

**THE EFFECT OF BANK FINANCING ON THE FINANCIAL PERFORMANCE OF  
SMALL AND MEDIUM-SIZED ENTERPRISES IN NAIROBI COUNTY**

**BY**

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## **DECLARATION**

I hereby declare that this research project is my original work and to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of a degree in any other University, except where due acknowledgement has been made.

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## **DEDICATION**

I dedicate this research project to my family. My parents Mr. and Mrs. Yinda who advised, supported and mentored me to go through education up to University level. I also dedicate this project to my best friend Sharon Momanyi for always being there when I needed someone and for motivating me to finish my project. Above all I thank the Almighty God for guidance and provision towards completion of this research project.

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## **LIST OF ABBREVIATIONS**

AIM	Alternative Investment Market Segment
CMA	Capital Markets Authority
GDP	Gross Domestic Product
GNI	Gross National Income
GOK	Government of Kenya
ILO	International Labour Organization
MSMEs	Micro Small and Medium Enterprises
OECD	Organization for Economic Cooperation and Development
SMEs	Small and Medium Enterprises

## **ABSTRACT**

Bank financing refers to the provision of credit facilities by financial institutions for business activities, making purchases or investing. Financial performance refers to the degree to which financial objectives of a firm are being or has been accomplished. According to Agnew (2003) access to finance is essential to the survival and performance of any business enterprise. According to Wanjohi and Mugure (2008) lack of adequate access to credit is the leading factor stifling the growth of small and medium enterprises in Kenya. The study sought to determine the effect of bank financing on the financial performance of SMEs in Nairobi County, Kenya.

This research was conducted through a descriptive research design. The descriptive research design was considered appropriate as it enables description of the characteristics of certain groups, estimation of the proportion of people who have certain characteristics and making of predictions. This study used quantitative, secondary data. The secondary data sources were obtained from the KPMG Top 100 SMEs survey in Kenya over a period of 5 years (2009-2013). The data was collected based on the information about the variables. Quantitative data was analyzed by descriptive analysis while qualitative data through content analysis. The study provides information to policy makers, scholars, academicians and investors on the effect of bank financing on the financial performance of SMEs.

From the findings, the study established that bank financing and SMEs' size positively affected the SMEs' financial performance while SMEs' tangibility had an inverse relationship with the SMEs' financial performance. The study concludes that there exists a significant positive relationship between bank financing and the financial performance of SMEs based in Nairobi County, Kenya. The study recommends that the CBK should continuously reform the terms of bank financing to increase SMEs' access to access credit from the financial institutions. The study also recommends the management of the SMEs should intensify SMEs' size so as to enhance their financial performance. The study findings informs the banking policy guiding the implementation of SME financing by various financial institutions as it proves that SMEs rely on bank financing to increase their financial performance.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

There is growing recognition of the important role small and medium enterprises (SMEs) play in economic development in every country. SMEs have the capacity to achieve rapid economic growth while generating a considerable extent of employment opportunities (Reddy, 1991). Studies indicate that in both advanced economies and developing countries SMEs contribute on an average 60 percent of total formal employment in the manufacturing sector (Ayyagari et al, 2007). For African economies, the contribution of the SME sector to job opportunities is even more important. Taking into account the contribution of the informal sector, SMEs account for about 75% of total employment in manufacturing (Ayyagari et al, 2007). The importance of SMEs in Kenya was first recognized in the International Labor Organization report on ‘Employment, Income and Equity in Kenya’ in 1972. The report underscored SMEs as an engine for employment and income growth. SMEs create about 85 percent of Kenya’s employment (African Economic Outlook, 2011 report).

A crucial element in the development of the SME sector is access to finance, particularly to bank financing, given the relative importance of banking sector in serving this segment. More importantly, a number of studies using firm – level survey data have shown that SMEs not only perceive access to finance and cost of credit to be greater obstacles than large firms, but these factors constrain SMEs performance more than large firms (Schiffer and Weder, 2001; IADB, 2004; Beck, Demirgüç-Kunt, and Maksimovic, 2005; and Beck, Demirgüç-Kunt, Laeven, and Maksimovic, 2006).

##### **1.1.1 Bank Financing**

Debt financing for SMEs in developing countries is mainly limited to bank loans and trade credit (Organization for Economic Cooperation and Development, 2006). According to Rungani (2009) commercial banks are a principal source of debt finance for new SMEs. Commercial banks offer new SMEs a wide range of services in their own right or through wholly or partially owned subsidiaries. These services cover every aspect of the financial

market such as overdraft facilities, term loans, trade bill financing, factoring, leasing, export and import finance and even government loan guarantee schemes. Commercial banks are in a better position to gather information on SMEs through established relationships which they and their staff have with SMEs and their owners. In addition, commercial banks have extensive branch networks that can be accessed by new SMEs even in remote locations. Furthermore, the financial conditions of small firms are usually rather opaque to investors and the costs of issuing securities directly to the public are prohibitive for most SMEs. Thus, without financial intermediaries like banks it would simply be too costly for most investors to learn the information needed to provide the credit, and too costly for the small firm to issue the credit itself. Banks, performing the classic functions of financial intermediaries, solve these problems by producing information about borrowers and monitoring them over time, by setting loan contract terms to improve borrower incentives, by renegotiating the terms if and when the borrower is in financial difficulty. In addition, Feakins (2005) points out that overdrafts and term loans are the two major products offered by commercial banks to new SMEs.

Pandula (2011) found that SMEs who are the members of SME representative societies or enterprises such as the Chamber of Commerce have a high probability of accessing bank finance. According to Pandula (2011) these societies have close contacts and relationships with SME owners/managers and are aware of the problems and needs of their members. Therefore, these societies and other business associations can play a key role in assisting their members to access bank loans from banks Pandula (2011).

However, access to credit is still a challenge to most SMEs, especially those in developing economies and it is also still a key issue both within the private and public sector. In Kenya, the lack of adequate access to credit is the leading factor stifling the growth of small and medium enterprises (Wanjohi and Mugure, 2008).

Very demanding requirements, in addition to the bureaucratic lending procedures by the financial institutions is the biggest challenge to credit access by SMEs. This has lead most

SMEs to resort to informal financial institutions such as savings and loans companies, friends and relatives.

### **1.1.2 Financial Performance**

SMEs performance may be measured using objective, subjective, or operational measures (Schayek, 2011). Richard, Devinney, Yip and Johnson (2008) suggest the goal approach as a composite measure of SME performance. The goal approach measures performance using financial (objective) and non-financial measures (subjective) measures.

Financial measures of performance can be referred to as the results of a firm's operations in monetary terms (Business Directory 2011). Financial measures of performance are derived from the accounts of a firm or can be found in the firm's profit and loss statement or the balance sheet. Financial measures are also referred to as objective measures because they can be individually measured and verified (Kellen, 2003).

Return on Assets (ROA): Cooke and Uchida (2204) suggest that the return on assets (ROA) is used as a vital measure of profitability. The ROA provides information about how much profits are generated, on average, by each unit of the assets of the firm (Petersen and Schoeman, 2008). In addition, Petersen and Schoeman (2008) note that ROA can be measured using the equation,  $ROA = \text{Net Profit after Tax} \div \text{Total Equity}$ . This suggests that ROA is an indicator of how efficiently a firm is being operated with the assets available to the firm.

Return on Equity (ROE): ROE should be the starting point for any systematic analysis of firm performance (Watson, 2007). ROE relates the earnings left over for equity investors after debt service costs have been factored into the equity invested in the firm (Damoradan, 2007). The equation used to measure ROE can be represented as:

$$ROE = \text{Net Profit after Interest before Tax} \div \text{Total Equity}$$

Profitability Growth: This is the growth in the profits of a firm. Profitability growth can also refer to the continuous increase in the financial profit after all expenses have been paid over a given period on time (Business Dictionary, 2011). An increase in the profitability of a firm is an objective measure of performance as it shows that the firm is continuously improving.

Sales growth: This refers to an increase in sales over a specific period of time, usually but not always annually. Delmar, Davidson and Gartner (2003) suggest that if there is one measure of SME performance that could be used then it has to be sales growth.

Schayek (2011) argues that most SME owners/managers are very sensitive about disclosing information relating to their firm's financial performance. In addition Watson (2007) suggests that because most SMEs are not required to report and publish their financial records, it is difficult to obtain, directly, the financial figures on sales and profitability of most SMEs. Therefore, most research studies such as Lechner, Dowling and Welppe (2006) and Watson (2007) have developed the use of a five point Likert scale which measures sales growth and profitability growth as financial performance measures. A similar technique is used by Sawyerr *et al.* (2003) Thrikawala (2011) and Watson (2011). This approach is implemented as it avoids the direct approach of asking for sales or profitability figures but infers the performance, indirectly, through the responses on the level of satisfaction with sales and profitability growth of the firm. However, it is important to note that sales and profitability growth should not be viewed in isolation as profits and sales may increase as a result of some underlying factor such as price increases or sales promotions, respectively, and not due to the improved performance of the firm or its products.

### **1.1.3 Effects of Bank Financing on the Financial Performance**

As a facilitator of industrial growth, the financial system plays a central role in establishing and strengthening firms. Production schemes, especially long-term, large-scale projects, need a system capable of capturing and allocating the resources of multiple savers (Bencivenga and Smith, 1991). Micro-enterprises and small firms usually have limited resources of their own and look to the financial system for the means to set up or grow their business. The financial system has five main functions as an engine of industrial development. The first is to reduce risk through coverage, commerce and diversification (Bencivenga and Smith, 1991). This function is essential for technological innovation, which is typically a long, slow process (Audretsch, Werner and Mahagaonkar, 2009).

The second function is to compile information and allocate resources. By reducing information asymmetries between lenders and borrowers, the financial system channels

resources to the most productive sectors, encouraging economic efficiency and social well-being (Greenwood and Jovanovic, 1990; Habibullah and Eng, 2006). The third function is to mobilize individual and grouped savers looking to invest their resources. The financial system brings together the resources of numerous savers for allocation to large and productive projects (Sirri and Tufano, 1995).

The fourth function is to reduce the costs of compiling the information needed to enforce contracts and oversee the behaviour of borrower firms. This function promotes capital accumulation and efficient resource allocation and, consequently, long-term growth (Levine, 1997; Rajan and Zingales, 1998). The fifth and final function is to facilitate specialization by reducing transaction costs. Specialization allows firms to concentrate on production activity, by giving them the space to improve their processes and products and thus increase their productivity (Stiglitz, 1989; Greenwood and Smith, 1997; Cooley and Smith, 1998).

#### **1.1.4 Small and Medium Enterprises in Nairobi County**

The number of small and medium enterprises is growing rapidly in Kenya (Sessional paper 2005, World Bank report). Every sector has smaller operations, this include the textile industry, finance, manufacturing, security, transport services, food and hotels to mention a few. The SMEs sector accounts for 75% of the total employment in Kenya while contributing 18.4 percent of the country's Gross Domestic Product.

According to GoK (2009), in the recent years the performance of the SMEs has continued to decline in Kenya. Virtually most small enterprises had collapsed leading to the closure of some of the SMEs that were producing 40% of the employment in Kenya. Other SMEs were auctioned while some were merged or acquired signifying questionable financial performance due to lack of proper management of debt acquired. Generally speaking, financial constraints remain a major challenge facing SMEs in Kenya (Wanjohi and Mugure, 2008) this is because the SMEs have little access to finance, further Hallberg (1998), and Mead & Liedholm (1998) in their study confirmed that access to finance is an important ingredient to developmental and eventual growth and performance of SMEs.

SMEs and other businesses rely on banks for major source of financing, though the SMEs rarely meet the conditions set by the financial institutions, and the same time fail to present a



guarantee or any supportive information about their ability to repay loans, it is therefore due to these reasons that banks and other financial institutions perceive SMEs as risky (Kariuki, 1995). According to World Bank (2006) Africa has the largest informal sectors in the world, this makes most of the SMEs in Kenya to be in the same informal sector with very limited opportunities for growth. In Kenya, availability and access to finance to SMEs has proven to be tremendously difficult, access to external finance is advantageous because it improves market selection by allowing small firms to be more competitive (Aghion, 2007).

## **1.2 Research Problem**

Access to adequate credit for working capital and long-term investment purpose has been cited as one of the major constraints that SMEs face in their operations in Kenya and other developing countries. The World Bank report (2010) suggests that one of the major causes of SME failure is limited access to external finance. The report further observes that SME loans as a percentage of total bank loans are generally smaller compared to large firms. Approximately ten percent (10%) of all formal SMEs have access to a bank credit line. Finance is the life-blood of any business enterprise and no enterprise, no matter how well managed, can survive without enough funds for working capital, fixed assets investment, employment of skilled employees and development of markets and new products (Agnew, 2003). Therefore, access to finance is essential to the survival and performance of any business enterprise.

However, empirical studies on the impact of bank financing on the financial performance in Kenya are limited. Nondi and Achoki (2006), in a survey of financial management problems in small hotels and restaurants in Kenya, found that 26 percent of these establishments reported lack of working capital as the most serious problem they face in their operations. Research by Mwamadzingo and Ndung'u (1999) which focused on the commercialization of innovations in Kenya also found that small scale firms experience great difficulty in attracting investment funds, which inhibits their ability to adopt modern methods of production. Onyango's (2000) study of the role of entrepreneurship in coping with development challenges in Kenya, found that women-owned SMEs face financial constraints due to inadequate financial resources caused by their under representation in the salaried

employment sector as well as using the low earnings they get to support their families with the basic necessities of life.

A comparison of the situation of SME financing in developing countries and developed countries shows a mixed picture. In developed countries, the constraint of credit access to SMEs has also been identified as one of the challenges that SMEs have faced overtime. Hallberg (2000) argued that SMEs complaints that their growth and competitiveness are constrained by lack of access to enough financial resources exist in many parts of the world.

Although, a considerable number of research reports have mentioned the access to finance has been a major problem in the SME sector, a survey of literature dealing with this area indicates there is a significant gap in knowledge of the effect of bank financing on the financial performance of SMEs. Thus, this study sought to address the research question; what is the effect of bank financing on the financial performance of small and medium enterprises in Nairobi County?

### **1.3 Objective of the Study**

To establish the effect of bank financing on the financial performance of SMEs in Nairobi County

### **1.4 Value of the Study**

The study is expected to be important to the commercial banks in Kenya, government, academia and other stakeholders.

In the academia field, the results of this study is a contribution to the existing store of knowledge on the subject and serve as a catalyst for further research on innovative ways of financing SME. It is useful as a source of reference to researchers, academics, policy makers, students and other stakeholders interested in financing challenges faced by SMEs.

In bank management, this study would provide data that may help to better understand banks' involvement with SMEs. This also include to identify "best practices" in commercial bank involvement with SMEs, including key factors and links among business models, processes, tools, as well as the actual performance in SME banking

To policy makers like government agencies such as the Ministry of Finance and Ministry of Industrialization, the findings and results of the study would provide insight and a more reliable guide for monitoring the financing challenges of SMEs. The study would provide data that may help understand the needed finances for banks to provide quality service to SME consumers and to ensure that their systems achieve the highest level of efficiency in provision of financing.

To other stakeholders like investors, shareholders, employees etc., the study provides information for suggesting improvement in “relationship lending”, a type of financing based primarily on “soft” information gathered by the loan officers through continuous, personalized, direct contacts with SMEs, their owners and managers, and the local community in which they operate of the respective banks in Kenya.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter is devoted to the review of literature. The static trade-off theory, the agency theory and the pecking order theory are discussed in this chapter. Determinants of financial performance of SMEs are also discussed in this chapter. Empirical review both locally and internationally is also highlighted.

#### **2.2 Theoretical Review**

Capital structure is defined as the specific mix of debt and equity a firm uses to finance its operations. At the earliest development stages, the finance of small and medium enterprises is significantly dependent on the owners and persons close to them. As successful SMEs develop, they soon outgrow sources of internal equity and graduate to external capital, including corporate investment, private equity, venture capital and bank debt. Therefore the capital of the business is essential since it forms the foundation of the firm (Boateng, 2004). Studying the capital structure of SMEs helps in evaluating existing models of capital structure by focusing on an environment in which many of the modelling assumptions are particularly salient.

The theoretical review underlying capital structure can generally be described in terms of the static trade-off theory by Modigliani and Miller (1958, 1963), the agency theory by Jensen and Meckling (1976) and the pecking order theory by Myers (1984). It must be noted that capital structure theories are not restricted to these three. According to Sogorb-Mira (2002) the most relevant capital structure theories that explain the capital structure of SMEs are those related to static trade-off, adverse selection and moral hazard (agency theory) and the pecking order theory.

### **2.2.1 The Static Trade-Off Theory**

According to Andree and Kallberg (2008) the origin of modern capital structure theory lies in the work of Modigliani and Miller (1958) in their proposition – often referred to as the “irrelevance theorem”. The theorem suggests that, as an implication of equilibrium in perfect capital markets, the choice of capital structure does not affect a firm’s market value. However, the theory proposed by Miller and Modigliani (1958) was revised in 1963 to represent a real life scenario. Modigliani and Miller (1963) introduced the effect of tax and interest deductibility of debt. By revising the two propositions, Miller and Modigliani (1963) showed the effect of tax rates and interest rate deductibility on the capital structure and expected return of the firm’s shares. Firms, through interest rate deductibility of debt, could shift payments from going to the government and instead direct them to the firm’s shareholders and creditors by increasing leverage (Miller and Modigliani, 1963). The tax deductible effect of interest on debt creates tax savings for the firm and makes debt financing cheaper than equity finance. Miller and Modigliani (1963) suggested that a firm should have 100% debt in its capital structure and this enables the firm to take absolute advantage of the tax-shield. However, Scott (1972) argues that, theoretically, 100% tax shield does not exist in reality because of the interest repayment obligations of debt. Debt leads to a legal obligation to pay interest and principal. If a firm cannot meet its debt obligations it is forced into bankruptcy and incurs associated costs.

Berger and Udell (2006) pointed out since the seminal work of Modigliani and Miller (1958 and 1963) on the significance of capital structure, yet the seemingly simple question of how firms should best finance their assets remains a contentious issue. Although there is no consensus, two other competing theories have emerged. These are the agency theory and the pecking order theory.

### **2.2.2 The Agency Theory**

Jensen and Meckling (1976) identified two types of agency conflicts. The first focuses on the conflict between shareholders and managers and the second on the conflict between equity-holders and debt-holders. Conflicts between shareholders and managers arise because managers do not hold total residual claim thus they cannot capture the entire gain from their

value-maximizing activities. The second type of conflict arises between debt holders and equity holders because debt contracts give equity holders an incentive to invest sub optimally. The debt contracts results in asymmetric distribution of the gains, that is, if an investment is profitable above the face value of debt, most of the gain is captured by equity holders, while if investment fails, debt holders bear all the consequences because of the limited liability of the equity holders. Thus, equity holders may benefit from investing in very risky projects, even if they are value-decreasing. Such investments result in a decrease of the value of debt, while the loss in the value of equity due to poor investment is more than offset by the gain in equity value transferred from debt holders.

Agency problems such as asymmetric information and moral hazards can impact negatively on the availability of credit and thus capital structure of SMEs (Stiglitz and Weiss, 1981). Stiglitz and Weiss (1981) named this phenomenon as credit rationing. In the Stiglitz and Weiss (1981) formulation a competitive market or a loan market may be characterized by credit rationing through interest rate manipulation by credit institutions. This is because when faced with two borrower types, a bank does not know whether a safe or risky borrower is applying for credit. Because of imperfect information, Stiglitz and Weiss (1981) suggest that adverse selection will occur where some potential borrowers receive credit while others are denied. Adverse selection also occurs because banks prefer borrowers that are most likely to repay their loans since the banks expected returns depend on the probability of repayment. In addition, there are also problems of moral hazard. This is the risk that the enterprise will not perform in a manner sufficient to meet the repayments or the borrower engages in risky projects after receiving the loan.

Therefore, in attempting to identify borrowers with a high probability of repayment, the banks are likely to use the interest rates that borrowers are willing to pay as a screening device. Interest rates are viewed as having an effect on credit rationing in an imperfect market characterized by information asymmetries. Interest rates are thus assumed to sort potential borrowers which lead to adverse selection. Risky borrowers are usually willing to pay a higher interest rate than safe borrowers. On the other hand, risky projects are more likely to fail than safe projects reducing the bank's profitability. Therefore, it would be advantageous

to the bank to charge lower interest rates on the safe borrowers and higher interest rates on the riskier investors.

However, because of information asymmetry, banks lack knowledge of the type of borrower or the riskiness of the project. Banks thus set a common interest rate for both borrower classes. Therefore, Stiglitz and Weiss (1981) theory suggests that because the bank is not able to control all actions of borrowers due to imperfect and costly information, it will formulate the terms of the loan contract. This is done to induce borrowers to take actions in the interest of the bank and to attract low risk borrowers. Thus in markets with incomplete information, banks set an equilibrium rate of interest at which the demand for credit will exceed the supply. There will, therefore, be credit rationing in credit markets where among loan applicants, some will receive and others are denied. Furthermore, there are identifiable groups of individuals who at a given supply of credit are unable to obtain credit at any interest rate (Stiglitz and Weiss, 1981).

The theory of credit rationing advanced by Stiglitz and Weiss (1981) is relevant to why small businesses have limited access to finance. According to the theory, information asymmetry that characterizes most developing countries results in adverse selection as banks do not possess intricate knowledge about the enterprises. Thus banks, in an attempt to decrease the negative effects of defaulting customers, usually charge a uniform interest rate to all its customers. However, these interest rates are usually high and discriminate against small enterprises as they lack collateral and prove to be highly risky projects to finance.

### **2.2.3 The Pecking Order Theory**

According to Myers (1984) there is no well-defined optimal capital structure. Therefore, management has a preference to choose internal financing before external financing. However, when a firm seeks to use external financing, Myers (1984) suggests that firms prefer to finance new investment using debt first, and then external equity. The pecking order theory thus argues that firms should use internal finance first before moving into external finance. Furthermore, when using external finance debt should be used before new equity. Contemporary finance researchers however find that new SMEs especially in developed countries use internal equity together with debt at start-up. This is termed the modified

pecking order theory. The theories of capital structure discussed above suggest that the sources of finance for SMEs are equity and debt.

## **2.3 Determinants of Financial Performance**

This section presents the determinants of financial performance of SMEs.

### **2.3.1 Bank Financing**

Firms need capital in their operations. They can finance their operations using internal funds, debt and equity. Debt finance is raised by borrowing from financial institutions. Most literature states that differences in the financial institution structure and lending infrastructure affect the availability of funds to SMEs (A.N, Berger & G.F Udell, 2004). These differences may significantly affect the availability of funds to SMEs by affecting the feasibility with which financial institutions may employ the different lending technologies (be it transaction lending or relationship lending) in which they have comparative advantage to provide fund to different businesses. Transaction lending technologies are primarily based on “hard” quantitative data such as the financial ratios calculated from certified audited financial statement among others. Relationship lending on the other hand is based on “soft” qualitative information gathered through contact overtime with SMEs. This soft information may include the character and reliability of the SME’s owner based on direct contact overtime by the financial institution. Also by lending infrastructure, they were talking about the rules and conditions set up mostly by governments that affect financial institutions and their abilities to lend to different potential borrowers.

Literature uses different measure for the calculation of financial leverage through accounting measures, which includes short term debt, long term debt and total debt as a ratio of total assets (Abor, 2005; Abor, 2007; Kyereboah-coleman, 2007). Debt/Equity ratio is an important tool of financial analysis to evaluate the financial structure of a firm. According to Khan and Jani (2004), D/E ratio gives the creditors and owners of a firm a very important viewpoint to the implication of the business, since it indicates the relative proportion of debt and equity in financing the assets of the business. Ever since SMEs are not trading in the financial markets book values are used to measure their financial performances. Using the book value measure, book value of debt is divided by book value of equity. Book value of



debt is calculated as total debt plus accrued interest. The second ratio that is often used for the measure of financial leverage is total debt to total assets also called a capital ratio, which is computed as the ratio of book value of total debt to total assets. Companies use leverage to finance their needs because of the tax shield which generates savings.

### **2.3.2 Size**

Both in the developing and developed world small firms have been found to have less access to external finance and to be more constrained in their operation and growth (Berger and Udell, 1998; Galindo and Schiantarelli, 2003).

Firms in the WBES were asked to rate financing and other obstacles, such as infrastructure, crime, macroeconomic instability and corruption in terms of their impact on the operation and growth of the firm. The World Business Environment Survey (WBES) is a unique firm-level survey conducted in 1999 and 2000 for over 10,000 firms in more than 80 countries.

Schiffer and Weder (2001) show that small firms consistently report higher growth obstacles than medium-size or large firms. Beck et al. (in press) show that size, age and ownership are the most reliable predictors of firms' financing obstacles. The authors find that older, larger and foreign-owned firms report lower financing obstacles. The relationship is not only statistically but also economically significant.

The probability that a small firm lists financing as a major obstacle (as opposed to moderate, minor or no obstacle) is 39% compared to 36% for medium-size firms and 32% for large firms. The higher financing obstacles that small firms report match not only anecdotal evidence from both developed and developing countries, they also confirm theory's predictions. In a world with fixed transaction costs and information asymmetries, small firms with demand for smaller loans face higher transaction costs and face higher risk premiums since they are typically more opaque and have less collateral to offer.

Do the higher financing obstacles that small firms report actually constrain their growth or do they find ways around these obstacles? Beck et al. (2005c) find that the higher obstacles faced by smaller firms indeed translate into slower growth. Small firms thus do not only

report facing higher growth obstacles, these higher obstacles are also more constraining for their operation and growth than in the case of medium-size and large firms.

Junjie et al. (2008) indicated that most of the problems related to financing arise predominantly in SMEs. This statement is proved by other researchers whom reported that there is a direct relationship between firm size and financing accessibility (Berry et al., 2003; Beck, Asli & Maksimovic, 2005; Beck & Demirguc-Kunt, 2006; North et al., 2008; Torre et al., 2010). This behavior is criticized by Binks et al. (2006) as the finance gap leads to competitiveness disadvantage and failure in exploiting business opportunity. In contrast, Berry et al. (2003) interpreted from banks' position that increases in firm size allows greater diversification of risks, which provide higher safeguards toward banks.

### **2.3.3 Tangibility**

SMEs face various financing constraints from banks (Irwin & Scott, 2010), yet banks remain the prime source of external SMEs finance (Fraser, 2006). Banks have adopted different lending approaches, some banks tend to look forward to future earnings from the repayment of the loan and interests, known as “going-concern approach”; in contrast some banks preferred “gone-concern approach” which tend to have security-based lending approach (Berry et al., 2003). Johnsen and McMahon (2005) also stated that other factors held constant, firms with more intangible assets need to borrow less, compared with firms with more tangible assets, because of collateral factor. Generally, banks prefer security-based lending approach, where the decision standard is much depends on the collateral provided by the assets (Junjie et al., 2008). Hence, in general terms, SMEs with high tangible asset holdings (e.g. manufacturing-based industry) are expected to access to greater finance compare with those associated with intangible assets such as service-based industry (Joensen & McMahon, 2005).

## **2.4 Empirical Review**

This section presents review of global and local empirical literature on the effect of bank financing on the financial performance of SMEs.

### **2.4.1 International Evidence**

Rainhart and Rogoff (2009) argued that debt impact positively to the growth of a firm only when it is within certain levels. When the ratio goes beyond certain levels financial crisis is very likely. The argument is also supported by Stern Stewart and Company which argues that a high level of debt increases the probability of a firm facing financial distress. Cecchetti et al. (2011) studied the effects of debt on firms and concluded that moderate debt level improves welfare and enhances growth but high levels can lead to a decline in growth of the firm. Over borrowing can lead to bankruptcy and financial ruin (Cecchetti et al., 2011). High levels of debt will constrain the firm from undertaking project that are likely to be profitable because of the inability to attract more debt from financial institutions.

Ahmad, Abdullar and Roslan (2012) carried a study in Malaysia which sought to investigate the impact of capital structure on firm performance by analysing the relationship between return on assets (ROA), return on equity (ROE) and short-term debt and total debt. The study established that short-term debt and long-term debt had significant relationship with ROA. It was also established that ROE had significant relationship with short-term debt, long-term debt and total debt.

Soumadi and Hayajneh (2012) studied the relationship between capital structure and corporate performance on Jordanian shareholdings firms. The study used multiple regression models by least squares (OLS) to establish the link between capital structure and corporate performance of firms over a period of 5 years. The results showed that capital structure was associated negatively and statistically with the performance of the firms in the sample. Another finding from the study was that there was no significant difference to the impact of financial leverage between high financial leverage firms and low financial leverage firms in their performance. The study also concluded that the relationship between capital structure and firm performance was negative for both high growth firms and low growth firms.

Maritala (2012) examined the optimal level of capital structure which enabled a firm to increase its financial performance. The study found that there was a negative relationship

between the firm's debt ratio and financial performance measured by return on assets and return on equity.

#### **2.4.2 Local Evidence**

Nondi and Achoki (2006), in a survey of financial management problems in small hotels and restaurants in Kenya, found that 26 percent of these establishments reported lack of working capital as the most serious problem they face in their operations.

Atieno (2009) found that SMEs in Kenya that participate in business associations have better access to bank loans. In addition, membership to associations is important for SMEs as they facilitate access to financial services. Thus institutions, such as associations, which support the SME's capacity to access financial services, become an important avenue for strengthening SMEs.

Namusonge, Mairura and Karanja (2013) in their survey on the role of financial intermediation in the growth of SMEs in Kenya, showed that the financial intermediaries played a significant role by offering banking services and extending credit facilities to SME businesses. Other support offered by financial intermediaries included; advisory services, training and financing the start of businesses. The existing evaluation procedures adopted by financial intermediaries were a big hindrance to credit access because they were stringent and bureaucratic was further revealed by the study. Finally they also found out that evaluation procedures made it difficult for businesses to access support from financial institutions because the procedures wasted a lot of business time and made financial intermediaries services inaccessible to most businesses

Osoro and Muturi (2013) concludes that accessibility to credit affects financial performance of small and medium enterprises positively. The easier it is to access credit, the higher the financial performance of the Small and medium enterprises. However, They also indicate that access to credit is not that easier from the financial institutions considering the many requirements one has to meet before the credit is approved to the entrepreneur for use in the business. There is evidence that as credit becomes more available, the financial performance of business becomes better and hence a chance for business growth (Osoro and Muturi, 2013).

Kinyua (2014) studied the role of finance, management skills, macro-environment factors and infrastructure have on the performance of small and medium-sized enterprises. The study sought to evaluate the factors affecting the performance of SMEs in the Jua Kali sector in Nakuru town. The results showed that financing had the potential to positively affect the performance of SMEs.

## **2.5 Summary of Literature Review**

The above literature review demonstrates that lack of access to financing adversely affects the performance of SMEs. It is also clear from the above arguments that the SMEs access to financing may either come from supply side market failure rejection from the bank's side for reasons not connected with the viability of the proposal or high risk and costs associated with such loans) or demand side market failure (insufficient information in the project proposal, high cost of credit)

The literature further demonstrates that SMEs with membership in associations and networks have better access to bank loans and information on the market. This is because member of the associations and networks tend to share knowledge, providing means for organizations to learn from the experiences of others in the industry. Locally, with the highest numbers of SACCOs and its members, is evidence of the benefits of the networks and associations in regards to cheaper credit compared to the expensive one from the banks.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The purpose of this chapter is to comprehensively explain the research methodology. Research methodology refers to the method by which data is gathered for a research project. It is the blueprint for the collection, measurement and analysis of data in order to achieve the objectives of a research project (Cooper and Schindler, 2003). For a study to generate replicable and objective research results, it should follow the principles of scientific research which are defined as systematically and empirically based procedures (Cooper and Schindler, 2006).

This chapter details the research design, the population and the sample of the research study. Additionally, the data collection method followed is discussed. The rationale for choosing the data collection method is also discussed. The data analysis methods, which describes data handling, statistical tests and computer software programs to be used in analyzing data and the rationale for using those methods and tests, is discussed. The reliability and validity of the data collected is also discussed to establish the validity of the results as well as the limitations faced in the collection of data.

#### 3.2 Research Design

Research design is an overall plan for the methods to be used to collect and analyze the data of a research study (Hair *et al.*, 2008). Cooper and Schindler (2006) state that research design explains the logic behind the research method, the research techniques as well as the research instruments or the research format. It is a detailed blueprint used to guide a research study towards its objectives. The research design involved coming up with the research approach that helped determine how the information would be obtained. The research design provided answers to questions such as: What techniques were used to gather data? What sampling techniques were used?

Descriptive research was used in this study to establish whether there is a relationship between bank financing and financial performance of SMEs, this is because it minimizes biasness in the collection of data (Hussey & Husey, 1997).

The data was analysed using descriptive statistics with the help of statistical package for social sciences (SPSS-version 20). Descriptive statistics helped to establish patterns, trends and relationships and makes it easier to understand and interpret the implication of the study.

### **3.3 Target Population**

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. This definition ensures that the population of interest is homogeneous. And by population the researcher means the complete census of the sampling frames. According to Mugenda and Mugenda (1999), target population in statistics is the specific population about which information is desired.

The population of the study comprised of the KPMG Top 100 SMEs over a 5 year period between 2009 and 2013 that are based in Nairobi County. These were small and medium enterprises that had been assessed according to the criteria set by KPMG. The study sampled 70 SMEs that are based in Nairobi County out of the KPMG Top 100 SMEs for the five year period.

### **3.4 Data Collection**

Secondary data was used in this study and it was obtained from the KPMG Top 100 SMEs survey in Kenya for the years 2009 to 2013. From this data we used only the SMEs that are based in Nairobi County.

### **3.5 Data Analysis**

Data analysis is a process of gathering, modelling and transforming data with the goal of highlighting useful information, suggesting conclusions and supporting decision making (Cooper and Schindler, 2003). The data was analysed using the statistical package for social

sciences (SPSS) that has data handling and statistical analysis capability that analyzed data statistics and generate descriptive statistics. Descriptive statistics helps to establish patterns, trends and relationships and makes it easier to understand and interpret the implication of the study

Regression was used to find the relationship between the two variables. This model represents the dependent variable as a function of one independent variable subject to a random ‘disturbance’ or ‘error’, which is assumed to have a constant value of zero (Cottrell, 2003). Linear regression model was used to analyze how the bank financing impact on the performance of SMEs.

### 3.5.1 Analytical Model

The regression model is shown below and thereafter the definition and measurement of the variables. The multiple linear regression model was used to determine the relative importance (sensitivity) of each independent variable in affecting the financial performance of SMEs.

$$y = \alpha + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \epsilon$$

Where;

y – Financial Performance of the SMEs as measured by ROA

Return on assets (ROA) = [net income / total assets]

$\alpha$  – Constant Value

$X_1$  – Bank Financing as measured by the amount borrowed from bank to total financing

$X_2$  – SMEs Tangibility as measured by Fixed Assets/Total Assets

$X_3$  – SME Size as measured by the Natural log of total assets

$\epsilon$  – The error or disturbance term

The dependent variable is defined by the financial performance of the SMEs in Nairobi County. The financial performance was measured by the ROA. The independent variables



were size, tangibility and leverage of the SMEs. Size of the SMEs was measured by Net Sales/average total assets. This was measuring the financial effectiveness of the firm. Tangibility indicated whether the shareholder is the permanent owner of the assets and was measured using the ratio Fixed assets/Total Assets. The last independent variable was the SMEs Leverage that was measured using Debt/Equity.

### **3.5.2 Test of Significance**

The normality of the data was determined using the Kolmogorov-Sminov test. T-test was used to determine whether a significant difference exists between two sets of scores (Coakes, 2005). In this study, the t-test was used to determine if relationship between the entrepreneurial characteristics of the SME owner and the firm characteristics of the SME and the networking of SMEs exist.

ANOVA test was used to test for significant differences in situations where the variables were more than two. Specifically, ANOVA was used to test whether access to debt finance fully, or partially, mediates the relationship between networking and performance.

## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents data analysis and interpretation. The objective of the study was to determine the effect of bank financing on the financial performance of SMEs in Nairobi County. Data was collected from 70 SMEs in Nairobi County, Kenya from 2009 to 2013. The data sources included information obtained from the KPMG Top 100 SMEs survey in Kenya. Data was collected based on the variables of the study, that is, financial performance depicted by bank financing (SMEs Leverage), SMEs tangibility and SMEs size.

#### **4.2 Descriptive Statistics**

In order to determine the effect of bank financing on the financial performance of small and medium-sized enterprises in Nairobi County, the study used descriptive statistics to provide a useful summary of financial performance, bank financing and tangibility of the SMEs using empirical and analytical analysis, as they provide a historical account of SMEs behavior.

##### **4.2.1 Financial Performance**

According to Wanjohi and Mugure (2008) the lack of adequate access to credit is the leading factor stifling the growth of small and medium enterprises. The findings on the financial performance for the 70 SMEs under study as depicted by return on assets (ROA) are as presented in the table 4.1 below.

**Table 4.1 Return on assets**

Year	Return on assets (ROA)	
	Mean	Std. Dev
2009	3.56	1.182
2010	3.12	2.923
2011	2.68	0.992
2012	2.44	1.446
2013	2.28	1.576

**Source: Research Findings**

The findings as shown in table 4.1 above indicate the trend of return on assets (ROA) values over the 5 year period. The highest value for ROA was a mean of 3.56 in year 2009 while the lowest value for ROA was a mean of 2.28 in year 2013. This represented a negative change in the ROA mean values of 1.28 over the 5 year period. The steady decrease in ROA values over the 5 year period indicates that the financial performance of the SME firms has been on the decline over the last 5 years. On the other hand, the high scores of standard deviation indicate variation in the financial performance for the various SME firms. Thus, bank financing significantly affects the financial performance of the SMEs in Nairobi County.

**4.2.2 Bank Financing**

The findings on the SMEs bank financing values are as presented in the table 4.2 below

**Table 4.2 Bank Financing**

<b>Year</b>	<b>Mean</b>	<b>Std. Deviation</b>
2009	0.36	0.712
2010	0.42	0.418
2011	0.47	0.314
2012	0.54	0.526
2013	0.65	0.804

**Source: Research Findings**

The findings as shown in table 4.2 above indicate the trend of SMEs bank financing over the 5 year period. From the findings, the lowest value of SMEs bank financing was a mean of 0.36 in year 2009 while the highest value of SMEs bank financing was a mean of 0.65 in year 2013. This shows a steady rise in the SMEs bank financing over the five year period between year 2009 and year 2013. This implies that SMEs bank financing in Nairobi County had a positive effect on the performance of the SMEs in Nairobi County since access to bank financing is an important ingredient to the developmental and eventual growth and performance of SMEs.

#### **4.2.3 SMEs Tangibility**

The findings on the SMEs tangibility mean values are as presented in the table 4.3 below.

**Table 4.3 SMEs Tangibility**

<b>Year</b>	<b>Mean</b>	<b>Std. Deviation</b>
2009	0.62	0.426
2010	0.69	0.951
2011	0.74	0.375
2012	0.81	0.278
2013	0.88	0.834

**Source: Research Findings**

The findings as shown in table 4.3 above indicate the trend of SMEs tangibility over the 5 year period. From the findings, the lowest value of SMEs tangibility was a mean of 0.62 in year 2009 while the highest value of SMEs tangibility was a mean of 0.88 in year 2013. This shows a steady increase in the SMEs tangibility between years 2009 and 2013. This implies that a large proportion of the SMEs assets were owned by their shareholders/owners. It further implies that the SMEs fixed assets formed the largest proportion of the SMEs total assets. Thus, majority of the SMEs in Nairobi County relied on internal financing (funds from the business owner and retained earnings) rather than external financing (loans from financial institutions) which exposed them to limited finances. This was likely to impede their growth and hence negatively affecting their financial performance.

#### 4.2.4 SMEs Size

The findings on the SMEs size natural log values are as presented in the table 4.4 below.

**Table 4.4 SMEs Size**

<b>Year</b>	<b>Natural log</b>	<b>Std. Deviation</b>
2009	0.58	0.712
2010	0.51	0.418
2011	0.47	0.314
2012	0.43	0.526
2013	0.38	0.804

**Source: Research Findings**

The findings as shown in table 4.4 above indicate the trend of SMEs size over the 5 year period. From the findings, the highest value of SMEs size was a natural log of 0.58 in year 2009 while the lowest value of SMEs size was a natural log of 0.38 in year 2013. This shows a steady decrease in the SMEs size between year 2009 and year 2013. This implies that SMEs in Nairobi County experienced reduced growth over the 5 year period. Thus, there exists a positive relationship between the SMEs size and their financial performance.

### 4.3 Inferential Statistics

In determining the effect of bank financing on the financial performance of SMEs in Nairobi County, the study conducted a multiple regression analysis to determine the nature of relationship between the variables. The regression model specification was as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon.$$

Where; Y= Return on assets = Financial performance

X<sub>1</sub> = Bank Financing (SMEs Leverage), X<sub>2</sub> = SMEs Tangibility and X<sub>3</sub> = SMEs Size

α=constant,

ε= error term and β<sub>1</sub>- β<sub>3</sub> = coefficients of the independent variables.

This section presents a discussion of the results of the multiple regression analysis. The study conducted a multiple regression analysis to determine the effect of bank financing on the financial performance of SMEs in Nairobi County, Kenya. The study applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. The findings are as presented in the following tables;

**Table 4.5 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.921 <sup>a</sup>	.8482	.788	0.0125

**Source: Research Findings**

a. Predictors: (Constant), Bank Financing, SMEs Tangibility, SMEs Size

b. Dependent Variable: Return on assets [Financial performance]

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the changes in the independent variables or the percentage of variation in the dependent variable (ROA) that is explained by all the three independent variables (Bank Financing, SMEs Tangibility and SMEs Size).

The three independent variables that were studied, explain 84.82% of variance in financial performance of SMEs in Nairobi County, Kenya as represented by the  $R^2$ . This therefore means that other factors not studied in this research contribute 15.18% of variance in the dependent variable. Therefore, further research should be conducted to investigate the other factors that affect the financial performance of SMEs in Nairobi County, Kenya.

**Table 4.6 ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1.354	2	.202	7.54	.004 <sup>a</sup>
	Residual	5.328	3	.246		
		6.767	5			

**Source: Research Findings**

a. Predictors: (Constant), Bank Financing, SMEs Tangibility, SMEs Size

b. Dependent Variable: Return on assets [Financial performance]

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. The "F" column provides a statistic for testing the hypothesis that all  $\beta \neq 0$  against the null hypothesis that  $\beta = 0$  (Weisberg, 2005). From the findings the significance value is .004 which is less than 0.05 thus the model is statistically significant in predicting how bank financing, SMEs tangibility and SMEs size affect the financial performance of the SMEs in Nairobi County. The F critical at 5% level of significance was 3.23. Since F calculated (value = 7.54) is greater than the F critical (3.23), this shows that the overall model was significant.

**Table 4.7 Multiple Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	B	
(Constant)	4.428	.826		3.61	.000
Bank Financing	0.835	.0312	0.218	1.81	.008
SMEs Tangibility	0.642	.864	0.359	8.41	.016
SMEs Size	0.781	.864	0.359	8.41	.014

**Source: Research Findings**

From the regression findings, the substitution of the equation

$(Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon)$  becomes:

$$Y = 4.428 + 0.835 X_1 + 0.642 X_2 + 0.781 X_3 + \epsilon$$

Where Y is the dependent variable (ROA),  $X_1$  is the bank financing,  $X_2$  is the SMEs tangibility and  $X_3$  is the SMEs size.

According to the equation, taking all the factors (bank financing, SMEs tangibility, and SMEs size) constant at zero, ROA will be 4.428. The data findings also show that a unit increase in bank financing will lead to a 0.835 increase in ROA; a unit increase in SMEs tangibility will lead to a 0.642 increase in ROA while a unit increase in SMEs size will lead to a 0.781 increase in ROA. This means that the most significant factor is bank financing followed by SMEs size. At 5% level of significance and 95% level of confidence, bank financing had a 0.008 level of significance; SMEs tangibility had a 0.016 level of significance while SMEs size had a 0.014 level of significance, implying that the most significant factor is bank financing followed by SMEs size and SMEs tangibility, respectively.



#### **4.4 Interpretation of the Findings**

The objective of the study was to determine the effect of bank financing on the financial performance of SMEs in Nairobi County, Kenya. The objective was assessed by use of secondary data and the subsequent analysis based on the variables of the study.

From the findings, the financial performance of SMEs in Nairobi County decreased over the 5 year period. The decrease in the ROA mean values from 3.56 in year 2009 to 2.28 in year 2013 indicates a steady decrease in the SMEs' financial performance over the 5 year period. Thus, bank financing significantly affects the financial performance of the SMEs in Nairobi County. These findings are consistent with GoK (2009) which observes that in the recent years the performance of the SMEs has continued to decline in Kenya. It further notes that virtually most small enterprises had collapsed leading to the closure of some of the SMEs that were producing 40% of the employment in Kenya. Other SMEs were auctioned while some were merged or acquired signifying questionable financial performance due to lack of proper management of debt acquired.

The study findings established that the SMEs' level of bank financing steadily reduced from a mean of 0.65 in year 2009 to a mean of 0.36 in year 2013. This implies that the SMEs in Nairobi County experienced difficulties in raising external financing in the form of bank loans. Thus, access to finance is an important ingredient to the developmental and eventual growth and performance of SMEs. These findings are in line with Wanjohi and Mugure (2008) who noted that generally speaking, financial constraints remain a major challenge facing SMEs in Kenya. The findings are also in line with Hallberg and Mead & Liedholm (1998) who argued that access to finance is an important ingredient to developmental and eventual growth and performance of SMEs. The World Bank report (2010) also suggests that one of the major causes of SME failure is limited access to external finance while Agnew (2003) observes that finance is the life-blood of any business enterprise and no enterprise, no matter how well managed, can survive without enough funds for working capital, fixed assets investment, employment of skilled employees and development of markets and new products. Thus, access to finance is essential to the survival and performance of any business enterprise. The findings are also in agreement with Sha (2006) who in his research on the factors that influence the survival and performance of SMEs found that business performance

is strongly influenced by access to finance and as such enterprises that have access to debt finance should perform better than those without access to finance. On their part, Fungo and Oyugi (2006) also identified problems of insufficient funding to sustain entrepreneurial activities as one of the critical bottlenecks for survival and growth of SMEs.

The study findings revealed that SMEs tangibility increased over the 5 year period rising from a mean of 0.62 in year 2009 to a mean of 0.88 in year 2013. This shows that a large proportion of the SMEs assets were owned by their shareholders/owners. Thus, most of the SMEs relied on internal financing rather than external financing to finance their asset base. This had a negative impact on their financial performance. These findings are consistent with Junjie et al. (2008) who observed that generally, banks prefer security-based lending approach, where the decision standard on how much to lend depends on the collateral provided by the assets. The findings are also in agreement with Joensen & McMahon (2005) who argued that in general terms, SMEs with high tangible asset holdings (e.g. manufacturing-based industry) are expected to access to greater finance compared with those associated with intangible assets (e.g. service-based industry). The findings are also collaborated by (Berry et al., 2003) who noted that banks have adopted different lending approaches, some banks tend to look forward to future earnings from the repayment of the loan and interests, known as “going-concern approach” while others preferred “gone-concern approach” which tend to apply security-based lending approach.

The study findings revealed that the SMEs size decreased over the 5 year period reducing from a natural log of 0.58 in year 2009 to a natural log of 0.38 in year 2013. This depicts that SMEs in Nairobi County experienced reduced growth over the 5 year period. Thus, there exists a positive relationship between the SMEs size and their financial performance. The findings are in line with Berger and Udell, (1998) and Galindo and Schiantarelli (2003) who observed that both in the developing and developed world, small firms have been found to have less access to external finance and to be more constrained in their operation and growth. On their part, Schiffer and Weder (2001) showed that small firms consistently report higher growth obstacles than medium-size or large firms. The findings are also collaborated by Beck et al. (2003) who observed that size, age and ownership are the most reliable predictors of firms’ financing obstacles. The authors found that older, larger and foreign-owned firms

reported lower financing obstacles. They further reported that SMEs not only perceived access to finance and cost of credit to be greater obstacles than large firms, but these factors constrained SMEs' performance more than large firms. They concluded that there is a direct relationship between firm size and financing accessibility.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the data findings on the effect of bank financing on the financial performance of SMEs in Nairobi County. The conclusions and recommendations are drawn there to. The chapter is therefore structured into summary of findings, conclusions, recommendations and areas for further research.

#### 5.2 Summary

The study established that the financial performance of the SMEs in Nairobi County as represented by ROA values steadily decreased by 1.28 over the 5 year period. This is as represented by the difference between the ROA mean values of 3.56 in year 2009 and 2.28 in year 2013. Therefore, bank financing significantly affects the financial performance of the SMEs in Nairobi County, Kenya.

From the findings, the lowest value of SMEs bank financing was a mean of 0.36 in year 2009 while the highest value of SMEs bank financing was a mean of 0.36 in year 2013. This shows a steady rise in the SMEs bank financing over the five year period between year 2009 and year 2013. This implies that SMEs bank financing in Nairobi County had a positive effect on the performance of the SMEs in Nairobi County since access to bank financing is an important ingredient to the developmental and eventual growth and performance of SMEs.

The study found out that there was a steady increase in the SMEs' tangibility as reflected by the increase in mean values from 0.62 in year 2009 to 0.88 in year 2013. Therefore, a large proportion of the SMEs assets were owned by their shareholders/owners. Therefore, most of the SMEs relied on internal financing rather than external financing to finance their asset base which reduced their financial performance due to limited financial capabilities.

The study found out that there was a steady decrease in the SMEs' size as reflected by the decrease in mean values from 0.58 in year 2009 to 0.38 in year 2013. Therefore, a large proportion of the SMEs assets were owned by their shareholders/owners. Therefore, most of

the SMEs in Nairobi County experienced reduced growth over the 5 year period. Thus, there exists a positive relationship between the SMEs size and their financial performance.

### **5.3 Conclusion**

In light of the findings, the study concludes that there was a steady rise in the SMEs bank financing over the five year period between year 2009 and year 2013. Therefore, SMEs bank financing in Nairobi County had a positive effect on the performance of the SMEs in Nairobi County since access to bank financing is an important ingredient to the developmental and eventual growth and performance of SMEs.

Given the steady increase in the SMEs' tangibility over the 5 year period and the corresponding decrease in the SMEs' financial performance over the same period, the study concludes that SMEs' tangibility negatively affected the financial performance of the SMEs in Nairobi County, Kenya.

Given the steady decrease in the SMEs' size over the 5 year period and the corresponding decrease in the SMEs' financial performance over the same period, the study concludes that there exists a positive relationship between the SMEs size and their financial performance.

### **5.4 Recommendations for Policy**

From the findings, the study established that bank financing positively influences the financial performance of SMEs in Nairobi County. Therefore the study recommends that the government policy makers should reform Kenya's financial sector to make it easy for SMEs to access bank financing more easily to spur their financial performance.

From the findings, the study established that there exists an inverse relationship between the SMEs' tangibility and their financial performance. Therefore the study recommends that the SMEs should adopt a capital structure that would allow them to expand their business activities.

From the findings, the study established that there exists a positive relationship between the SMEs size and their financial performance. Therefore the study recommends that the SMEs

should intensify their investments so as to grow their businesses in order to enhance their financial performance.

### **5.5 Limitations of the Study**

The study was limited by lack of adequate information as SMEs level of information disclosure differed where some of the SMEs did not disclose all the information on bank financing.

The descriptive research design also had inherent limitation such as the risk of non-response rate because such studies are conducted on the basis of voluntary participation.

The study was further limited by the lack of co-operation from the study respondents owing to their busy work schedule when the researcher sought clarification on the information on SMEs' bank financing.

The study was also limited by the short time frame in which it was conducted.

### **5.6 Areas for Further Research**

Since this study explored the effect of bank financing on the financial performance of SMEs in Nairobi County, Kenya, the study recommends that; similar study should be done in other regions/counties of the country for comparison purposes and to allow for generalization of findings on the effect of bank financing on the financial performance of SMEs in Kenya. Further, similar studies should be done in other countries for comparison purposes and to allow for generalization of findings on the effect of bank financing on the financial performance of SMEs.

The study recommends that a similar study should be done on effect of bank financing on the financial performance of manufacturing firms in Kenya. In addition, another study should be done on effect of technological innovations on financial performance of telecommunication firms in Kenya

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## APPENDICES

### APPENDIX I: LIST OF KPMG TOP 100 SMES IN KENYA 2009

	Name of the Company
1	MELLECH ENG. & CONS. LTD
2	TOP IMAGE (K) LTD
3	LINKSOFT TELECOMS NETWORKS LTD
4	GAP MARKETING LTD
5	OCEAN AGRICULTURE
6	TRUFOODS LTD
7	FLOORING INTERIORS LTD
8	MANJI FOOD INDUSTRIES LTD
9	CRAFT SILICON LTD
10	ELRIS COMMUNICATIONS
11	STANTECH MOTORS LTD
12	AFRICAN TOUCH SAFARIS LTD
13	ALPHA DAIRY PRODUCTS LTD
14	SOKO SWEETS LTD
15	I SOLUTIONS
16	HOGGERS LTD
17	FARAM EA LTD
18	MASTER POWER SYSTEMS LTD
19	EXPRESS COMPANY LTD
20	VAJAS MANUFACTURERS LTD
21	ULTIMATE ENGINEERING
22	TIGER BRANDS (K) LTD
23	MURINGA HOLDINGS LTD
24	DISTRIBUTED COMMUNICATION SYSTEMS LTD
25	MADHUPAPER KENYA LTD
26	STOIC COMPANY LTD
27	KENWEST CABLES LTD
28	VIVA PRODUCT LINE LTD
29	NILA PHARMACEUTICAL LTD

30	FAST CHOICE LTD
31	INDENT LTD
32	ENGINEERING SUPPLIES 2001
33	SKYLARK CREATIVE PRODUCT
34	GLACIER PRODUCTS LTD
35	KANDIA FPS LTD
36	DESBRO ENGINEERING LTD
37	ALEXANDER FORBES
38	INTERSAT AFRICA LTD
39	ALPINE COOLERS LTD
30	GENESIS KENYA INVESTMENT
41	WARREN ENTERPRISES LTD
42	SARACEN MEDIA
43	MEDIAEDGE INTERACTIVE LTD
44	GINA DIN CORPORATE
45	BAUS OPTICAL LTD
46	TONONOKA ROLLING MILLS LTD
47	VITAFOAM PRODUCTS LTD
48	CAPITAL COLORS CREATIVE DESIGN LTD
49	POWER CONTROLS LTD
50	CECYPO LTD
51	KENYA BUILDERS & CONS. LTD
52	SIMBA TECHNOLOGY LTD
53	LOTA MOTORS LTD
54	PRIME FUELS KENYA LTD
55	KENTONS LTD
56	CARIBON LTD
57	CREATIVE EDGE LTD
58	THE PHOENIX LTD
59	MENTOR HOLDINGS
50	SECUREX AGENCIES (K) LTD
61	CHEMSERVE CLEANING
62	IMPALA GLASS INDUSTRIES

63	SPECICOM TECHNOLOGIES LTD
64	CHARLESTON TRAVEL LTD
65	CHANDARANA SUPERMARKETS
66	MUKURWEINI-WAKULIMA DAIRY LTD
67	RADAR LTD
68	CIRCUIT BUSINESS SYSTEMS
69	MASTER FABRICATORS LTD
60	RIFT VALLEY AGENCIES LTD
71	CAPITAL AIRTIME LTD
72	TECHBIZ LTD
73	SEASONS RESTAURANT & HOTELS
74	HENKEL CHEMICALS E.A
75	MICROSKILLS I.T(K) LTD
76	PHARMART CHEMISTS
77	OIL SEALS AND BEARINGS CENTRE
78	KAPS LTD
79	DEEPA INDUSTRIES LTD
70	RELIABLE ELECTRICAL
81	HEALTHCARE DIRECT LTD
82	VICTORIA FURNITURE'S LTD
83	FAIRVIEW HOTEL
84	TRANS BUSINESS MACHINES
85	SCHINDLER LTD
86	PRECIOUS INSURANCE BROKERS LTD
87	CHEMOQUIP LTD
88	MAKINI SCHOOL LTD
89	TRAVEL CARE LTD
90	WINES OF THE WORLD
91	PWANI CELLULAR SERVICES LTD
92	NIVAS LTD
93	RAMCO PRINTING WORKS LTD
94	BIMAS
95	ELECTRO WATTS LTD

96	SOFTWARE TECHNOLOGIES LTD
97	WINAFRIQUE TECH
98	COMPUTECH LTD
99	TRAVEL AFFAIRS LTD
100	CHANDARANA SUPERMARKETS

**Source: KPMG**

## APPENDIX II: SUMMARY OF RAW DATA

<b>Year</b>	<b>N</b>	<b>Return on assets (ROA)</b>	<b>Bank Financing</b>	<b>SMEs Tangibility</b>	<b>SMEs Size</b>
		Mean	Mean	Mean	Natural log
2009	70	3.56	0.36	0.62	0.58
2010	70	3.12	0.42	0.69	0.51
2011	70	2.68	0.47	0.74	0.47
2012	70	2.44	0.54	0.81	0.43
2013	70	2.28	0.65	0.88	0.38

**Source: Research Findings**



### **APPENDIX III: INTRODUCTION LETTER**

Akinyi Susan Irene  
PO BOX 30197-00100  
Nairobi.  
The Operations Manager KPMG  
PO BOX 40612-00100,  
Kenya

Dear sir/Madam,

**RE: LETTER OF INTRODUCCION**

I am a master of business administration student at the University of Nairobi and in my final year of study. As part of the requirements for the award of the degree of Master of Business Administration, I am undertaking a research on

**“The effect of bank financing on the financial performance of small and medium-sized enterprises in Nairobi County”.**

In this regard, I am kindly requesting for your support in terms of time, and by providing financial information on top 100 SMEs. Your accuracy and candid response will be critical in ensuring objective research. This is an academic research and confidentiality is emphasized.

Thank you in advance

Yours Sincerely,

Akinyi Susan Irene