kiiru, 1991: Oketch, 2000). In the recent years, the GoK has been taking measures to ensure that SMEs have access to financing. Introduction of the Youth Enterprise Fund and Women Enterprise has been found to promote SMEs financing access from 7.5% in 2006 to 17.9% in 2009 (Financial Sector Deepening Kenya, 2009). Presently, pursuant to Regulation six of the Public Procurement and Regulation, 2011, there is the National Sensitisation on Youth Access to 10% of all Government Procurements (PPOA, 2011). This preferential treatment for SMEs by GoK is meant to develop the SME sector and hence the general economy of the country.

Starting and operating a SME, just like any other enterprise, includes a possibility of success as well as failure. Because of their small size, a simple management mistake is likely to lead to sure death of a small enterprise hence no opportunity to learn from its past mistakes. Efficient management may also lack due to external factors that are beyond the owner-manager's control (Oketch, 2000). These factors are inherent in the institutional environment of Kenya which favours larger firms. In addition, ongoing changes in the business environment with regard to globalization of markets act as a further challenge to SMEs growth prospects. Liberalization of markets has made competition real among firms and only those with a competitive edge can survive (Matovu, 2006).

1.2 Research Problem

The effect of access to credit financing on profitability is not clear and has been a source of discussion with some authors arguing that access to credit financing enhances profitability while others argue the cost of financing nets off the benefits thereof. From an economic view, expanding credit financing access holds the promise of increasing profitability by spurring investment in under-funded enterprise, following the logic of Gurley and Shaw (1955) and McKinnon (1973). However, some authors have provided contrary evidence where they have found borrowing to be welfare enhancing and not always output-increasing or enhancing SMEs profitability contrary to economic view of credit access (Karlan & Morduch, 2009). Stiglitz and Weiss (1981) argue that there is a trade-off between cost of financing and profitability which may cloud out the benefits of access to credit financing. Karlan and Morduch (2009) in their study concluded that financial access will not, on its own, be enough to spur SMEs growth since there are other perennial challenges hindering their growth.

Lack of credit finance access has been identified as one of constraints hindering profitability and growth of SMEs (Oketch, 2000: Mwangi et al., 2013). The Government of Kenya has been taking measures to ensure that SMEs have access to financing through introduction of products such as Youth Enterprise Fund, Women Enterprise Fund and Uwezo fund. This preferential treatment for SMEs by GoK is meant to develop the SME sector and Kenya's economy as a whole. According to World Bank, SMEs contribute up to 45% of employment in developing economies (World Bank survey, 2010). According to GoK (2012), SMEs contributed 70% of Kenya's GDP in 2011. On the same survey, out of the total new jobs created in 2012, SME sector contributed up to 79.8%. As a result, Kenya's development plan recognizes SMEs as a pillar to achieving middle income status in 2030. Despite SMEs significance, past statistics indicate that three out of five businesses fail within two years of operation (GoK, 2007). Survival, success and growth of SMEs have been of interest to researchers for many years and have thus become the subject of a lot of analysis. Researchers have shown interest in uncovering the primary determinants of new venture success or failure with no much attention to the effect of credit financing on SMEs growth.

Most studies carried out in Kenya on SMEs financing, have sought to determine the ease of credit access in Kenya and the challenges facing SMEs. Bowen, Morara, and Mureithi, (2009) studied the management of business challenges among Small and micro enterprises in Nairobi in Nairobi and found that the key challenge that faced SMEs was lack of credit access. Nyagah (2013) studied the non-financial constraints hindering growth of SMEs in Nairobi County and found that lack of financial access was a main challenge facing SMEs among other non financial challenges. Could lack of credit financing be the cause of high SMEs mortality rates? It remains unknown to what extent increased credit financing access from the government efforts has contributed to SMEs profitability in Kenya.

The purpose of this study therefore was to examine the effect of credit financing on the profitability of Small and Medium Enterprises in Nairobi County. It sought to bridge the gap that exists on access to credit financing and its effect of SMEs profitability. It sought to answer the question; what is the effect of access to credit financing on the profitability of SMEs in Nairobi County?

1.3 Objective of the Study
To evaluate the effect of credit financing on profitability of SMEs in Nairobi County

1.4   Value of the Study

Growth of SMEs depends on a number of actors and factors. As the GoK and other sector actors lay measures to enhance credit access for SMEs in Kenya, the impact of credit financing in promoting SMEs growth needs to be ascertained. This study is of importance to SMEs Management in addressing the influence credit financing has in attaining sustainable growth for SMEs. To GoK, the findings of this study have brought light to various policy measures that would alleviate challenges SMEs encounter in accessing credit finance. The study is also of importance to actors of Capital Markets Authority (CMA) by providing information that CMA may use to develop guidelines that will make it possible for SMEs to access external financing through the capital market.

To Policy makers, the study findings have brought into light policies which are detrimental to the profitability of SMEs in Kenya. The findings of this study are a source of reference material for researchers and academicians to enhance further studies on factors determining growth of SMEs.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This chapter reviews existing literature on Credit financing and SMEs. It involves a review of theoretical aspects and empirical studies that relate to the study and research gaps therein.

2.2   Theoretical Review

A theoretical framework refers to collection of interrelated ideas based on theories. It is a set of prepositions, which are derived and supported by data or evidence. A theoretical framework accounts for or explains a phenomenon. The study will be guided by a number of theories that have been developed to explain the concept of financial access and profitability of SMEs.

2.2.1   Credit Rationing Theory

Credit rationing theory, propounded by Stiglitz and Weiss (1981), provides a framework for analyzing financial market inefficiencies that affect credit financing. It asserts that, information asymmetry is the main cause of financial market malfunctioning in developing countries that hinders credit allocation and leads to credit rationing. Lending institutions that advance credit to economic agents are not only interested in the interest they receive on credit facilities, but also the risks of such facilities. The interest that banks charge on loans have the tendency to affect the risks of a pool of loans by either sorting potential borrowers (adverse selection effect) or affecting the behaviour of borrowers (moral hazard effect).

Relating this theory to the study variables, the theory posits that credit financing has positive effect on profitability and therefore efforts should be undertaken to enhance it. However, the process of availing credit to users is faced by limitations which ration the amount available to the borrowers. As a result, lending institutions try to resolve the problem by resorting to various screening mechanisms to identify potential borrowers who are more likely to pay back credit advanced to them, since expected return on such credit depends crucially on the probability of repayment. One of the methods of screening suggested by Stiglitz and Weiss (1981) is the interest rate that an individual is willing to pay. This is because, given the efficient financial markets hypothesis, individuals who are willing to pay high interest rates may on the average not pay back credit advanced and banks are mostly discouraged to give loans to such borrowers. On the other hand, low risk borrowers, faced with high interest rates,

ceteris paribus, will be expecting negative returns and hence will not go for such loans. Therefore, in our world today where people can easily get all the information they need, banks could precisely predict all actions by borrowers but may not be able to control such actions. Terms of lending are thus designed by lending institutions in a manner that induces borrowers to take actions in the institutions' interest.

Stiglitz and Weiss (1981) posited that adverse selection and credit rationing can occur if lending institutions require collateral for credit advanced. They argue that since low-risk borrowers expect a lower rate of return if the rate of inflation is high, they are on the average less wealthy than high-risk borrowers and unable to provide more collateral for extra credit. Thus, as the collateral requirements for loans by banks increase, adverse selection is inevitable as in the case for high interest rates. Altogether, low risk borrowers are eliminated from the stream of potential borrowers and banks may not be interested in granting loans to them. The most important conclusion from Stiglitz and Weiss argument is that information asymmetry results to adverse selection and moral hazard. This is a source of market inefficiency in developing countries and leads to low risk borrowers such as SMEs being sidelined or even excluded from the stream of potential borrowers.

2.2.2 Informational Asymmetry Theory

The concept of Information Asymmetry was first proposed by Akerlof (1970). His basic argument was that in many markets the buyer uses some market statistic to measure the value of a class of goods. Thus the buyer sees the average of the whole market while the seller has more intimate knowledge of a specific item. Akerlof argues that this information asymmetry gives the seller an incentive to sell goods of less than the average market quality. In contract theory, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other. This creates an imbalance of power in transactions which can sometimes cause the transactions to go awry. Examples of this problem are adverse selection, moral hazard, and information monopoly.

In relation to credit financing and profitability, the theory view credit financing as having positive impact on profitability. However, availing the credit is affected by information asymmetry which implies that there will be some proposals on which lending institutions will not have perfect information therefore limiting the access to credit facilities for such propositions. This includes new and technology-based propositions for which market

intelligence would be limited. At an early stage for most SMEs, information about them is limited (Hall et al., 2000). At this stage, assets are often knowledge based exclusively associated with the founding entrepreneur. More so with manufacturing or technology based firms in which entrepreneurs may be reluctant to provide full information about the opportunity because of concerns that disclosure may make it easier for others to exploit (Shane & Cable, 2003). In addition, there may be asymmetries arising from location as well as sector the SME operates in. For example, owners of SMEs in rural environments may face difficulties with access to credit facilities from Commercial banks whose network is based in urban centres (OECD, 2012). The theory concludes that some SMEs will not be able to access credit financing irrespective of the infrastructure put in place to enhance credit access due to information gap between the borrowers (SMEs included) and finance lending institutions.

2.2.3 Accelerator Theory

The accelerator theory was first suggested by Clark (1917). It is an economic theory that suggests that as demand or income increases in an economy so does investments made by firms. The theory proposes that most firms choose to increase production in order to increase their profits. The theory also suggests that such increase in production attracts more investors which enhance profitability. According to Edgmand (1979) the accelerator theory of investment is based on the fact that a particular amount of capital stock is necessary to produce a given output. This therefore means that for SMEs to increase output and profitability, an additional amount of financing is required. The theory supports the notion that credit financing leads to accelerated SMEs profitability.

2.3 Determinants of Profitability of Small and Medium Sized Enterprises

The primary task for any business regardless of its size, capital, ownership and nature is to earn profit. Several factors which have been found to be the main determinants of SMEs profitability which include credit financing, SME industry, age of SME and legal composition of the SME.

2.3.1 Credit Financing

SME financing plays a crucial role on firm's profitability and lack of credit financing limits firms activities. Although it is difficult to construct the measures for firm performance in the SME sector, many studies have attempted to do this and found that greater sales and profits are associated with greater access to credit financing. In addition, firms with increasing sales and increasing sales turnover ratios would be expected to have less credit constraints (Peria, 2009). Guffey (2008) recognizes the importance of financing on SMEs arguing that unless SME owners can count on the finance banking of their relatives, they will need finances such sources like bank loans or venture capital. There are various ways the business owners can finance the growth of their firms but the fundamental decision is whether or not to accept external equity finance return for part ownership of the business. If owners allow external equity finance they choose to relinquish part of their control to either a financial institution or other individuals.

SMEs perceive access to credit financing as a major stumbling block to the profitability of their operations. Credit financing constraints are particularly severe in start-up enterprises and relatively young firms (three years old or less) smaller firms have lesser assets to offer as collateral. In order to reduce the anticipated risk and moral hazard associated with lending, the banks use collateral as one of the instruments. The collateral is an assurance to the bank in case of default and it also ensures the borrowers commitment to the loan repayments. In addition, smaller and younger firms are more likely to face higher cost of financing and they are required to offer collateral (Peria, 2009).

2.3.2 Industry

Industry factors significantly determine SMEs profitability whereby a number of studies carried out to identify the influence of a firms industry on the profitability of the firm concur that there are significant differences between sectors in terms of the typical profitability of the firms. Only a few studies show sector variables not to be significant (Barkham et al., 1996). Some industries are known to have higher firms' profitability than others mostly depending on capital required to be invested in assets and the level of sales. The degree of concentration in an industry also determines firm profitability. A higher concentration enables collusion between firms which can lead to higher profits. Industry effect models argue that differences in industry-level characteristics, such as efficiency level, industry structure or quality of top

management firms and specific industry regulations cause differences in profitability (Stierwald, 2009). In addition, sectors that require more capital investment in equipment, machinery, buildings, labour and raw materials have fewer finances hence are less profitable.

2.3.3 Age

The age of the SME is an important factor influencing the profitability of the firm (Barkham et al., 1996). Age of a firm helps in determining the competitive advantage of the firm over other firm and it also help the firm to design its competitive strategies. Age of the firm also leads to the creation of firm image in the eyes of customer which leads to increased sales for the firm and firm increased profit. An SME that has been in existence for long also has a large market share which plays a key role in identification of firm profitabilty and its position in the industry and is also able to identify the level of competition and the way to form all lever of strategies (corporate level, business level and product level) to counter that competition (Raza, Farooq, and Khan, 2011).

2.3.4 Legal Composition

Theoretically, a firm constituted such that the owner/managers enjoy limited liability has been said to have a greater incentive to pursue risky projects and therefore expects higher profits than other firms (Stiglitz and Weiss, 1981). Further, firms with limited liability and owned by more than one person are usually well structured, professionally managed and operated and therefore have high, stable and consistent profitability growth. Foreman et al. (2006) found that the positive effect of partnership on profitability was twice as large as that of the sole trader, taking limited liability and subsidiaries as the base case; this was explained by interpret the effects as risk tolerance and division between many individuals.

2.4 Empirical Review

Adverse selection has been found to be a key hindrance to SMEs access to credit financing. Adverse selection occurs because lenders assess borrowers' capability to repay their loans since lenders expected returns depend on the probability of repayment. In an attempt to identify borrowers with high probability of repayment, lenders are likely to use interest rates that an individual is willing to pay as a screening device. Stiglitz and Weiss (1981) concluded from their study that interest rates charged by a credit lending institution are seen as having a dual role of sorting potential borrowers and affecting the actions of borrowers. Both effects

are seen as a result of the imperfect information inherent in credit markets. Stiglitz and Weiss (1981) further propounded that high credit interest rates induce firms to undertake projects with higher payoffs. Since credit lending institutions are not able to control all actions of borrowers, they formulate borrowing terms to induce borrowers to take actions in the institutions' interest and to attract low risk borrowers.

Oketch et al. (1995) conducted a study on sixteen financial lending institutions to determine demand and supply of credit to the SMEs sector in Kenya. The study revealed that the demand and supply for credit has been on the rise since 1991. It also revealed that only 16% of the demand had been met. The study further revealed that although financial institutions lend to prime borrowers with collateral security, there is need for these institutions to increase their lending to SMEs.

Researchers have postulated that credit information sharing institutions have a positive effect on SME credit access. Jappelli and Marco (2002) in their study on Information sharing, lending and defaults, found that strong credit information sharing institutions are positively related to the size of the credit market and that credit information sharing between lenders is associated with increased and cheaper credit in transition countries in Eastern Europe. Further, they found that bank lending is higher and credit risk is lower in countries where lenders share information, regardless of the private or public nature of the information sharing mechanism. They also concluded that public intervention is more likely where private arrangements have not arisen spontaneously and creditor rights are poorly protected. This implies that establishment of credit referencing bureaus and sharing of credit information is likely to promote SMEs credit financing by addressing the adverse selection problem.

Miller (2005) demonstrated how such financial institutions that shared credit information increased the quantity of small business loans in the United States and more importantly, served to expand credit to riskier and marginal borrowers. Miller (2005) posited that incomplete borrower information generates a possibility of loan default that eventually leads to credit rationing. Credit rationing refers to a situation where lenders limit the supply of additional credit to borrowers, even if the latter are willing to pay higher interest rates. The role of risk in allocation of credit therefore becomes important in credit markets. Lenders will want to minimize their risk exposure by advancing credit to borrowers who exhibit a low risk of default.

Garikai (2011) studying the growth of small and medium sized in developing nations identified constraints that hinder new business start-ups in Kenya. The study identifies the constraints to include limited access to credit finance, limited market opportunities, and lack of business enabling environment, market information and managerial skills. Other factors also identified as affecting enterprise growth are poor management skills, financial constraints, poor marketing skills and limited laws to regulate SMEs. The study recommended that measures to enhance credit financing for SMEs to be put in place to ensure accelerated SMEs start ups and growth.

Nkuah and Gaeten (2013) undertook a study on challenges and determinants in accessing bank credit by SMEs in Ghana. Their findings were that as part of the entrepreneurs' characteristics, male entrepreneurs were most favoured by financial institutions than their female counterparts in credit accessibility. However, general credit accessibility among both genders was very low. The study also revealed that entrepreneurs within the age category of 31years to 40 years as well as 41 years to 50 years were considered worthier of credit than the other age groups. Interestingly, financial institutions in the Wa Municipality did not consider the level of education of entrepreneurs before they advanced them access to credits. With regards to a firm's peculiar characteristics and credit accessibility, the study revealed that firms in the service sector were most favoured than those in the production and agricultural sectors due to the volatility of the latter sector and the resultant high tendency of loan default.

Further, SMEs with less number of employees were considered for credit more than SMEs with more than seven employees. Most SMEs could not readily measure their monthly average returns from the business yet, financial institutions found them worthy of credit. Financial institutions in the Wa Municipality did not also discriminate against the sole ownership of a business in credit accessibility. However, there was generally a low level of credit uptake in the metropolis. The study further found that there was no significant relationship between the location of a business and access to credit though most of the sampled SMEs were operating within the central business area of the Wa Municipality. The study also showed that lack of collateral, inadequacy of managerial competence and lack of a clear repayment plan were some of the reasons for which most entrepreneurs in the Wa Municipality could not access bank credits for their businesses. Nkuah and Gaeten (2013) concluded that some characteristics or attributes of a firm significantly enhanced their credit accessibility.

Mwangi et al. (2013) carried out an evaluation of Financing and Development of SMEs in Mombasa, Kenya using descriptive research design. The study deduced that the performance of most SMEs was curtailed by poor economic conditions, high operating prices, high inflation rate and frequent increases in prices of basic commodities. SMEs cited loyal and reliable customer base as a reason for their survival. Age of an enterprise was found to dictate the level of borrowing from financial institutions. SMEs cited lack of information on finance to expand the businesses, taxation, unfriendly laws, lack of insurance, increased fuel prices and political instability as some of the reasons that inhibited their growth. Among those who were using credit facilities, 74 percent found the facility. Government support through facilities such as Women Enterprise Fund SMEs was cited as one of the reasons of business success. The findings further revealed that two thirds of all respondents were willing to take extra credit in order to expand. Based on the findings, bank loans as sources of start-up capital contributed to only 6 percent of respondents as compared to 70 percent contributed by own savings.

2.5   Summary of Literature Review

Research has shown that a fair number of SMEs discontinue within a few years of their start up. Of the enterprises that survive, there is considerable variability in the rate of growth (Fraser, 2005). The causes of failure or success of SMEs vary from country to country. This variance depends on the business enabling environment influenced by economic, geographical and cultural differences. In Kenya, the GoK has put in measures to support the SME sector by improving access to credit facilities, with the intention of stimulating growth in the sector and promote realization of its potential contribution to the economy (FSD, 2009).

Despite this emphasis, effects of existing institutional challenges such as lending policies to access credit facilities have not been addressed (Nyagah, 2013). There has been no empirical study in Kenya assessing the potential role of improved lending as a stimulus to SMEs growth. Although informal sources of credit have proved relatively successful in meeting the credit needs of SME, their limited resources restrict the extent to which they can effectively and sustainably satisfy the credit needs of entrepreneurs. This is because as microenterprises expand in size, the characteristics of credit facilities they require become increasingly difficult for informal credit sources to satisfy, yet SMEs remain too small for the formal lenders (Aryeetey, 1996).

CHAPTER THREE
RESEARCH METHODOLOGY

3.1   Introduction

This chapter discusses the research methodology that was adopted in this study with the aim of achieving the set objectives. The chapter addresses the research design, population of the study, sources and type of data, sampling design, data collection and data analysis.

3.2   Research Design

A research design is a programme that guides the researcher in collecting, analysing and interpreting observed facts. This study adopted a descriptive research design. A descriptive research design is adopted when the researcher has a specific question in mind. Descriptive research is used to describe characteristics of a population or phenomenon being studied (Creswell, 2003). Quantitative (forced-choice questions) and qualitative (open-ended questions) approach was employed to probe into the relationship between the study variables. Longitudinal data was collected in a sequence so as to track the magnitude of change (SMEs growth) that will have taken place over a time period.

3.3   Population

A population is a set of people, services, and elements being investigated. The target population of this study were the formal licensed SMEs licensed to operate in Nairobi County. Data available from the Ministry of Industrialization and Enterprise Development indicates that there were a total of 4,560 SMEs licensed to operate in Nairobi County in the year 2012. These include 2,500 in the manufacturing sector, 1,500 in the general trading and 560 of them in the service industry. This study targeted the above reported population.

3.4   Sample

The researcher adopted a Stratified random sampling. This method of sampling involves the division of a population into smaller groups known as strata. The strata are formed based on members' shared attributes or characteristics. A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the population. These subsets of the strata are then pooled to form a random sample. The procedure started with stratification of SMEs into various sectors. A sample size should be manageable enough to enable the researcher derive detailed data at an affordable cost in terms of time, finances and

human resource (Mugenda and Mugenda, 2003). A sample of 100 SMEs in total was sampled using the sector weights as determined by dividing SMEs in each sector by the total SMEs in Nairobi County. By applying simple random sampling, the researcher introduced probability sampling wherein each subject will have an equal chance of being selected.

3.5   Data Collection

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. The researcher administered questionnaires through interviews to collect primary data. A questionnaire is a data collection instrument that sets out in a formal way the questions designed to elicit the desired information. Closed ended questions have the advantage of collecting quantitative data while open ended questions allow the respondents freedom and chance to provide in-depth response. A questionnaire is desirable because of low cost and adequacy of time for respondents to give responses. It is free of interviewer's biases and a large number of respondents can be reached (Kothari, 2004). The questionnaires have two sections. Section A sought to obtain background information of the respondent SMEs and section B drew data on credit financing the respondent SMEs have accessed. Profitability of respondent SMEs was determined by Return on Assets (ROA) which was computed from data obtained from the financial statements. Total credit finance is the total sum of total accounts payable, current loans payable and long term loans.

3.5.1   Data Validity and Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results while validity refers to how well an instrument measures what it is purported to measure. Reliability is the consistency of measurement or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. A measure is considered reliable if a subject's score on the same test given twice is similar. Reliability does not however imply validity because while a scale may be measuring something consistently, it may not necessarily be what it is supposed to be measuring. The researcher used the most common internal consistency measure known as Cronbach's alpha (α). It indicates the extent to which a set of test items can be treated as measuring a single latent variable. The recommended value of 0.7 was used as a cut-off of reliabilities (Ngugi,

2013). To prevent bias and inaccuracy on profitability, the data was extracted from the SMEs financial statements.

3.6   Data Analysis

Data collected was checked for completeness after which it was coded to enable the responses to be grouped into various categories for easy analysis. Statistical Package for Social Sciences (SPSS) software was used to apply multiple regression analysis in the analysis of primary data to establish a causal effect relating independent variable to the dependent variable. The data was presented in tables, charts and graphs.

3.6.1   Analytical Model

Multiple regression analysis was used to determine whether the independent variable (credit financing) impacts the dependent variable (Profitability). SME profitability as measured by return on Assets (ROA) was regressed against the independent variables. The model and the moderating variables used were borrowed from the studies by Nkuah and Gaeten (2013) and Ngugi (2013). The moderating variables used were found in literature to be the main factors affecting SMEs profitability other than credit financing.

$$Ys = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Ys = SME profitability as measured by ROA computed from data obtained from financial statements

β_0 = Constant (coefficient of intercept)

X_1 = SME annual credit finance as a percentage of total assets

X_2 = SME industry, coded for analysis where 1 will be Manufacturing industry, 2 Trade and 3 Service industry

X_3 = Age of the SMEs in years

X_4 = Legal Composition of the SME, coded for analysis where 1 will be sole proprietorship, 2 partnership and 3 limited company

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ is the regression coefficient of four variables

ε = Error term which will be assumed to be zero for this study

3.6.2 Test of Significance

Inferential statistics are techniques that allow us to test hypotheses and make estimations using sample data. Such techniques include analysis of variance (ANOVA) which the researcher used to test the significance of the overall model at 95% level of significance. According to Mugenda (2008), ANOVA is used because it makes use of the F –test which plays an important role in the analysis of variance. Coefficient of correlation (R) and coefficient of determination were also applied in making conclusions.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1   Introduction

This chapter presents the analysis of data collected on the effects of credit financing on profitability of small and medium sized enterprises in Nairobi County. Data was gathered using questionnaires and review of the financial statements. Data collected is presented and interpretation of the findings is also covered under this chapter.

4.2   Findings

This section presents results analysis of the data collected.

4.2.1   Response Rate

The researcher administered the questionnaires through interviews where the respondents were explained the importance for the study and the use and required information. This ensured a high response rate of 97%. The 3% accounted for sampled SMEs who due to their internal policies could not accept to provide information. 100 questionnaires were administered out of which 97 were filled. A response rate of 50% is considered adequate, 60% good and above 70% rated very good (Mugenda & Mugenda, 2003).

4.2.2   Reliability of Research Instruments

Reliability of an instrument refers to its ability to produce consistent and stable measurements. To test for data reliability, Cronbach Alpha was used. The findings indicated that credit financing had a coefficient of 0.6029, SMEs age 0.5999, industry 0.9163, and legal composition 0.7337. All constructs had a Cronbach's Alpha above the suggested value of 0.5 thus the study was reliable (Ngugi, 2013). On the basis of reliability test, it was concluded that the scales used in this study were reliable to capture the constructs.

4.2.3   SME Industry

Industry factors significantly affect the level of SME profitability. Differences in industry-level characteristics, such as efficiency, industry structure and specific industry regulations cause differences in profitability (Stierwald, 2009). The SMEs industries were classified into three; namely, manufacturing, trade and service. 54% (52) of the studied SMEs were in

manufacturing industry, 34% (33) in trading business while 12% (12) in service industry. The details are presented in the figure 4.1 below.

Figure 4.1: SMEs Industry
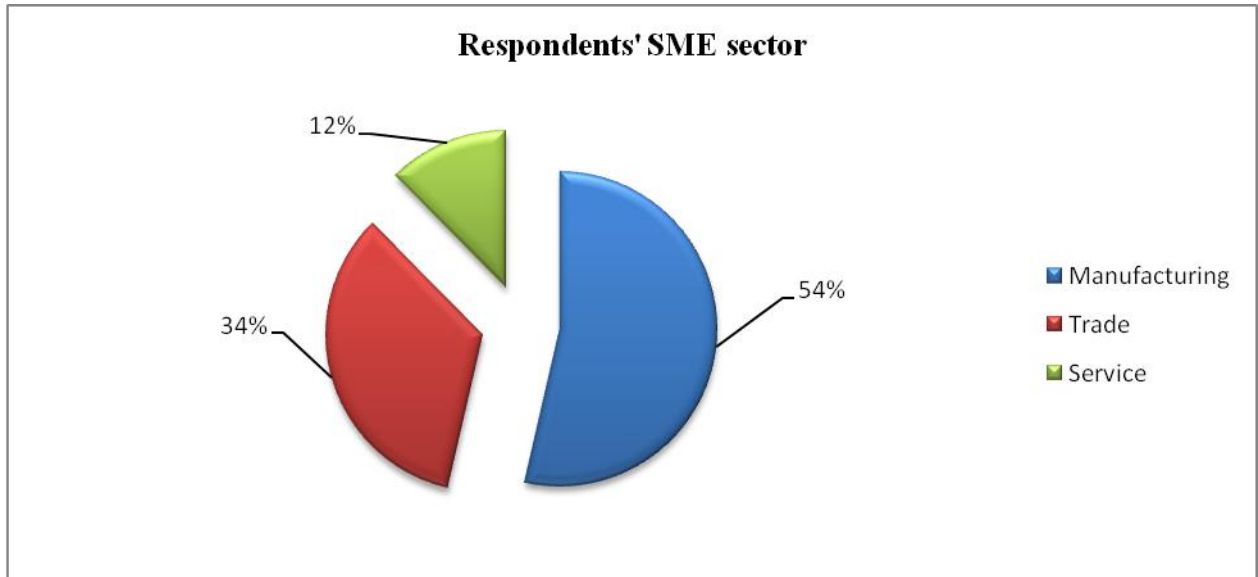
Source: Research Findings

4.2.4   SME Age

This part was important since the age of a firm helps in determining the competitive advantage due to the creation of firm image in the eyes of customer which leads to increased sales for the firm and firm increased profit (Barkham et al., 1996). As shown in the graph 4. 1 below, 49% (48) of the studied SMEs were in existent for more than 10 years, 30% (29) for 8-10 years, 9% (9) for 5 to 8 eight years, 8% (8) for 2 to 4 years and 3% (3) for less than two years. So as to achieve the study objectives, five years data was obtained and analyzed. 88% (86) of the SMEs could give the required five years data. In addition, older firms are usually provides more reliable data and their performance can be predicted with higher degree of accuracy (Ngugi, 2013).

Figure 4.2: Age of SMEs
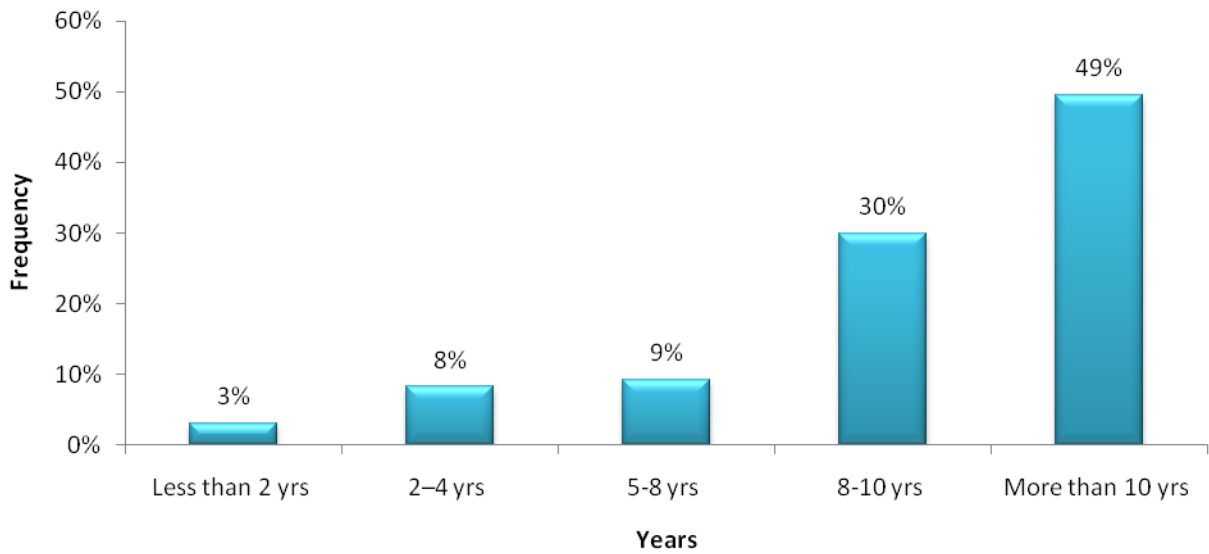
Source: Research Findings

4.2.5   Respondent's current position

Reliability of information obtained from primary sources highly depends on who provided the information. To achieve ensure this, the question sought to provide the researcher with sense of reliability of the information provided by the respondents. As it can be seen in figure 4.2 below, 60% of the respondents were directors of the SMEs, 21% line managers, 16% owners and 3% partners in the partnership SMEs. This implies that the data obtained was reliable since it was provided by individuals in positions that could enable them access crucial SMEs information sought by this study.

Figure 4.3: Respondents' Position

Repondent's Position

16%
3%
60%
21%

Owner
Partner
Line Manager
Director
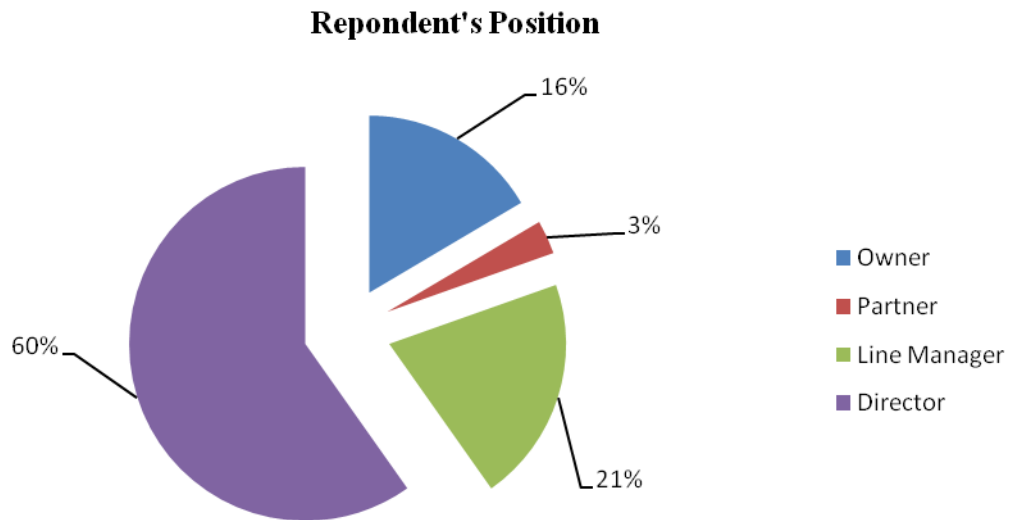
Source: Research Findings

4.2.6   SME legal formation

Legal formation of a SME affects the level of credit financing used by the SME and profitability. Foreman et al. (2006) posited that positive effect of partnership on profitability was twice as large as that of the sole trader, taking limited liability and subsidiaries as the base case. As shown in graph 4.2 below, 81% (79) of respondents SMEs limited companies, 13% (13) partnerships and 5% (5) sole proprietorship.

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Figure 4.4: SMEs Legal Formation
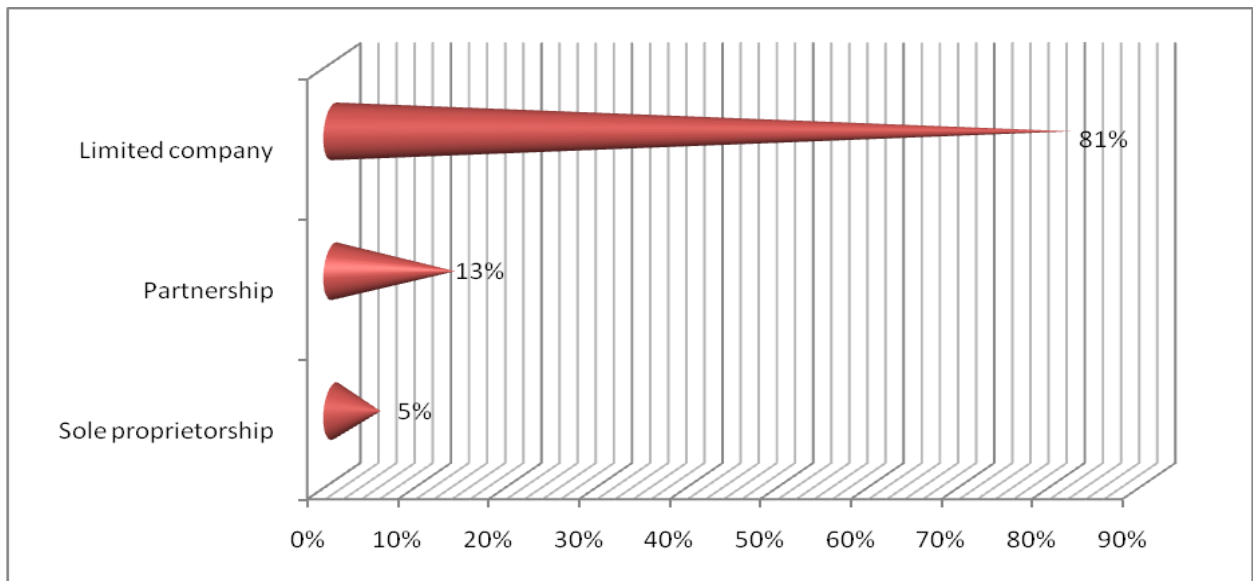
Source: Research Findings

4.2.7   SME Number of Employees

Number of employees indicate the size of a SME whether small, micro or medium enterprise. The size of a SME affects the level of firms' profitability. As seen from the graph 4.3 below, majority of respondent SMEs are medium sized since 49% of the SMEs have over 50 employees, 24% have 21 to 50 employees, 13% 6 to 10, 10% below 5 while 8% 11 to 50 employees.

Figure 4.5: Number of Employees
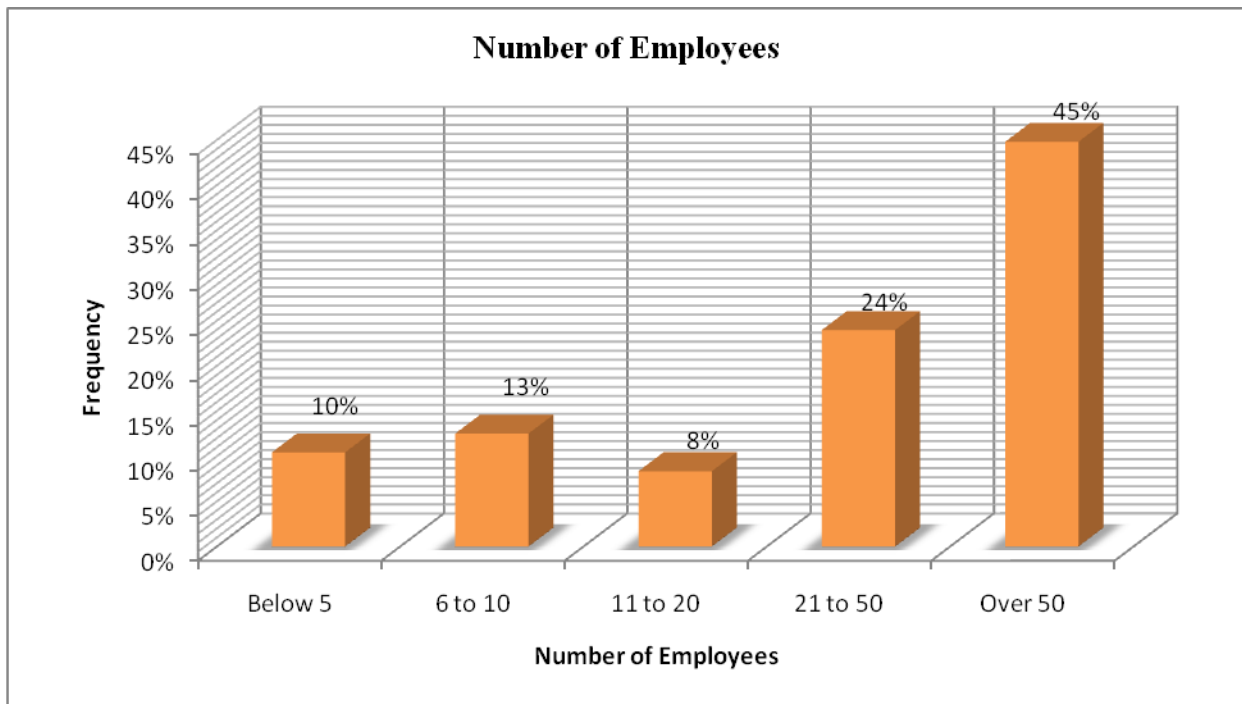
Source: Research Findings

4.3   Credit Financing and Profitability

The study sought to examine the effect of credit financing on profitability of SMEs operating in Nairobi County. Data collected from SMEs financial statements and questionnaires was analysed to achieve this objective.

4.3.1   Factors Affecting SMEs Credit Access

This question sought to determine the factors hindering access to finance by SMEs in Nairobi County. Studies in Kenya found collateral requirements and high cost of credit as major reasons restricting SMEs ability to access finance (Garikai, 2011; Mwangi et al., 2013). A Likert scale was used to determine hindrances to SMEs access to credit financing using a scale of 1-5 where 5 represented limitation to a very great extent, 4 great extent, 3 moderate extent, 2 Low extent and 1 very low extent.

As shown in table 4.1 below, overall, high cost of credit financing was ranked as the main hindrance to respondent SMEs credit financing access to a very great extent with a mean of 5.7067 and standard deviation of 0.9385, collateral second with mean a mean of 5.6933 and standard deviation 0.8011, debt level third with a mean of 5.16 and standard deviation of

0.7024. Reputation of the SMEs was also found to affect access to credit financing to a moderate extent with a mean of 3.8533 and standard deviation of 0.4254. Size of SMEs, age and legal formation were found to affect credit financing to a low and a very low extent respectively.

Table 4.1: Factors hindering SMEs credit financing

Factors hindering SMEs Credit Financing	Overall Ranking	Mean	Standard Deviation
Cost of finance (interests, legal fees, insurance)	1	5.7067	0.9385
Collateral	2	5.6933	0.8011
SME total debt level	3	4.1600	0.7024
Reputation of the SME	4	3.8533	0.4254
Size of SME	5	3.8400	0.575
Age of SME	6	1.3733	0.3858
SME legal formation	7	1.4267	0.2839

Source: Research Findings

4.3.2 Ease of Credit Finance Access

Numerous measures have been made by the Kenyan government in attempt to deepen the financial markets and ensure SMEs access to credit. Understanding the implications of credit financing constraints on the SMEs is of first-order importance for the performance SMEs in developing countries (Alexander & Hall, 2003). As shown in the graph 4.5 below, 46% of the respondents rated credit access to be very hard in 2009, 45% rated it fair in 2010, 41% easier in 2011, 48% easier in 2012. In 2013, 30% of the respondents ranked credit access to be very easy compared with the other years, 52% easier, 17% fair, 1% hard and 0% very hard, with 0% and 1% rating it very hard and hard respectively. Overall, credit access by SMEs in Nairobi was ranked easier by 30% of the respondents, fair by 23%, hard by 21%, very hard by 11% and very easy by 9%. Overall, 68% of the respondents ranked SMEs credit access to be fair, easier or very easy. This implies that ease of credit access has improved since 2009 and is SMEs can fairly get access to credit financing.

Figure 4.6: Ease of SMEs credit financing
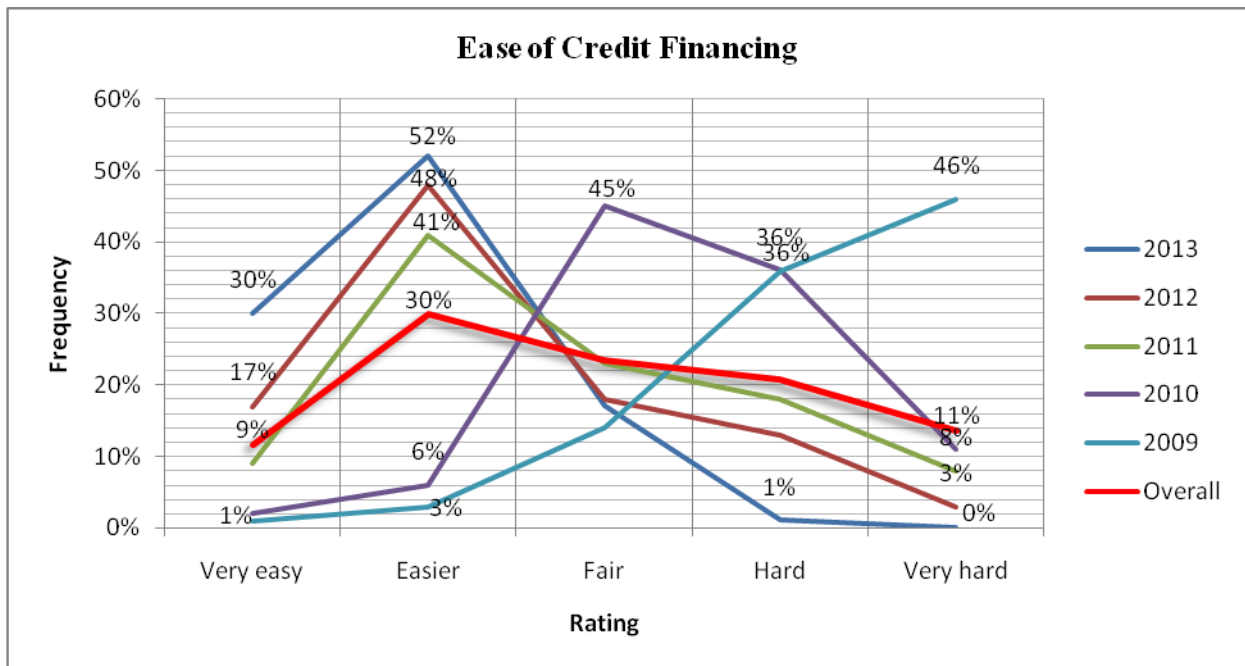
Source: Research Findings

4.3.3   Credit Financing as a Percentage of Assets

The researcher sought to find out the extent to which credit is used by the SMEs to finance assets for the over five year period between 2009 and 2013. As shown in the graph 4.5 below, SMEs assets were on average financed by credit finance up to a maximum of 29% and a minimum of 17% in the years 2009 and 2013. All SMEs studied have a portion of their assets financed by credit signifying the importance of credit in financing SMEs assets and operations.

Figure 4.7: Ease of SMEs credit financing
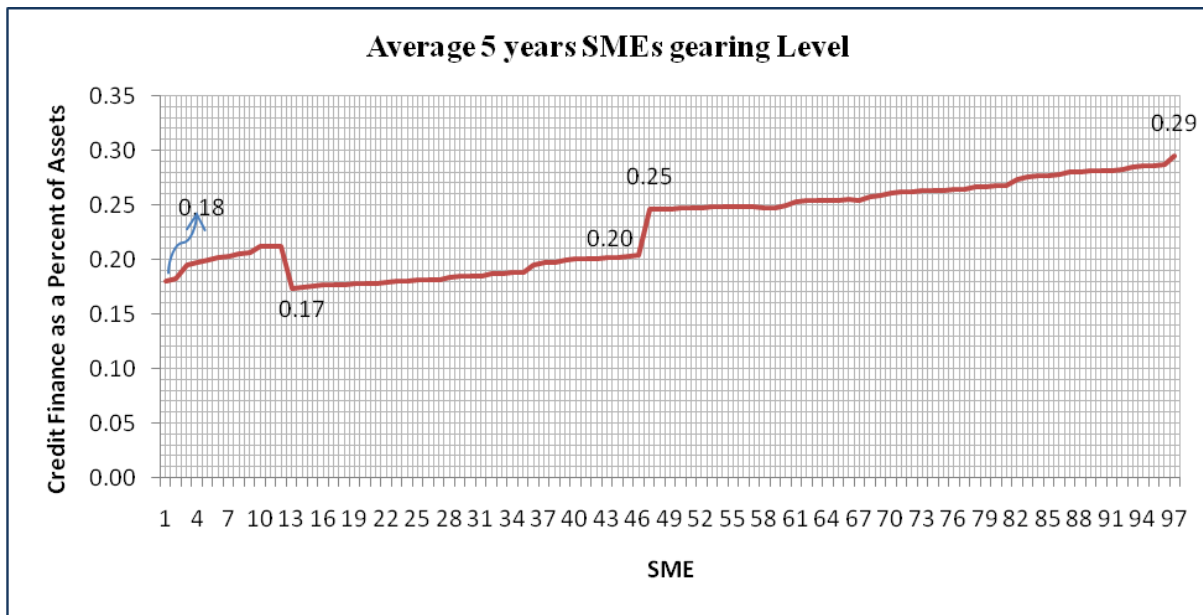
Source: Research Findings

4.4   SMEs Profitability

Profitability of SMEs was measured by return on assets over a five year period, 2009- 2013. As shown in graph 4.6 below, return on assets for the respondent SMEs ranged between - 41% and +27%. However, 89% (87) of SME had positive return on assets with 11% (10) having negative return on assets over the five year period. This implies that SMEs in Nairobi County are profitable with most of them generating incomes of more than 10% per shilling of assets.

Figure 4.8: SMEs Average return on assets
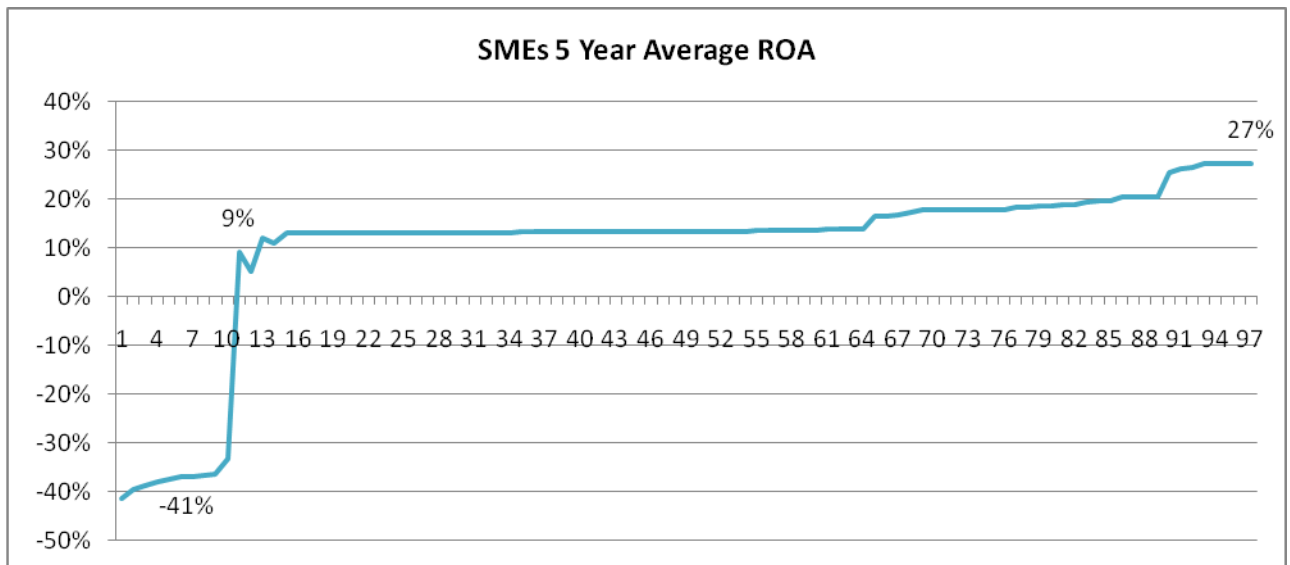
Source: Research Findings

4.5 Regression Analysis

4.5.1 Regression between Profitability and Credit Financing

The linear regression analysis models the relationship between the dependent variable which is profitability and independent variable which is credit financing. The coefficient of determination (R^2) and correlation coefficient (R) shows the degree of association between credit access and profitability of SMEs in Nairobi. The results of the linear regression indicate that R^2=0.3607 and R=0.6006 implying that there is a positive linear relationship between credit financing and profitability of SMEs in Nairobi. The findings are in line with those of Peria (2009) and Guffey (2008) who found that credit financing played an important role in firms' performance.

Table 4.2: Profitability and Credit Financing Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.6006	0.3607	-0.0003	0.1687

a. Predictors: (Constant), Credit Financing as percentage of assets

Source: Research Findings

Table 4.3 shows the results of ANOVA test which reveal that credit financing have significant effect on SME profitability since the actual P value is 0.0327 which is less than 5% level of significance. This implies that the model Y=B0+B1X1+E is significant where Y is the return on assets and X1 credit financing as a percentage of assets.

Table 4.3: Profitability and Credit Financing Model ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.0276	1	0.0276	0.0971	0.0327
	Residual	2.7025	95	0.0284		
	Total	2.7302	96			

Predictors: (Constant), Credit Financing as Percentage of Assets

Dependent Variable: Return on Assets

Source: Research Findings

The model coefficients between return on assets (dependent variable) and credit finance (independent variable) as a percentage of total assets are shown in table 4.4. The coefficients are significant at 5% confidence level.

Table 4.4: Profitability and Credit Financing Model Coefficients

Model		Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	0.0035	0.1037		0.0338	0.0097
	Credit Financing as Percentage of Assets	0.4396	0.4461	0.1006	0.9854	0.0327

a. Dependent Variable: Return on Assets

Source: Research Findings

4.5.2 Regression between Profitability and SMEs Industry

Table 4.5 below shows the summary of regression model result. The value of R and R^2 are 0.2462 and 0.0606 respectively. The R value of 0.2462 represents a positive linear relationship between SMEs industry and profitability. The R^2 indicates that explanatory power of the independent variables is 6.1% meaning that about 6.1% of the variation in

profitability is explained by the model $Y=\beta_0+\beta_2 X_2+E$ where Y is return on assets and X2 is SMEs industry. Stierwald (2009) found that industry effects and specific industry regulations cause differences in profitability between firms.

Table 4.5: Profitability and SME Industry Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.2462	0.0606	0.0507	0.1643

a. Predictors: (Constant), Industry

Source: Research Findings

Table 4.6 shows the results of ANOVA test which reveal that SME industry has significant effect on profitability since the P value is 0.015 which is less than 5% level of significance. This implies that linear regression model $Y=0.1655+0.0505 X_2+E$ where X2 is the SMEs industry and that the model was significant.

Table 4.6: Profitability and SME Industry Model ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.1655	1	0.1655	6.1313	0.01505
	Residual	2.5647	95	0.0270		
	Total	2.7302	96			

a. Predictors: (Constant),Industry

b. Dependent Variable: Return on assets

Source: Research Findings

Table 4.7 below shows a positive coefficient between SMEs profitability and industry. The coefficients were found significant.

Table 4.7: Profitability and SME Industry Model Coefficient

Model		Coefficients	Std Error	Standardized Coefficients	t	Sig.
1	(Constant)	0.0057	0.0431		0.1328	0.0890
	Industry	0.0506	0.0204	0.2462	2.4762	0.0151

Source: Research Findings

4.5.3   Regression between Profitability and SMEs Age

Table 4.7 below shows the summary of regression model result. The value of R and R^2 are 0.2429 and 0.059 respectively. The R value of 0.2429 represents a positive linear relationship between SMEs age and profitability. The R^2 indicates that explanatory power of the independent variables is 5.9% meaning that about 5.9% of the variation in profitability is explained by the model $Y=\beta 0+ \beta 3X3+E$ where Y is return on assets and X3 is SMEs age. The findings concur with those of Raza, et al., that SMEs age determines its competitiveness and hence affecting profitability.

Table 4.8: Profitability and SME Age Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.2429	0.0590	0.0491	0.1644

a. Predictors: (Constant), Age

Source: Research Findings

Table 4.8 shows the results of ANOVA test which reveal that SME age has significant effect on profitability since the P value of 0.0165 which is less than 5% level of significance. This implies that linear regression model $Y=0.0488 +0.00644X3+E$ where X3 is the SMEs age and that the model was significant.

Table 4.9: Profitability and SME Age Model ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.1611	1	0.1610	5.9557	0.01652
	Residual	2.5691	95	0.0270		
	Total	2.7302	96			

a. Predictors: (Constant), Age

b. Dependent Variable: Return on Assets

Source: Research Findings

The model coefficients are shown in table 4.9 below and all of them are significant.

Table 4.10: Profitability and SME Age Model Coefficient

Model		Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	0.048812	0.028193		1.731312	0.086642
	Age	0.00644	0.002639	0.242886	2.440444	0.016523

a. Dependent Variable: Age

Source: Research Findings

4.5.4   Regression between Profitability and Legal Composition

Table 4.10 below shows the summary of regression model result. The value of R and R^2 are 0.4755 and 0.2261 respectively. The R value of 0.4755 represents a positive linear relationship between SMEs legal composition and profitability. The R^2 indicates that explanatory power of the independent variables is 22.6% meaning that about 22.6% of the variation in profitability is explained by the model $Y=\beta0+ \beta4X4+E$ where Y is return on assets and X4 is SMEs legal composition.

Table 4.11: Profitability and SME Legal Composition Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.4755	0.2261	0.2180	0.1491

a. Predictors: (Constant), Legal Formation

Source: Research Findings

Table 4.11 shows the results of ANOVA test which reveal that SME age has significant effect on profitability since the P value of 0.0000 which is less than 5% level of significance. This implies that linear regression model $Y=\beta 0+ \beta 4X4+E$ where X4 is the SMEs legal composition and that the model was significant. Foreman et al. (2006) found that the positive effect of partnership on profitability was twice as large as that of the sole trader, taking limited liability and subsidiaries as the base case; this was explained by interpret the effects as risk tolerance and division between many individuals.

Table 4.12: Profitability and SME Legal Composition Model ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.6173	1	0.6173	27.7549	0.0000
	Residual	2.1129	95	0.0222		
	Total	2.7302	96			

a. Predictors: (Constant), Legal formation

b. Dependent Variable: Return on assets

Source: Research Findings

The model coefficients which have been found to be significant are shown in table 4.12 below.

Table 4.13: Profitability and SME Legal Composition Model Coefficients

Model		Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	-0.1882	0.0575		-3.2707	0.0015
	Legal formation	0.1182	0.0224	0.4755	5.2683	0.0000

a. Dependent Variable: return on assets

Source: Research Findings

4.5.5 Overall regression analysis

The linear relationship between the dependent variable which is return on assets as a measure of profitability and independent variables which are credit financing, industry, age and legal composition. This analysis is meant to achieve the study general objective which was to determine the effect of credit financing on profitability of small and medium sized enterprises. SME industry, age and legal composition were included in the model as control variables.

The coefficient of determination (R^2) and correlation coefficient (R) were used to show the degree of association between Variables and profitability of SMEs in Nairobi County. An R of 0.8197 shows a strong positive relationship between profitability, credit finance, industry, legal form and age of SMEs. The model developed could account for 67.19% of changes in profitability.

Table 4.14: Overall Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.8197	0.6719	0.2383	0.1472

a. Predictors: (Constant), Credit Finance, Industry, Legal form, Age

Source: Research Findings

Table 4.14 below indicates that P value = 0.000 which is less than 5%. This shows that the overall model is significant and can be used in prediction and decision making. This implies that credit financing, SMEs industry; age and legal composition all have significant effect on

profitability of SMEs in Nairobi County. The finding that industry effects are not significant in determining firms profitability concur with those of Barkham et al., (1996) that found that sector variables were not to be significant in determining profitability of a firm.

Table 4.15: Overall Model ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.7373	4	0.1843	8.5100	0.0000
	Residual	1.9928	92	0.0217		
	Total	2.7302	96			

a. Predictors: (Constant), Credit Finance, Industry, Legal, Age

b. Dependent Variable: Return on Assets

Source: Research Findings

Table 4.15 below shows the overall model coefficients all of which are significant except for the SME industry. Credit financing, legal formation and age of SMEs have positive relationship with profitability with industry having a negative relationship. Therefore, when combined with other variables, SMEs industry has an insignificant effect on profitability. The model developed showing the relationship between the independent variables and profitability is given below.

$$Y = -0.2916 + 0.4146X_1 - 0.0059X_2 + 0.0062X_3 + 0.1039X_4$$

Table 4.16: Overall Model Coefficient

Model		Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	-0.2916	0.1121		-2.6006	0.0108
	Legal Form (X4)	0.1039	0.0239	0.4178	4.3412	0.0000
	Age (X3)	0.0062	0.0027	0.2348	2.3314	0.0219
	Industry (X2)	-0.0059	0.0111	-0.0487	-0.5361	0.5932
	Credit Finance (X1)	0.4146	0.4506	0.0949	0.9202	0.0036

a. Dependent Variable: Return on Assets

Source: Research Findings

4.6   Interpretation of the Findings

From the study findings, 88% of respondent SMEs have been in existence for more than five years. This implies that they could provide the required five years data which is more reliable and with higher degree of accuracy. The respondents composed of directors, line managers, owners or partners in the partnership SMEs. This implies that the data obtained was reliable since it was provided by individuals in positions that could enable them access crucial SMEs information sought by this study.

Overall, high cost of credit financing was ranked as the main hindrance to respondent SMEs credit financing access, collateral second, debt level third and SME reputation fourth. Age and legal formation were also found to affect credit financing to a low and a very low extent respectively. SMEs assets were on average financed by credit finance up to a maximum of 29% and a minimum of 17% in the years 2009 and 2013 with 100% of SMEs using debt finance. This implies the importance of credit in financing SMEs assets and operations. Return on assets for the respondent SMEs ranged between -41% and +27%. However, 89% of SME had positive return on assets with 11% having negative return on assets over the five year period. This indicates that SMEs in Nairobi County are profitable with most of them generating incomes of more than 10% per shilling of assets.

The linear relationship between the dependent variable which is return on assets as a measure of profitability and independent variables which are credit financing, industry, age and legal composition shows an R of 0.8197 which implies a strong positive relationship between profitability, credit finance, industry, legal form and age of SMEs. R^2 of 0.6719 means that the model developed could account for 67.19% of changes in profitability as measured by return on assets. The P value of 0.000 on the overall model which is less than 5% shows that the overall model is significant and can be used in prediction and decision making. This implies that credit financing, SMEs industry; age and legal composition all have significant effect on profitability of SMEs in Nairobi County. Overall model coefficients of 0.414 on credit financing implies that a unit increase in credit finance as a percentage of assets will increase profitability as measured by return on assets by 0.4146%.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1   Introduction

The chapter summarizes the findings of the study from which conclusions and recommendations were made. This chapter presents the discussions from the data analysed in chapter four. The chapter is structured into a summary of findings, conclusions, recommendations and areas for further research.

5.2   Summary

The study sought to determine the effect of credit financing on SMEs profitability in Nairobi County. The study found that credit finance, industry, legal form and age of SMEs are positively related to SMEs profitability as measured by return on assets with a correlation coefficient of 0.8197. The four independent variables explain 67.19% of changes in profitability with credit financing having the highest effect on profitability compared to the other variables included in the model.

Assessment of individual variables effect on profitability indicates that credit financing has a positive effect on profitability with R^2 of 0.3607 and R of 0.6006, SMEs age with a R and R^2 of 0.2429 and 0.059 respectively. SMEs legal composition was found to be positively related with profitability with R and R^2 of 0.4755 and 0.2261 respectively and SME industry with R and R^2 of 0.2462 and 0.0606 respectively. Limited companies were found to be more profitable than partnerships and sole proprietorships.

All the SMEs studied were found to be using credit finance with assets financed by credit finance ranging from 17% to 29%. This signifies the importance of credit finance in financing SMEs assets and operations. High cost of credit financing was found to be the main hindrance to SMEs credit financing access with lack of collateral ranking second. However, credit financing access was found to have improved since year 2009 to 2013 with 68% of the respondents ranked SMEs credit to have improved over the years. Respondent SMEs were found to be profitable with the return on assets ranging from -41% and 27%. 89% of the SMEs had positive return on assets with 11% having negative return on assets over five years period.

5.3   Conclusion

The objective of this study was to examine the effect of credit financing on profitability of SMEs in Nairobi County. The study concludes that credit financing has positive and significant effect on SMEs profitability. The study included SMEs industry, legal formation and age as control variables based on available literature. SMEs industry, legal formation and age were all found to have positive and significant effect on profitability with credit finance as the most important variable in the study model. Some of the factors hindering SMEs access to credit financing were found to be high cost of credit and collateral requirement. Despite the challenges, respondent SMEs were found to finance a portion of their assets with credit finance. Access to credit finance by respondent SMEs has increased substantially from 2009 to 2013.

5.4   Recommendations for Policy

Small and Medium Enterprises (SMEs) play an important role in Kenya's economy by contributing to economic growth and industrialization. In line with the study objective and the findings of this study, the researcher makes the following are the recommendations: First, credit finance enhances growth by enabling SMEs to undertake profitable ventures that many a times need heavy capital investment. Financial lending institutions should consider establishing less stringent collateral requirements to make it easier for SMEs to access the same and be able to support their operations. Secondly, among challenges hindering SMEs from accessing credit finance is the high cost of credit. Lending institutions should review credit costs such as processing fee that pushes the cost of lending high. Finally, SMEs need to consider their legal formation by opting for limited liability companies as opposed to sole proprietorships. This is because Limited Liability companies are more structured making it favourable for lending institutions to consider them for credit as opposed to sole proprietorships.

5.5   Limitations of the study

Respondent SMEs are those operating in Nairobi County. This implies that the findings may not be representative of all SMEs in Kenya. A study on SMEs across various counties in Kenya could have provided more conclusive results on the effect of credit financing on profitability of SMEs in Kenya.

Respondents were reluctant to provide information. The researcher had to administer the questionnaires through interviews as opposed to relying on self-administration of the questionnaires. 3% of the sampled SMEs did not provide information due to strict internal policies on information sharing.

Dispersed locations of the response SMEs within Nairobi County poised logistics challenge to the researcher. Limitation of the project completion period poised a challenge.

5.6   Recommendations for Further Research

This study focused on SMEs based in Nairobi County hence the findings by this study may not be representative of SMEs in Kenya or other counties. Further study can be done on SMEs licensed to operate in other counties and confirm the consistency of the results. In addition, further study can be done specifically on the variables used as control variables and incorporate more variables which may also be accounting for changes in profitability. It can also be important to study big companies and find out if the effect of credit financing is the same just like for SMEs.

REFERENCES

Akerlof, G., (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism.

Alexander, M., and Hall, L., (2003). Access to credit and the effect of credit constraints on Costa Rican manufacturing firms. Research Network working paper, Inter-American Development Bank, Newyork.

Ansoff, H., (1965). An analytical Approach to Business Policy for Growth and Expansion. New York: McGraw-Hill.

Aryeetey, E., (1996). Rural finance in Africa: Institutional developments and access for the poor. The World Bank Annual Conference on Development Economics, Washington.

Barkham, R., Gudgin, M., and Hanvey, E., (1996). The Determinants of Small Firm Growth: An Interregional Study in the United Kingdom, 1986-90 Jessica Kingsley: London.

Basu, P., (2006). Improving access to finance for India's rural poor. The World Bank, Washington.

Becker, S., (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*.

Bowen, M., Morara, M., & Mureithi, S., (2009). Management of business challenges among Small and micro enterprises in Nairobi-Kenya.

Clark, J., (1917). Business Acceleration and the law of demand: A technical factor in economic cycles. *Journal of political economy*

Creswell, W., (2003). Research design: Qualitative, Quantitative, and mixed methods

Davidsson, D., Frederic, W., Johan, D., (2006). Entrepreneurship and the Growth of Firms

Davidsson, P., Steffens, P., and Fitzsimmons, J., (2005). Growing profitable or growing from profits: Putting the horse in front of the cart? Paper presented at the Paper presented at the Academy of Management Meeting, Honolulu.

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Deakins, D., Ishaq, M., Smallbone, D., Whittam, G., and Wyper, J., (2005). Minority Ethnic enterprise in Scotland: A National Scoping Study, Final Research Report for Scottish Executive. Scotland.

Demirgüç-Kunt, A., Beck, T., Honohan, P., (2007). Finance for all: policies and pitfalls in expanding access. World Bank Policy Research Report.

Demirgüç-Kunt, A., Beck, T., Honohan, P., (2008). Finance for all: policies and pitfalls in expanding access. World Bank Policy Research Report.

Demirgüç-Kunt, A., and Levine, R., (2008). Financial and economic opportunity. World Bank Policy Research Working Paper 4468.

Djankov, S., Caralee, M., and Shleifer, A., (2007). Private Credit in 129 Countries. World Bank Doing Business Project.

Edgmand, M., (1979), Macroeconomics Theory and Policy. 2nd Edition, prentice-Hall: New Yolk.

Enos, J., (1992). The Creation of Technological Capabilities in Developing Countries. London: Pinter.

European Union Commission Recommendation, (2003). Definition of micro, small and medium sized enterprises, the official journal of the European Union, L124/36.

Financial Sector Deepening (2009). SME trade finance, Review of facilities available in Kenya.

Financial Sector Deepening (2009). National survey of financial services access. Finances, Kenya.

Foreman, J., Gerry, M., and Morgan, B., (2006). Growth and Profitability of Small and Medium sized Enterprises: Some Welsh Evidence

Franck, T. and Huyghebaert, N. (2009). Financing of Business Start-Ups: A Topic of Great Relevance for Firm Performance, Growth and Survival, SMEs in Europe, Vienna: SUERF Studies, E. (eds) Financing

Fraser, S., (2005). Finance for Small and Medium-Sized Enterprises, Report on the 2004 UK Survey of SME Finance, Centre for Small and Medium-Sized

Garikai, W., (2011). Growth of SMEs in Developing Nations: Special Reference to AGOA.

Goldsmith, W., (1969). Financial Structure and Development. Yale University Press, New Haven.

Government of Kenya, (2007). Kenya Bureau of Statistics. Nairobi: Government Printer.

Government of Kenya, (2008). Economic Survey. Nairobi Kenya: Government Printers.

Government of Kenya, (2010). Economic Survey. Nairobi Kenya: Government Printers.

Government of Kenya, (2012). Economic Survey. Nairobi Kenya: Government Printers.

Griffin, W., Gregory, M., (2010). Organizational Behavior: Managing People and Organization 9th Edition.

Guffey, M., (2008). Business Communication: Process & Product 6th Edition.

Gurley, G., & Shaw, S., (1955). Financial aspects of economic development. American Economic Review 45, 515-538.

Hall, G., Hutchinson, P., & and Michaelas, N., (2000). Industry effects on the determinants of unquoted SMEs' capital structure. *International Journal of the Economics of Business*, 7 (3), 297-312.

Hallberg, K., (2001). A Market-Oriented Strategy for Small and Medium-Scale Enterprises. IFC Discussion Paper no. 48

Harvie, C., & Lee, C., (2005). Sustaining growth and performance in East Asia: the role of small and medium-sized enterprises in achieving and sustaining growth and performance

Hussain, M., (2000). Credit for the alleviation of rural poverty: The Grameen Bank in Bangladesh. IFPRI Research Report No. 65.

Idowu, C., (2010). Impact of Microfinance on Small and Medium-Sized Enterprises in Nigeria.

Jappelli, T., & Marco, P., (2002). Information sharing, lending and defaults: Cross- country evidence. *Journal of Banking and Finance*. 2017-2045.

Jappelli, T., and Marco, P., (2006). Public Credit Information: A European Perspective. In Credit Reporting Systems and the International Economy, by Margaret J. Miller, 81-114. Cambridge, MA: The MIT Press.

Karlan, D., & Morduch, J., (2009). Access to Finance Chapter 2, Handbook of Development Economics, Volume 5, DaniRodrikand Mark Rosenzweig, eds.

Kenya Association of Manufacturers, (2008). Market Access for SMEs through Private and Public Procurement in Kenya.

Kiiru, K., (1991). A review of the institutional lending to the jua kali and small enterprise sector in Kenya. Geneva: International Labour Organisation.

Kothari, R., (2004). Research Methodology. New Delhi: New Age international.

Lee, N., Sameen, H., and Martin, L., (2013). Credit and the crisis Access to finance for innovative small firms since the recession

Levy, M., Powell, P., (2005). Strategies for growth in SMEs: The Role of Information and Information Systems.

Liao, J., Welsch, H., & Pistrui, D., (2001). Environmental and Individual Determinants of Entrepreneurial Growth : An Empirical Examination. *Journal of Enterprising Culture* , 9(3), 253-272.

Macpherson, A., Holt, R., (2007). Knowledge, learning and small firm growth: A systematic review of the evidence, Research Policy

Matovu, D., (2006). Micro finance and poverty alleviation in Uganda. Uganda.

McKinnon, R., (1973). Money and Capital in Economic Development. The Brookings Institution, Washington.

Miller, J., (2005). Credit Reporting Systems around the Globe: The State of the Art in Public Credit Registries and Private Credit Reporting Firms. Cambridge, Massachusetts: The MIT Press.

Monge, A., Cascante, J., and Hall, L., (2001). Enforcement, Contract Design and Default: Exploring the Financial Markets of Costa Rica. Washington, DC, United States: Inter-American Development Bank/John Hopkins University Press.

Mugenda, A., and Mugenda, O., (2003). Research methods; quantitative and qualitative approaches. Africa Center for Technology (ACTS), Nairobi Kenya

Mugenda, A., (2008). Social Science Research. Nairobi: Acts Press.

Mwangi, M., Gongera, E., Mindila, R., Nyakwara, S., Ongeri, J., and Okeyo, H., (2013). An Evaluation of Financing and Development of Small and Medium Enterprises in Mombasa County, Kenya

Ngugi, K., (2013). Influence of intellectual capital on the Growth of small and medium enterprises in Kenya. JKUAT , PHD thesis

Nkuah, J., Tanyeh, J., and Gaeten, K., (2013). Financing small and medium enterprises (SMEs) in ghana: challenges and determinants in accessing bank credit. *International Journal of Research in Social Sciences*

Nyagah, C., (2013). Non-financial constraints hindering growth of SME'S in Kenya: the case of plastic manufacturing companies in industrial area in Nairobi County. Kenyatta University MBA project

OECD (2012). Credit information sharing. Improving financial access

Oketch, O., (2000). Gender Equity, Micro and small Enterprises in Kenya: Agenda for improving the Policy Environment. Nairobi: ICEG.

Oketch, H., Abaga, A., and Kulundu, D., (1995). The demand and supply of micro and small enterprise finance in Kenya. KREP, Nairobi.

Otieno, S., Lumumba, M., Nyabwanga, N., Ojera, P., & Alphonce, J., (2011). Effect of provision of micro finance on the performance of micro enterprises: A study of youth micro enterprises under Kenya Rural Enterprise Program (K-REP), Kisii County, Kenya. African Journal of Business Management Vol. 5(20), pp. 8290-8300

Peria, M., (2009). Bank financing to SMEs: what are Africa's specificities? SME Financing in Sub Saharan Africa.

PPOA (2011). An Annual Summary of Public Tenders in Kenya.

Raza, S., Farooq, S., and Khan, N., (2011). Firm and Industry Effects on Firm Profitability: An Empirical Analysis of KSE. *International Research Journal of Finance and Economics*

Robb, A., and Robinson, T., (2009). The Capital Structure Decision of New Firms.

Romer, M., (1986). Increasing Returns and Long-run Growth. Endogenous Technological Change. Journal of Political Economy 98(5):S71−102.

Ruland, W., and Zhou, P., (2005). Debt, Diversification and Valuation. *Journal of Review of Quantitative Financial Accounting*, 25(3),pp. 277-291.

Schiantarelli, F., (1996). Financial Constraints and Investment: Methodological Issues and International Evidence. Oxford Review of Economic Policy 12(2): 70-89.

Schultz, T., (1961): Investment in Human Capital, American Economic Review, 51:1-17.

Shane, S., and Cable, D., (2003). Network ties, reputation and the financing of new ventures. Management Science,48(3): 364-381.

Sharpe (1990). Asymmetric information, Bank lending, and Implicit contracts.

Shaw, S., (1973). Financial Deepening in Economic Development. Oxford University Press, New York.

Shelley, E., (2004). Factors Hindering Growth in small business www.sbae.uca.edu/research/2004 paper pdf/019.pdf

Steijvers, T., (2008). Existence of Credit Rationing for SME's in the Belgian Corporate Bank Loan Market, Mimeo.

Stierwald, A., (2009). Determinants of Firm Profitability- The Effect of Productivity and its Persistence. Melbourne Institute of Applied Economic and Social Research: The University of Melbourne

Stiglitz, J., and A. Weiss. (1981). Credit Rationing in Markets with Imperfect Information.

Udell, G., (1997). The Consolidation of the Banking Industry and Small Business Lending, in Bank Mergers and Acquisitions: Stern Kluwer Publishers.

Wasonga, J., (2008). Challenges influencing small and medium enterprises (SMES) in Kenya: the Fina Bank Experience.

Weill, P., (1992). The relationship between investment in information technology and firm performance: a study of the valve manufacturing sector. Information Systems Research.

World Bank (1994). Findings-Africa Region. No. 26: Washington DC.

World Bank Survey (2010). Kenya Unlocking Growth Potential: Strategies, Policies, Actions.

World Bank (2010). Europe and Central Asia region, International Monetary Fund. The Road to Stability and Prosperity in South Eastern Europe: A Regional Strategy Paper

Zahra, S., (1993). Environment, corporate entrepreneurship, and financial performance: A taxonomic approach. *Journal of Business Venturing*, 8: 319–340.

APPENDICES

Appendix I: Introduction Letter

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 14/07/2014

TO WHOM IT MAY CONCERN

The bearer of this letter ESTHER KARIMI NJERU

Registration No. D61/80299/2012

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
23 JUL 2014
P.O. Box 30197 - 00100, NAIROBI

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Appendix II: Questionnaire

This purpose of this questionnaire is to collect data for purely academic purposes. The study seeks to the effect of credit financing on SMEs growth in Nairobi County. All information will be treated as confidential. Please do not put any form of identification on this questionnaire.

SECTION A: BACKGROUND INFORMATION

1. **What is your SME business sector**

   1   Manufacturing   [ ]

   2   Trade   [ ]

   3   Service   [ ]

2. **How long has your SME been in operation?**

   Less than 2 yrs   [ ]

   2–4 yrs   [ ]

   5-8 yrs   [ ]

   8-10 yrs   [ ]

   More than 10 yrs   [ ]

   Please specify the exact years as at December 2013…………………….......

3. **What position are you holding currently?**

   Owner   [ ]

   Partner   [ ]

   Line Manager   [ ]

   Director   [ ]

   Other (specify)..

4. **SME legal formation**

1	Sole proprietorship	[ ]
2	Partnership	[ ]
3	Limited company	[ ]

5. Current SME number of employees

Below 5	[ ]
6-10	[ ]
11-20	[ ]
21-50	[ ]
Over 50	[ ]

SECTION B: SME CREDIT FINANCING

6. To what extent do the following factors affect your ability to access credit finance?
Use a scale of 1-5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1=Very low extent. Tick as appropriate.

	1	2	3	4	5
Cost of finance (interests, legal fees, insurance)	[ ]	[ ]	[ ]	[ ]	[ ]
Reputation of the SME	[ ]	[ ]	[ ]	[ ]	[ ]
Collateral	[ ]	[ ]	[ ]	[ ]	[ ]
Size of SME	[ ]	[ ]	[ ]	[ ]	[ ]
Age of SME	[ ]	[ ]	[ ]	[ ]	[ ]
SME total debt level	[ ]	[ ]	[ ]	[ ]	[ ]
SME legal formation	[ ]	[ ]	[ ]	[ ]	[ ]

7. How easy can you rate access to credit for SMEs in Nairobi County for the last five years? Use a scale of 1-5 where 1= Very easy; 2= Easier; 3= Fair; 4= Hard and 5= Very hard.

	1	2	3	4	5
2013	[ ]	[ ]	[ ]	[ ]	[ ]
2012	[ ]	[ ]	[ ]	[ ]	[ ]
2011	[ ]	[ ]	[ ]	[ ]	[ ]
2010	[ ]	[ ]	[ ]	[ ]	[ ]
2009	[ ]	[ ]	[ ]	[ ]	[ ]

8. **Please indicate the average amount of credit your SMEs has been using for the last 5 years as a percentage of total assets in the below table. Obtain total credit finance as a sum of total accounts payable, current loans payable and long term loans.**

Year	2013 %	2012 %	2011 %	2010 %	2009 %
Total credit Financing as a percentage of total assets					

END

Thank you for your time