THE EFFECT OF BANKING SERVICES ON THE PROFITABILITY OF THE TOP 100
SMALL AND MEDIUM ENTERPRISES IN KENYA

BY

NG’ETHE HENRY MUKURIA

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DECLARATION

This research project is my original work and has not been presented for any award in this or any other institution.

Signature…………………………………………  Date…………………………………………

NG’ETHE HENRY MUKURIA

D61/60091/2010

This research project is submitted for examination with my approval as The University Supervisor.

Signature …………………………………………  Date…………………………………………

MR. HERICK ONDIGO

Lecturer,
Department of Finance and Accounting
School of Business, University of Nairobi.
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DEDICATION

This project is dedicated to every person who gave so much of their time to invest in my growth and development both academically, professionally and personally. I would like to especially thank my wife Evelyne Achieng Wambogo and family to whom I owe so much. I highly cherish your love, encouragement, support, and guidance throughout all these years. Above all, thank you so much for always encouraging me to believe in myself.
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<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
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<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
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<td>ERS</td>
<td>Economic Recovery Strategy</td>
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<td>FRB</td>
<td>Federal Reserve Bank</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>ICPAK</td>
<td>Institute of Certified Public Accountants, Kenya</td>
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<tr>
<td>KBA</td>
<td>Kenya Bankers’ Association</td>
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<td>KCB</td>
<td>Kenya Commercial Bank</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<tr>
<td>ROA</td>
<td>Return on Assets</td>
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<td>ROE</td>
<td>Return on Equity</td>
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<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
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<td>SPSS</td>
<td>Statistical Packages for Social Services</td>
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ABSTRACT

Small and medium enterprises in Kenya form a bulk of the economy and its contribution is important for the country. Banks, also, are known to spur the growth of businesses and therefore the services they provide to small and medium enterprises are important to enable that growth. Various studies were done on the effects of banks on the small and medium enterprises but they had not analyzed using the variables used in the study. This provided the research gap and the research objective which was to determine the effects of banking services on growth of Top 100 SMEs in Kenya. The study used descriptive cross-sectional study design, with questionnaires being the primary data collection tool. The questionnaire was designed and sent to company managers for their response in order to answer the research question. From the responses provided and the study research objective, descriptive statistics was provided and data analysis was done using the multiple regression analysis as the study variables were in ordinal scale. Data was analyzed using SPSS to determine the effect of banking services on growth of the Top 100 SMEs in Kenya. The study findings indicated that that the value of SMEs’ assets, debt-equity ratio, monthly average savings and SME training had an effect on the profitability (ROA) of the SMEs while the amount of loan given to SMEs had no effect on the profitability of the Top 100 SMEs in Kenya. The study encountered several challenges including low response from the SMEs and also the absence of specific information which made the study to use ordinal scaling for data gathering. The study recommended that the government should have information from SMEs and have an information database so as to be able to gather information easily, help in policy formulation and aid in decision making.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study
Banks play a major role in the growth of countries’ economies and businesses. In today’s global economy, doing business is unpredictable due to the ever increasing complex environment. For a business to prosper, it needs the right ‘ingredients’ so that it can remain competitive and profitable. Banks have increased their roles in order to make businesses and companies that they deal with successful.

Small and medium enterprises are businesses in the informal and formal sectors employing between one to fifty employees (Rok, 2009). Roles played by SMEs cannot be underestimated, (SMEs) play a major role in economic development in terms of income generation, provision of employment opportunities and poverty reduction in African countries. Studies indicate that in both advanced economies and developing countries SMEs contribute on average 60 percent of total formal employment in the manufacturing sector (Ayyagari et al, 2007). This is three-quarters of total employment in the manufacturing sectors. Access to finance is very crucial to SME development as this could be in form of working capital, asset financing, long term loans etc.

Firm-level data showed that access to finance is perceived as one of the main obstacles to doing business in sub-Saharan Africa and SMEs are particularly disadvantaged in terms of accessing credit facilities as compared to corporate organizations (World Bank, 2009). Beck et al (2008; 2010) attempted to understand SME financing from the supply side. Based on a survey of 91 banks in 45 countries, perceive SME segment to be highly risky and very conservative approach is necessary when it comes to loan advancement. However, significant differences exists across
banking industry in developed and developing economies, in terms of enabling environment to the growth and development of SMEs,

In the US for example, the SME sector provides 67% employment and 61% manufacturing sector output. This is significant contribution and requires more attention in terms of developing and improving the sector for better performance. In Kenya, a micro-finance bill aimed at encouraging more effective SMEs was enacted in early 2007.

1.1.1 Banking Services
Banks and the banking industry are important to the economy of any country. They provide various services to its clients including custodial services, financial lending services, advisory services and other services that are beneficial to their clients as stipulated in their articles. Different banks provide different services to their clients depending on their target market, and more importantly, from rules and regulations as stipulated by the central bank. In Kenya, the Central Bank of Kenya provides regulations and guidelines of the banking sector. The banking and financial institutions in the country are categorized as commercial banks or micro finance institutions. These categories are governed by their respective regulations as stipulated in the Banking Act (Central Bank of Kenya, 2014).

With the aggressive competition in the banking industry in Kenya, banks are willing to provide services to ensure their customers are satisfied. Because of the low banking population in the country, banks are working with mobile companies to tap into the unbanked population in order to increase their customer base. With the advancement of technology, ease of transaction with banks is the focus of many clients and banks are ensuring that this is made possible. Internet banking and mobile banking has changed the face of banking in Kenya and clients are finding it easy to transact with their banks.
Boot (2000) stated that an important factor that banks are embracing in order to maintain their customers is relationship banking. Relationship banking may be defined as the provision of financial services by a financial intermediary on the basis of long-term investment in obtaining firm-specific information through multiple interactions with diverse financial services. This information may be useful in determining what services to offer clients and determining the qualification of loan advancement to their customer.

1.1.2 Profitability of Small and Medium Enterprises
To measure the profitability of SMEs different indicator such as sales or turnover growth, increase of employment, asset value, market share, profits and output can be used. Sales and employment remain very important indicators for measuring the growth and development of enterprises. Entrepreneurial profitability are affected by both internal and external factors.

Internal factors include management style, succession plans and these are not very problematic since organizations usually have adequate mechanism to settle them. The external factors define the macro-environment which may facilitate or inhibit entrepreneurship at start-up and during the SME lifecycle. Dahlqvist et al, (2000) supported this and expounded that these external factors present opportunities, threats and information affecting entrepreneurs within environment, regardless of their background, education or business concept. Guzman & Santos (2001) lists external factors to include socio-demographics, markets local, international, emerging and established markets cultural, economic, political, institutional, legal, productive, technological, infrastructure and other physical factors of that particular environment. Political, economical Social, technological, environmental and legal factors were also cemented by Morrison (2006) as very critical factors that may affect the growth of SME’s. Toye, (2002) stated that success of a new venture depends on the state of specific factors within the boundaries of specific nation-
states with their own distinct economic, political and social factors.

These factors are rarely affected by management decisions because they are beyond the control of SMEs. Among the main external factors that affect the profitability of SMEs is access to finance, competition, government policies etc. Lack of capital or denial to financial resources was a major barrier for SMEs and entrepreneurs, which usually have to mobilize their own capital or their own resources to establish or expand their business. In addition, SMEs in developing countries have difficulties in accessing bank loans as a consequence to the high risk for failing loans, low profitability and lack of collateral required by banks (Harvie, 2005). Financing of SMEs and access to finance plays a crucial role in the growth process and development of the enterprises (World Bank, 2011). By entering the competition, the company tries to find competitive advantages. SMEs are usually not very competitive in terms of market knowledge, innovation, prudent investment, business operations and good management, which are important factors in improving the quality (OSMEP, 2007). Developing countries compete with other countries as a result of globalisation and increased trade however barriers and other restrictions generally favour these countries (Lind, 2009). Government policies provide a conducive operating environment that enhances growth development and reduces poverty are very important and determines the success rate in an economy.

1.1.3 Effect of Banking Services on Profitability of Small and Medium Enterprises

Banking services are known to be of great importance to SMEs in order to improve their profitability. The lending relationship between the bank and the SMEs are often subject to ability and willingness of the borrower to repay the credit facility. The study predicts a positive relationship between banking services and profitability of SMEs.
Efforts targeted at the SME sector are based on the premises that (i) SMEs are the engine of economic development, but (ii) market and institutional failures impede their growth, thus justifying government interventions. Despite the growing interest of the development community in subsidizing SMEs, however, there are skeptical views that question the efficacy of pro-SME policies. Specifically, many critics stress the importance of the business environment facing all firms, large and small.

According to Dalberg (2011) access to finance is necessary to create an economic environment that enables firms to grow and prosper. SMEs in developing countries, however, face significant barriers to finance. Financial constraints are higher in developing countries in general, but SMEs are particularly constrained by gaps in the financial system such as high administrative costs, high collateral requirements and lack of experience within financial intermediaries. Increased access to finance for SMEs can improve economic conditions in developing countries by fostering innovation, macro-economic resilience, and GDP growth.

Numerous studies highlight access to finance as one of the driving factors of an enabling economic environment: The World Bank and the International Finance Cooperation (IFC) rank economies according to their ease of doing business; in this framework, the ability for business to get credit is an important criterion (World Bank, IFC, 2011). The Global Entrepreneurship Monitor (GEM) Entrepreneurship Framework Condition also highlights entrepreneurial finance, defined as the availability of financial resources for SMEs in the form of debt and equity, as one of the key factors for stimulating and supporting entrepreneurial activity (Global Entrepreneurship Monitor, 2010).

Access to finance helps all firms to grow and prosper: The Investment Climate Surveys of the World Bank show that access to finance improves firm performance. It not only facilitates
market entry, growth of companies and risk reduction, (Beck, Thorsten and Demirgüç-Kunt, Asli, 2008) but also promotes innovation and entrepreneurial activity (Klapper, Laeven, & Rajan, 2006). Furthermore, firms with greater access to capital are more able to exploit growth and investment Opportunities (Beck, Thorsten, Asli Demirgüç-Kunt, & Vojislav Maksimovic, 2006). In other words, aggregate economic performance will be improved by increasing the access to capital (World Bank, 2010).

1.1.4 Small and Medium Enterprises and Banking in Kenya
The Institute of Certified Public Accountants, Kenya (ICPAK, 2014) defines an SME as an entity that does not have public accountability, publishes general purpose financial statements for external users e.g owners not involved in day to day management, whose debt and equity instruments are not traded in the public market, and does not hold funds in a fiduciary capacity for a broad group of outsiders as one of its primary business such as banks, insurance companies, securities brokers and investment banks.

The importance of SMEs in any economy cannot be over emphasized because they consist of the majority businesses thereby providing employment to majority of people. These SMEs have contributed immensely to the growth of the economy and contribute to employment of large numbers of people.

A number of studies have shown that financing is a greater obstacle for SMEs than it is for large firms, particularly in the developing world, and that access to finance adversely affect the growth of the SME sector more than that of large companies (Schiffer and Weder, 2001; Beck et al, 2005; Beck et al, 2006). Calice, Chando & Sekioua (2012) in a study noted that the banks’ interest towards dealing with SMEs is not driven by a general desire by the banks to take advantage of specific positive government and regulatory programs, but rather appear to be
largely motivated by the business objective of profit pursuit. In their study, Calice, et al (2012) also stated that banks had considerable exposure to the SME market with Kenya having an average loan exposure to SMEs at 50 percent but for most banks the deposit relationship usually preceded the loan relationship. Most banks in Kenya have gone ahead and set up separate SME departments which deals specifically with SME issues such as credit facilities and business development advice.

The interrelation between SMEs and banks provide profitability growth prospect to both industries. The SMEs will grow as they need capital during the growth stage to make more money while banks will also benefit as a result of credit interest income. Since there is a large number of SMEs, dealing with these numbers will grow the bank, the SMEs and the economy. This approach was widely used by Equity bank to finance the micro enterprises in Kenya and with the large number of customers saw its rapid profitability and expansion.

1.2 Research Problem
A crucial element in the development and growth of the SME sector is access to finance, particularly to bank financing, given the relative importance of the banking sector in serving this segment. Access to finance adversely affects the growth of the SME sector in the developing world more than that of large companies (Beck et al, 2005). In Kenya, most SMEs rely heavily on savings or bank loans for expansion (KPMG, 2011). Nevertheless there are hiccups that bank loans have become very expensive attracting interest rates between 23% and 29%. Studies have been done on the SMEs growth in Kenya with little concern on banking services and their effects on the growth of SME’s.

Implications of financing on SMEs profitability are crucial. Franck & Huyghebaert (2008) examined the effects of outstanding debts on business performance. Leverage could affect firm
performance when there are market imperfections. Modigliani & Miller (1958) cemented this by concluding that financing decisions should not affect product market outcomes, as far as financial and product markets are perfect. Huyghebeart (2008) further indicated that for one to recognize product market imperfections, firms need to look at the impact of their decisions and behavior on one another especially when the number of competitors in a market is limited.

Empirical evidence reveals the importance of internal finance for SME profitability, pointing towards a positive relationship between profitability and internal finance, in different economies, namely Germany (Audretsch & Elston, 2002), United States (Carpenter & Petersen, 2002), Portugal (Cabral & Mata, 2003; Oliveira & Fortunato, 2006) and Spain (Moreno & Casillas, 2007). However, the analysis developed by Heshmati (2001), concerning Sweden, did not detect a statistically significant effect of internal finance on growth. In turn, the study by Honjo & Harada (2006), applied to the situation in Japan, underlines the importance of internal finance for the growth of younger companies, although there was no statistically significant relationship detected between the growth of older companies and level of internal finance.

Even though studies have been done both locally and globally, there are some proponents in support of internal finance having a positive effect on SME profitability while others are not in agreement. There is no local study that analyzes specifically the effect of banking services on the profitability of SMEs in Kenya. Banking services in the study refers to credit lending services, banking services, and advisory services. It is from this research gap that the study seeks to answer the question “What is the effect of banking facilities on the profitability of SMEs in Kenya?”
1.3 Objective of the study
To determine the effect of banking services on the profitability of small and medium enterprises in Kenya.

1.3.1 Specific Objectives
1. To determine the effect of credit services on the profitability of small and medium enterprises in Kenya.

2. To determine the effect of SME savings on the profitability of small and medium enterprises in Kenya.

3. To determine the effect of number of SME trainings on the profitability of small and medium enterprises in Kenya.

4. To determine the effect of debt-equity ratio on the profitability of small and medium enterprises in Kenya.

5. To determine the effect of SME asset value on the profitability of small and medium enterprises in Kenya.

1.4 Value of the Study
The study will be important to banks and financial institutions as it will provide them with relevant information of what is important for SME profitability. For banks to know what makes SMEs become profitable and implement them is important as it provides a symbiotic relationship of profitability and growth for the two sectors. It will also provide banks with market intelligence which would give it business advantage.

Also, the study will be of importance to small and medium enterprises as it will enable them to know what indicators to measure to gauge them for success. These enterprises will also learn of
what is expected of them as they interact with financial institutions.

Financial policy makers and the government will also benefit from the study as they will know the relationship between the two sectors better and what is required from each for success. This would enable them formulate better policies for a better financial economy. Better performance by these sectors will also lead to more tax revenues and more employment opportunities.

Finally, the study would also be useful to scholars and researchers in the field as it will improve the knowledge in the area and provide reference for further studies.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
The study will review the theoretical and empirical literature of the role of internal audit function in corporate governance in banking sector in Kenya. Section 2.2 will discuss the theoretical literature, which discusses the various theories that are foundation of the study. Section 2.3 discusses the relevant literature that is used. Empirical review of previous studies is done in Section 2.4 where previous studies are reviewed in order to fill the research gap, and the summary of the literature review is done in Section 2.5.

2.2 Theoretical Review
This section reviews some of the theories deemed relevant in guiding this study. These are:

2.2.1 Pecking Order Theory
The theory states that capital structure is driven by firm's desire to finance new investments, first internally, then with low-risk debt, and finally if all fails, with equity. Therefore, the firms prefer internal financing to external financing (Myers & Majluf, 1984). Since small firms are opaque and have important adverse selection problems that are explained by credit rationing and high information costs (Psillaki, 1995). The theory is very relevant as the study seeks to establish the effects of bank services on the growth of SME’s. Pecking order theory examines effects of debt on a firm, these includes terms and conditions like repayment schedules, record keeping, associated with debt usually provided by financial institutions. Banking institutions usually requires collateral before lending to SME’s for compensation purposes in the event of default by the customer. These securities are charged at the registrars with Banks as the beneficiary during liquidation.
The pecking orders will imply that the organizations using properties as securities loses ownership immediately and eventually may be forced to relinquish title to the bank during default. Implications of financing on SMEs performance and growth can both be positive and negative a (Franck & Huyghebaert, 2008). Key issues should be factored especially in terms of how leverage could affect a firm’s performance so far as cash flow and loan repayments are concerned during start up periods. Modigliani & Miller (2008) stated that leverage could affect firm performance in terms of financing decisions as far as financial and product markets are perfect. Impacts of decisions and behavior must be matched with costs-benefit analysis so that there is maximization of resource allocations by the financially constrained organizations. Cash-flow investment sensitivities are typically large for SME’s (Huyghebaert & Van de Gucht, 2004).

2.2.2 Keynesian Economics Theory

This is an economic theory of total spending in the economy and its effects on output and inflation. Keynesian economics was developed by the British economist Keynes in 1936 in an attempt to understand great depression. Keynes advocates for increased government expenditure and lower taxes to stimulate demand and pull the global economy out of the depression (Keynes, 1936).

This theory will guide the study in examining the function of the government monetary policies in creating an environment for economic growth through the SMEs. We shall try to establish how the government policies influence the banking services being offered as well as the areas which the SME’S are investing in.
2.2.3 Prospect Theory
According to prospect theory as proposed by Kahneman & Tversky (1979), decision makers can become less risk averse and even risk seeking if they find that they are operating below target or aspiration levels. High-variance (riskier) alternatives may provide a decision maker a better chance of achieving the desired outcome than low-variance (safer) alternatives. Prospect theory predicts that individuals tend to be risk averse in a domain of gains, or when things are going well, and relatively risk seeking in a domain of losses, as when a leader is in the midst of a crisis.

The theory describes the decision processes in two stages: editing and evaluation. During editing, outcomes of a decision are ordered according to a certain heuristic. In particular, people decide which outcomes they consider equivalent, set a reference point and then consider lesser outcomes as losses and greater ones as gains. It also aims to resolve isolation effects stemming from individuals' propensity to often isolate consecutive probabilities instead of treating them together. In the subsequent evaluation phase, people behave as if they would compute a value (utility), based on the potential outcomes and their respective probabilities, and then choose the alternative having a higher utility.

Fiegenbaum & Thomas (1986) noted that an analysis of market risk or beta (the relevant measure for the shareholder), instead of total risk, seemed to nullify the negative association effect (low return/high variance and high return/low variance). However, they also suggested that total risk (variance) may be more appropriate for measuring managerial risk. Variability of outcome is more appropriate than beta as a measure of risk for this study because the objective is to gain insight into management behavior.
2.3 Determinants of Profitability of Small and Medium Enterprises
Various factors are known to determine the growth of SMEs. They can be broadly categorized as institutional factors, internal factors and external factors. These include: i) credit services; ii) age; iii) intangible assets; iv) size; and v) advisory services.

2.3.1 Credit Services
Credit services are important in increasing the liquidity of a business as this money can be invested in projects selected by the company. Studies done by Cooley & Quadrini (2001) and Cabral & Mata (2003), show that the growth of new small companies is hindered by restrictions concerning finance and by the shortage of resources of diverse nature. The strategies of SMEs for finance are fundamental in explaining their growth, and this can be seriously hindered when companies are subject to considerable financial restrictions (Reid, 2003). Companies bear different costs of internal finance and external finance imperfections of the capital market (Stiglitz & Weiss, 1981). If the capital market was perfect, then all companies would have access to alternative sources of finance, and in this way internal finance and external finance would be considered perfect substitutes.

As a consequence, companies’ financing decisions would be irrelevant for carrying out their strategies for investment and growth (Stiglitz & Weiss, 1981). In the context of the imperfections of the capital market, the results obtained by Fazzari et al. (1988) are particularly relevant: SMEs face more restrictions in the access to external finance and are therefore much more dependent on internal finance, in order to finance their investment, and consequently their growth.

2.3.2 Age
In the early years of the life cycle, a company grows towards attaining an optimal level of efficiency. At later stages of its life cycle, and after reaching a minimum efficient scale that
allows it to survive the rate of growth diminishes. Jovanovic (1982) claims that company managers need time to identify the opportunity costs associated with the alternative investment opportunities. In this context the results of Fariñas and Moreno (1997) are particularly relevant, concerning the relationship between growth and age, highlighting the fact that the youngest companies register higher growth rates in the first years of their life cycle. After ensuring survival, companies show lower growth rates, which increase the possibility of company growth not being related to age.

Lumpkin (1998) and Shane & Venkataraman (2000) concluded that young companies, usually more proactive and better informed about the level of risk associated with investment opportunities, present a better rate of effectiveness as regards taking advantage of new profitable business than older companies. This being so, according to Lumpkin (1998), and Shane & Venkataraman (2000), a negative relationship is expected between growth and age, given the greater ability to grow revealed by younger companies.

### 2.3.3 Intangible assets

Companies that own greater intangible assets have a higher propensity to develop innovative activities, thus higher propensity to innovate meaning improved economic performance in companies (Griliches & Lichtenberg, 1984; Pusher, 1995; Smith et al., 2004; Audia & Greve, 2006; Chen et al., 2006).

Deloof (2003) and Rogers (2004) in their studies found that intangible assets, which are indicative of growth opportunities, can be considered as a fundamental aspect for the survival and sustainable growth of SMEs. Empirical evidence about the effect of intangible assets on SME growth are scarce, an exception being the studies by Yasuda (2005) and Calvo (2006), which point towards a positive relationship between growth and intangible assets. However, the
insufficiencies of internal finance conjointly with the lack of external finance influence negatively companies’ investment decisions, and consequently their growth dynamics (Harris & Raviv, 1991; Lang et al., 1996; Carpenter & Petersen, 2002).

2.3.4 Size
According to Barkham et al. (1996) small companies and large companies have quite different motivations for growth, namely: (i) small companies grow because of the need to reach a minimum efficient scale that allows survival; and (ii) large companies can grow according to possible strategic alterations, as a consequence of changes taking place in the markets.

The conclusions of Barkham et al. (1996) are reinforced by Audretsch et al. (2004), the authors pointing towards motivation for small company growth having to do with the need to find a minimum efficient scale that permits survival. In this way, obtaining economies of scale is the main motivation behind the growth of companies that are smaller than they would be if they have already achieved the minimum efficient scale. According to Audretsch et al. (2004) small companies can present high growth potential, since they frequently operate at a sub-optimal production scale, which assumes partial use of internal capacity as well as partial exploration of the market in which they operate.

2.3.5 Advisory Services
Business Advisory Services includes market intelligence, domestic and export market development support, financial analysis and other benchmarking tools to improve operations, access to public and/or private sector financing, support for innovation, new technology and productivity networking and expert advice offered to SME’s customers by the banks, business providing focused, specialized supplier referral services to SME’s promoting industry-related trade shows, strengthening relationships with key stakeholders in Alberta, such as the provincial
government, local industry associations and regional economic development offices, and collaborating with them on industry research and studies and trade missions between.

The advisory services include best practices, timely workshops, management, liquidity management, data aggregation and management services, holistic models based on strategic business and risk objectives. These services are very useful and are value addition in business management and growth of SME’s.

2.4 Empirical Review
Tan & Tay (1995) did survey of Singaporean SMEs to determine the relationship between the growth of local SMEs and the characteristics of owners and the firm. The study analyzed both the demographic and psychological attributes of the owners, as well as firm attributes, such as size and age of the firm. Regression models were constructed to determine the relationship between the growth of SMEs and owners’ and firms' characteristics. The results showed that the educational level and working experience of owners, their need for achievement and internal locus of control, as well as the age of the business, and the ability of the business to attract government grants correlated significantly with the growth of the firm.

Carpenter & Petersen (2002) developed a model of firm growth whereby the firm’s growth of total assets is subject to financing constraints for small firms in the United States. They found that a firm facing a binding cash flow constraint exhibited approximately a one to one relationship between the growth of its assets and internal finance. Furthermore, firms that have access to external finance exhibited a much weaker relationship.

Wagenvoort (2003) did a study to determine whether financial constraints hinder the growth of SMEs in Europe. The study estimated the growth-cashflow sensitivities for firms in different size classes. The results of the study showed that the sensitivity of company growth to cashflows rises
as company size falls, which suggests that SMEs indeed encountered financial constraints that prevented them from fully exploiting their growth potential. Also, within each size class, quoted firms even when small tend to suffer less from finance constraints than unquoted firms.

Hutchinson & Xavier (2004) did a study comparing the impact of credit constraints on the growth and profitability of SMEs in a transition country (Slovenia) with an established market economy (Belgium). This was from all the manufacturing companies that were required full company accounts to national statistics office. This was between 1993 and 2000 for Belgium and 1994 to 2001 for Slovenia. The study results showed that firms in Slovenia are more sensitive to internal financing constraints than their Belgian counterparts and growth was indicated more on companies that access credit.

Kiimbo et al. (2012) did a study on the extent of financing of SMEs in Kakamega municipality. They interviewed 60 SME owners using descriptive research design from a population of 1311. From the study, it was found that less than half of SMEs in Kakamega consider formal financing as a source for their operations, while more than 90% of SMEs who sought for formal financing succeeded in growing. The results also showed that formal financing is significant to keep businesses operational.

Wambua & Mugambi (2013) did a study on the effect of multiple banking on the performance of small and medium enterprises in Mombasa, Kenya. The study analyzed the effects of diversity of banking services, diversity of off-balance sheet items, diversity of relationship banking and multiple bank credit facilities on the performance of SMEs. A sample size of 258 SMEs was used, from which the business managers/proprietors were interviewed. The result of the study showed that multiple banking variables: multiple business accounts, diversity of off-balance
sheet items and diversity of relationship banking correlated positively with net asset value, profitability and growth of the SMEs.

2.5 Summary of Literature Review
The study looked at the theoretical review of effects of banking services on the profitability of SMEs in Kenya. The theories used are Pecking Order Theory, Keynesian Theory, and Prospect Theory. The chapter also looked at the determinants of profitability of SMEs which include credit services, age, intangible assets, size, and advisory services. The study will however emphasize on credit services which also include banking services and advisory services. The empirical review looked at international and local studies. The studies, however, did not review specifically the impact of banking services to SMEs which creates a gap in the study.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
The chapter outlines the overall methodology that was used in the study. This includes research design, target population, sampling procedures, data collection methods, data analysis and presentation of the study findings.

3.2 Research Design
According to Bryman & Bell (2007), research design is a general plan that provides a framework for the choice of data collection techniques and data analysis procedures. The study used descriptive cross-sectional research design to establish the effects of bank financing on the growth of SME’s in Kenya. A descriptive cross-sectional study was ideal for the study as it was used to analyze different SME businesses and descriptive information regarding the business indicated.

3.3 Target Population
Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population for the study was the top 100 SMEs in Nairobi which were ranked as the Top 100 mid-sized company survey in the year 2013. This population will be retrieved from the Top 100 companies as listed in http://eastafricatop100.com/top-100-companies/ to obtain the Top 100 SMEs operating in Kenya.

3.4 Sampling
Any statements made about the sample should be inferred to the population. According to Miaoulis & Michener (1976), three criteria usually are needed to be specified to determine the
appropriate sample size: purpose of the study, population size, the level of precision, the level of confidence or risk, and the degree of variability in the attributes being measured.

According to Cochran (1963), a sample size is determined by the level of precision, the confidence level, and the degree of variability. For finite populations, the sample size will be calculated using the following formula:

\[
n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}\]

Where \( n \) is the sample size and \( N \) is the population size, and \( n_0 \) is determined using the formula:

\[
n_0 = \frac{N}{1 + N(e)^2}\]

Where \( N \) is the population size and \( e \) is the level of precision. The study will use a precision level of 5% and therefore from the above formula, the calculated sample size is 45, but we shall use a sample size of 50 to increase level of precision.

### 3.5 Data Collection

The study utilized both primary data collection methods. For primary data questionnaires was used and was mainly structured with closed questions to capture quantitative data. Business managers for SMEs were given questionnaires to answer and verbal questions were asked to corroborate information provided in the questionnaire.

### 3.6 Data Analysis

Data collected was coded and analyzed. This stage involved data capture, processing cleaning and tabulation. Data was analyzed using the SPSS v.17. Statistical techniques were applied to the data and multiple linear regression and Chi-Square tests were used to determine the relationship between the independent and dependent variables. The significance of the variables was
analyzed using p-values. The resulting p-values were compared with the critical P-value of 0.05. Variables with p-values of less than 0.05 were declared significant determinants of SME growth by banks while those of values more than 0.05 were declared not significant. Means and standard deviation were used to determine the measures of central tendency among the variables.

3.6.1 Analytical Model
Linear regression analysis shall be used depicted by the below model;

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e \]

Where:

\( Y \) is the SME profitability as measured by the return on assets in a certain year.
\( X_1 \) is the credit services as measured by the amount of loan given.
\( X_2 \) is the savings services as measured by the average monthly savings.
\( X_3 \) is the training services as measured by the number of trainings received from bank.
\( X_4 \) is the leverage of the company as measured by the debt-equity ratio.
\( X_5 \) is the size of the company as measured by the value of assets.
\( \beta_1, \beta_2, \beta_3, \beta_4, \) and \( \beta_5 \) are the independent variable coefficients.
\( \alpha \) is the constant of the regression.
\( e \) is the residual or error term

3.6.2. Test of Significance
The study will employ test of significance tools mainly ANOVA, \( R^2 \), R and F-statistic to better understand the different relationships between the variables in this study. Through ANOVA, the researcher will establish a statistical test of whether or not the means of the several groups under study are equal. In measuring how well our regression model fits the data in this study, we shall employ the use of the goodness of fit statistic \( R^2 \). The \( R^2 \) calculated will be used to examine how
close the data is to the fitted regression line. The $R^2$ is also known as the coefficient of determination. The $R$ test will be used to measure the strength and the direction of the linear relationship between variables.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction
The objective of the study was to determine the effects of banking services on growth of SMEs in Kenya. This chapter contains the summary statistics from the bank response in 4.2, while the empirical model will be discussed in chapter 4.3. The study discussions were contained in chapter 4.4 and chapter 4.5 summarized the data analysis findings, results and discussions.

4.2 Response Rate and Data Validity
The study target population was the top 100 SMEs for the year 2013, with a sample size of 50 respondents using the Cochran (1963) formula. Of this target population, 32 respondents participated by filling and returning the questionnaire. This yielded a response rate of 64%. The other 36% of the target population may not have responded to the questionnaire as a result of lack of adequate time to respond to the questionnaire, while some may be due to protecting the financial privacy of their company.

Table 4.1: Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.115</td>
<td>.210</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Research Findings

According to Berg and Gall (1989) validity is the degree by which the sample of test items represents the content the test is designed to measure. The study used the Cronbach-Alpha to test the internal consistency and is used to measure the validity of scale or composite score. The table above indicated a Cronbach Alpha value of 0.115 indicating that 11.5% of the variance are ‘true scores’ or reliable.
4.3 Descriptive Data

Descriptive data for the study responses were calculated and results presented as below:

Business operation period statistics

<table>
<thead>
<tr>
<th>Table 4.2: Business operation period</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>32</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Under 5 years</td>
<td>8</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>15</td>
<td>46.9</td>
<td>71.9</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>7</td>
<td>21.9</td>
<td>93.8</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>2</td>
<td>6.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Findings

The table above shows the distribution of the business operation period for the SMEs that were sampled. From the table, 25% (N=8) of the SMEs have been in operation for less than 5 years, 46.9% (N=15) of the SMEs have been in operation for between 6 to 10 years, while 21.2% (N=7) of the respondents have been in operation for a period of 11 to 20 years.

Loan with bank statistics

<table>
<thead>
<tr>
<th>Table 4.3: Loan with bank distribution</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>32</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>90.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Findings

Table 4.3 above shows the value of assets distribution for the SMEs that were sampled. From the table, majority of the SMEs 53.1% (N=19) have a debt-equity ratio between 0 to 20 percent, while 40.6% (N=13) of the sampled SMEs have a debt-equity ratio of between 21 to 40 percent. A paltry 6.3% (N=2) of the respondents had a debt-equity ratio between 41 to 60 percent while there was no SME which had a debt-equity ratio of over 60 percent.
Purpose of loan

Table 4.4: Purpose of loan

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Expansion</td>
<td>15</td>
<td>46.9</td>
<td>51.7</td>
<td>51.7</td>
</tr>
<tr>
<td>Equipment purchase</td>
<td>11</td>
<td>34.4</td>
<td>37.9</td>
<td>89.7</td>
</tr>
<tr>
<td>Working capital</td>
<td>2</td>
<td>6.3</td>
<td>6.9</td>
<td>96.6</td>
</tr>
<tr>
<td>Other purpose</td>
<td>1</td>
<td>3.1</td>
<td>3.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>90.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>3</td>
<td>9.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

Table 4.4 above shows the purpose of the loans taken by the SMEs that were sampled. From the table, majority of the SMEs 51.7% (N=15) took the loan for business expansion purposes, while 37.9% (N=11) of the sampled SMEs took the loan for equipment purchase. Also, there were non-responses from 3 who did not receive loans from banks.

Loan processing challenges from SMEs

Table 4.5: Loan processing challenges

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collateral</td>
<td>15</td>
<td>46.9</td>
<td>51.7</td>
<td>51.7</td>
</tr>
<tr>
<td>Credit scoring</td>
<td>10</td>
<td>31.3</td>
<td>34.5</td>
<td>86.2</td>
</tr>
<tr>
<td>Waiting period</td>
<td>3</td>
<td>9.4</td>
<td>10.3</td>
<td>96.6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3.1</td>
<td>3.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>90.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>3</td>
<td>9.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

Table 4.5 above shows the loan processing challenges encountered by the SMEs that were sampled. From the table, 51.7% (N=15) had collateral as a challenge for accessing loans, 34.5% (N=10) had credit scoring as a challenge for loan processing, while 10.3% (N=3) had waiting period as a loan processing challenge.
Loan payment challenges from SMEs

Table 4.6: Loan payment challenges

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Tenure of loan</td>
<td>5</td>
<td>15.6</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>Cost of loan</td>
<td>19</td>
<td>59.4</td>
<td>65.5</td>
</tr>
<tr>
<td></td>
<td>Terms and conditions</td>
<td>5</td>
<td>15.6</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29</td>
<td>90.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>3</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>32</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

Table 4.6 above shows the loan payment challenges for the SMEs that were sampled. From the table, 65.5% (N=19) had cost of loan as a challenge during payment of their loan, 17.2% (N=5) had tenure of loan as a payment challenge while 17.2% (N=5) had terms and conditions as their loan payment challenge.

Savings motivator statistics

Table 4.7: Savings motivator

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Repay a loan</td>
<td>10</td>
<td>31.3</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>Expand business</td>
<td>20</td>
<td>62.5</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Take a loan</td>
<td>2</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

Table 4.7 above shows the savings motivator by the SMEs that were sampled. From the table, 62.5% (N=20) were saving to expand their business, 31.3% (N=10) of the SMEs respondents stated that they save to repay their loan, while 6.3% (N=2) save in order to take a loan.
Savings by Small and Medium Enterprises statistics

Table 4.8: Business Training Statistics

<table>
<thead>
<tr>
<th></th>
<th>Business Training1</th>
<th>Business Training2</th>
<th>Business Training3</th>
<th>Business Training4</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.03</td>
<td>2.09</td>
<td>1.72</td>
<td>1.94</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.822</td>
<td>.777</td>
<td>.813</td>
<td>.801</td>
</tr>
</tbody>
</table>

Source: Research Findings

The above table shows the means of the SME responses showing the extent to which they receive trainings by their banks. With regards to business receiving training on how to save from business (Business Training 1), the responses had a mean of 2.03 indicating that they hardly receive training from banks. The SMEs receiving management training on how to improve business (Business Training 2) had a mean of 2.09, also indicating that they hardly receive management training from banks. The respondents also indicated the extent to which they receive training on how to prepare financial accounts for their business (Business Training 3). With a response mean of 1.72, this indicated that the SMEs hardly receive training from banks on how to prepare financial statement. Finally, SMEs responded on whether they receive leadership training from their banks (Business Training 4). The responses indicated a mean of 1.94 which indicated that the SMEs hardly receive training from banks.

Independent Variable Statistics

Table 4.9: Independent Variable Statistics

<table>
<thead>
<tr>
<th></th>
<th>Value of assets</th>
<th>Debt-equity ratio</th>
<th>Amount of loan</th>
<th>Monthly saving</th>
<th>No. of Trainings</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>50410937.50</td>
<td>21.28</td>
<td>11210937.50</td>
<td>317500.00</td>
<td>1.59</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>3.264E7</td>
<td>11.537</td>
<td>8429898.159</td>
<td>134524.251</td>
<td>1.434</td>
</tr>
<tr>
<td>Minimum</td>
<td>9800000</td>
<td>0</td>
<td>0</td>
<td>150000</td>
<td>0</td>
</tr>
<tr>
<td>Maximum</td>
<td>134000000</td>
<td>45</td>
<td>26500000</td>
<td>650000</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Research Findings
Table 4.9 above shows the mean, standard deviation, minimum and maximum response values for the independent variables. These variables were value of assets, debt-equity ratio, amount of loan given, monthly savings, and the number of trainings received. For the value of assets, the mean value of assets for the Top 100 SMEs was Sh.50,410,937, minimum value of Sh.9,800,000 and a maximum value of 134,000,000. For the debt-equity ratio variable, the mean percentage for the debt equity ratio was 21.28%, a minimum of 0% and a maximum ratio of 45%. The variable monthly savings had a mean of Sh.317,500, a minimum monthly savings of 150,000, and a maximum monthly savings of Sh.650,000. The final variable under analysis was the number of trainings on SMEs by banks in the last 12 months, with a mean of 1.59 trainings, minimum value of 0, and a maximum value of 4 trainings.

4.3 Regression Analysis

Table 4.10: Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.507*</td>
<td>.257</td>
<td>.115</td>
<td>.40182</td>
</tr>
</tbody>
</table>

Source: Research Findings

a. Predictors: (Constant), Amount of loan, Monthly saving, Average Training, Value of assets, Debt-equity ratio

Table 4.10 above shows the $R$, $R^2$, and the standard error of the estimates. $R$ represents the multiple correlation coefficients, while $R^2$ represents the proportion of variance in the dependent variables that can be explained by the independent variables. As shown in Table 2, $R$ indicated a value of 0.507, while adjusted $R^2$ indicated a value of 0.115, and a standard estimate 0.401. The adjusted $R^2$ is used for multiple regression analysis and it indicated that there was a variance of 11.5% on Return on Assets as a result of audit rotation, consultancy services, and audit fees. The table also indicates a correlation coefficient of 0.712 indicating that there is a strong relationship between the dependent and independent variables.
4.3.1 Analysis of Variance

Table 4.11: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.739</td>
<td>5</td>
<td>1.148</td>
<td>7.129</td>
<td>.288a</td>
</tr>
<tr>
<td>Residual</td>
<td>3.713</td>
<td>23</td>
<td>.161</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.453</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

a. Predictors: (Constant), Amount of loan, Monthly saving, Average Training, Value of assets, Debt-equity ratio

b. Dependent Variable: ROA

The ANOVA table tests whether the overall regression model is a good fit for the data, and whether the independent variables statistically significantly predict the dependent variable. It tests the statistical significance of the test. The F test has two numbers for its degrees of freedom and from the table, F(5,23) = 7.129 and p value (0.288)> 0.05, it indicated that it is not significant in terms of goodness of fit.

4.3.2 Regression Analysis

Table 4.12: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.449</td>
<td>1.029</td>
<td>1.408</td>
<td>.172</td>
</tr>
<tr>
<td>Debt-Equity ratio</td>
<td>.050</td>
<td>.151</td>
<td>.038</td>
<td>.329</td>
</tr>
<tr>
<td>Monthly saving</td>
<td>-.193</td>
<td>.136</td>
<td>-.278</td>
<td>1.421</td>
</tr>
<tr>
<td>Value of assets</td>
<td>.011</td>
<td>.179</td>
<td>.009</td>
<td>.063</td>
</tr>
<tr>
<td>Average Training</td>
<td>.002</td>
<td>.222</td>
<td>-.006</td>
<td>-1.112</td>
</tr>
<tr>
<td>Amount of loan</td>
<td>-.008</td>
<td>.116</td>
<td>-.017</td>
<td>-.324</td>
</tr>
</tbody>
</table>

Source: Research Findings

a. Dependent Variable: ROA

The regression coefficients table indicates the slope of both the unstandardized and standardized coefficients of the variables. Table 4.12 above indicated standardized coefficients for the variables: debt-equity ratio had a beta coefficient of 0.038, monthly savings had a standardized
beta coefficient of -0.278, value of assets had a standardized beta coefficient of 0.009, average training had a standardized beta coefficient of -0.006, while amount of loan disbursed had a standardized beta coefficient of -0.17.

From these coefficient variables indicated, the equation can be stated as:

\[ \text{Return on Assets (ROA)} = 1.449 - 0.17 \times X_1 - 0.278 \times X_2 - 0.006 \times X_3 + 0.038 \times X_4 + 0.09 \times X_5 \]

This equation indicates that an increase in return on assets by one unit requires a decrease of 0.17 units of amount of loan given, a decrease of 0.278 units of average monthly savings, decrease of 0.006 units of number of trainings, increase of 0.038 of the debt-equity ratio, and an increase of 0.09 units in the value of assets.

4.3 Interpretation of the Findings

The objective of the study was to analyze the effects of banking services on the growth of top 100 SMEs in Kenya. Profitability of SMEs in Kenya was measured in terms by the return on assets as a standard measure. The objective of the study was to determine the effects of banking services on the profitability of SMEs in Kenya. Factors thought to constitute banking services were identified through literature review and were conceptualized to answer the research objective. These were the amount of loan given, average monthly savings, number of business trainings, debt-equity ratio, and value of assets.

With regards to the first variable, amount of loan given, the study findings indicated a negative impact of the variable on the return on assets. This may be because of the cost of the loan since a higher loan amount indicates a higher interest cost which affects profitability. This finding is contrary to Cooley and Quadrini (2001) and Cabral and Mata (2003) whose studies indicated that credit services are important to SME growth, which is indicated through profitability. However,
the study conforms to Stiglitz and Weiss (1981) who indicated that SMEs face restrictions on external finance becoming more dependent on internal finance, consequently their growth.

The second variable under analysis was the average monthly savings by SMEs. The study findings also indicated a negative effect of monthly savings to the return on assets (-0.278). This might have been because low monthly savings indicate that it is being used to generate revenues as opposed to money lying in the banks. Companies that have constant use for money will have high returns for their businesses.

The third variable under analysis was the number of trainings on SMEs done by banks. It was indicated as an advisory variable and the study findings indicated a small negative effect (-0.006) of training on the return on assets. The fourth variable under analysis on its impact on return on assets was the debt-equity ratio of the SMEs. The study findings indicated a positive effect (0.038) on the return on assets of SMEs. This finding is positive because it is known that a high debt ratio indicates low service cost hence higher profitability. This outcome is similar to that of the amount of loan disbursed and the findings similar to that of Cabral and Mata (2003) and Carpenter and Petersen (2002) who stated the importance of internal financing on the growth of SMEs due to its cost.

The final variable for analysis under the study was the size of the company which was measured by the value of assets. The study findings indicated a positive effect of size of company to the return on assets. This finding is consistent to Oliveira and Fortunato (2006), Calvo (2006), and Moreno and Casillas (2007) and does not validate Gibrat’s law, in that negative and statistically significant relationships are present between growth and size.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter contains the summary and conclusion of the study with regards to the effects of banking services on growth of SMEs in Kenya. Chapter 5.2 looked at the summary of the study, while chapter 5.3 presented the conclusion of the study based on the results of the analysis. The limitations of the study were presented in chapter 5.4 and finally chapter 5.5 highlighted the study recommendations for further research.

5.2 Summary
The interrelationship between SMEs and banks are known to be of importance to the economy since the SMEs constitute a huge percentage of businesses in the country and banks are known to provide the impetus for growth through provision of finance to the SMEs. Little study had been done with regards to the effect of banking services and these being more than financial provision. Our study therefore identified the research gap and in order to fill the gap came up with research objectives and research questions in line with the objectives.

Literature review was carried out through identifying the theories relevant to the studies and also analyzing similar empirical studies that were deemed relevant. Both local and international studies were analyzed and from these literatures, our study was able to identify and quantify the variables to be used in the study. This enabled the study to come up with an analytical model which was used to answer the research question. The study used a descriptive cross sectional design and from the research design, and used primary data through questionnaires to gather information relevant for the study. The population was identified as the Top 100 SMEs for the year 2013 and sample size of 45 Top 100 SMEs was calculated in order to be representative of
the population and from this sample size, questionnaires were sent to the managers of these companies through email and a few through hand delivery.

The study was able to have 32 responses from the SMEs who were sent the questionnaires and from the responses the data was verified, coded and analyzed using SPSS software. Both descriptive statistics and inferential statistics were calculated and output interpreted. The means and standard deviations were calculated for the descriptive data and multiple regression analysis used to answer the research question. The study results indicated that the value of SMEs’ assets, debt-equity ratio, monthly average savings and SME training had an effect on the profitability (ROA) of the SMEs while the amount of loan given to SMEs had no effect on the profitability of the Top 100 SMEs in Kenya.

The study suggested that other factors which affect profitability of SMEs such as the growth stage of SME may be analyzed and their effects analyzed. Also, other analytical techniques such as Chi-Square may also be analyzed and the results analyzed.

5.3 Conclusion
Banks have a significant positive effect to the economy and especially to the small and medium sized enterprises. The banks provide various services which are used by the SMEs in order for them to grow. The importance of SMEs has been seen by banks having dedicated sections for SMEs so that their needs can be catered for. Their specialized attention provides a symbiotic growth for both banks and SMEs. This may be through loan financing, banking, training and other services that improves the performance of SMEs.

The study results indicated that the value of assets and the debt-equity ratio had a positive effect on profitability of Top 100 SMEs, average monthly savings, and bank trainings had negative effects on the Top 100 SMEs’ profitability. This can be inferred to the population to state that
value of assets and the debt-equity ratio improves profitability of the Top 100 SMEs in Kenya, while the amount of loan disbursed, average monthly savings, and bank training reduces the profitability of Top 100 SMEs and all SMEs in general.

5.4 Limitations of the Study
One of the limitations of the study included low number of respondents in the study. From the questionnaires sent which were 50 in number, only 32 of them responded. With a larger response rate, the margin of error of analysis is always reduced since larger sample sizes are always a better representative of the population.

Another limitation of the study was the absence of specific information required from the SMEs. These included the specific total asset value, actual monthly savings and profitability. This is because the SMEs are not mandated by law to provide financial information to anyone and they therefore prefer to keep their information private. The study had to group these variables so that there could be more responses from the SMEs. Also, the study had to ensure that the information provided is authentic by doing ratio calculations to see whether they make sense.

5.5 Recommendations of the Study
The study recommends provision of training services to SMEs so as to improve their performance. The trainings include management trainings, financial and tax trainings, and leadership trainings. These would greatly improve the profitability and growth of the SMEs.

The study also recommends that SMEs should have proper accounts documentation in order to enable compilation of data efficiently. Big economies are able to plan adequately for their SMEs when they have concise data available to them and can therefore make proper decisions. SMEs should be able to provide data centrally to a database which can be used to make decisions and formulate policies.
5.6 Suggestions for Further Research
The study suggests further research on the topic with regards to other factors that may be affecting profitability of SMEs. One of the variables that can be analyzed as having an effect on profitability of an SME would be the business life cycle as it also impacts the profitability of a business.

Also the study recommends that other analytic techniques such as Chi-square tests may be used in future studies to analyze the effects of banking services on SME profitability. This may give other insights that may not be available with the current analysis.
REFERENCES


Davidson ().


APPENDICES

Appendix I: Introduction Letter.

My name is Henry Mukuria from the University of Nairobi. I am carrying out a research study on the effects of bank financing on the profitability of SMEs in Kenya. The research is purely for academic purposes and I am glad to inform you that your input will form part of the research study. I would request your assistance in filling the questionnaire and any information given will be treated with utmost confidentiality.

Thank you.

Ng’ethe Henry Mukuria.
## Appendix II: Research Questionnaire

### PART A: DEMOGRAPHIC AND BUSINESS INFORMATION

<table>
<thead>
<tr>
<th>Respondent’s Name (optional)</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Name</td>
<td></td>
</tr>
</tbody>
</table>

### Period of business operation

- Under 5 years
- 6 to 10 years
- 11 to 20 years
- Over 20 years

### What is the nature of your business ownership?

- Sole Proprietorship
- Co-owned (partnership)
- Family owned
- Company

### Which bank are you currently banking with?

- 

### What is the approximate total value of assets in your business?

- 

### Do you feel your bank adequately caters for your business needs?

- Yes
- No

### What is the percentage of business is financed by bank loan?

- 0 to 20 percent
- 21 to 40 percent
- 41 to 60 percent
- Over 60 percent

## B1: Business Loans

### Do you have any credit facilities with the bank?

- Yes
- No

### If yes above, how much?

- 

### How many times have you taken a bank loan for business purpose?

- Once
- Twice
- More than twice

### The loan taken for business purpose improved the business operations?

- Agree
- Disagree

### What was the purpose for the loan?

- Business expansion
- Equipment purchase
- Working capital
- Other purpose

### What challenges did you encounter during loan processing?

- Collateral
- Credit scoring
- Waiting period
- Other (state)
What challenges do you encounter during payment of the loan facility?

<table>
<thead>
<tr>
<th>Tenure of loan facility</th>
<th>Cost of loan</th>
<th>Terms and conditions of loan</th>
<th>None</th>
<th>Other</th>
</tr>
</thead>
</table>

B2: Business Savings

How much do you save per month with your bank(s)?

What motivates your saving? (tick all that apply)
- Repay a loan
- To start business
- To grow/expand business
- To take a loan

B3: Business Training

How many trainings has your organization received in the past 12 months?

Rate the following assistance that you receive from your bank.

<table>
<thead>
<tr>
<th>Bank support</th>
<th>Always</th>
<th>Sometimes</th>
<th>Hardly</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>I receive training from my bank on how to save from my business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I receive business management lessons from my bank on how to improve my business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I receive training on how to prepare financial accounts for my business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I receive leadership training from my bank.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix III: List of Top 100 Small and Medium Enterprises for the year 2013

1. LEAN ENERGY SOLUTIONS LTD.
2. EAST AFRICAN CANVAS CO. LTD
3. DIGITAL CITY LTD
4. PLENSER LTD
5. ALLWIN AGENCIES (K) LTD
6. PROPACK KENYA LTD
7. VIVEK INVESTMENTS LTD
8. POWERPOINT SYSTEMS (EA) LTD
9. CONINX INDUSTRIES LTD.
10. SYNERMEDICA PHARMACEUTICALS (KENYA) LTD
11. COAST INDUSTRIALS & SAFETY SUPPLIES LTD
12. ISOLUTIONS ASSOCIATES
13. WOTECH KENYA LIMITED
14. AVTECH SYSTEMS LIMITED
15. KENYA BUS SERVICE
16. MURANGA FORWARDERS
17. SYNERMED PHARMACEUTICALS (K) LTD
18. TISSUE KENYA LTD
19. KENYA HIGHLAND SEED CO LTD
20. FAMIAR GENERATING SYS LTD
21. ALEXANDER FORBES
22. CHEMICALS & SCHOOL SUPPLIES LTD.
23. CHARLSTONE TRAVEL LIMITED
24. ONFON MEDIA LTD
25. ELITE TOOLS LTD
26. EUROCON TILES PRODUCTS LTD
27. ENDEVOUR AFRICA LIMITED
28. RONGAI WORKSHOP & TRANSPORT LTD
29. R & R PLASTICS LTD
30. CHIGWELL HOLDINGS LTD
31. CLASSIC MOULDINGS LIMITED
32. PEWIN CABS LIMITED
33. NOVEL TECHNOLOGIES EA LTD
34. XTREME ADVENTURES LTD
35. VINTAGE AFRICA LIMITED
36. PUNJANI ELECTRICAL AND INDUSTRIAL HARDWARE LIMITED
37. SPRY ENGINEERING CO. LTD
38. GENERAL CARGO SERVICES LTD
<table>
<thead>
<tr>
<th></th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.</td>
<td>PINNACLE (K) TRAVEL &amp; SAFARIS</td>
</tr>
<tr>
<td>40.</td>
<td>PANESARS KENYA LIMITED</td>
</tr>
<tr>
<td>41.</td>
<td>SPECIALIZED ALUMINIUM RENOVATORS LTD.</td>
</tr>
<tr>
<td>42.</td>
<td>CUBE MOVERS LIMITED</td>
</tr>
<tr>
<td>43.</td>
<td>BROGIIIBRO COMPANY LTD</td>
</tr>
<tr>
<td>44.</td>
<td>TOTAL SOLUTIONS LTD</td>
</tr>
<tr>
<td>45.</td>
<td>TYREMASTERS LTD</td>
</tr>
<tr>
<td>46.</td>
<td>XRX TECHNOLOGIES LIMITED</td>
</tr>
<tr>
<td>47.</td>
<td>SENSATION LTD</td>
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<tr>
<td>48.</td>
<td>EUREKA TECHNICAL SERVICES LTD</td>
</tr>
<tr>
<td>49.</td>
<td>PALBINA TRAVEL LIMITED</td>
</tr>
<tr>
<td>50.</td>
<td>WAUMINI INSURANCE BROKERS LTD</td>
</tr>
<tr>
<td>51.</td>
<td>ASL CREDIT LIMITED</td>
</tr>
<tr>
<td>52.</td>
<td>ZAVERCHAND PUNJA LIMITED</td>
</tr>
<tr>
<td>53.</td>
<td>CANON CHEMICALS LTD</td>
</tr>
<tr>
<td>54.</td>
<td>PACKAGING MANUFACTURERS(1976) LTD</td>
</tr>
<tr>
<td>55.</td>
<td>TRIDENT PLUMBERS LTD</td>
</tr>
<tr>
<td>56.</td>
<td>TYPOTECH</td>
</tr>
<tr>
<td>57.</td>
<td>KINPASH ENTERPRISES LTD</td>
</tr>
<tr>
<td>58.</td>
<td>VEHICLE &amp; EQUIPMENT LEASING LTD</td>
</tr>
<tr>
<td>59.</td>
<td>SHEFFIELD STEEL SYSTEMS</td>
</tr>
<tr>
<td>60.</td>
<td>COMPLAST INDUSTRIES LTD</td>
</tr>
<tr>
<td>61.</td>
<td>DUNE PACKAGING LIMITED</td>
</tr>
<tr>
<td>62.</td>
<td>HEBATULLAH BROTHERS LIMITED</td>
</tr>
<tr>
<td>63.</td>
<td>SPICE WORLD LIMITED</td>
</tr>
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<td>64.</td>
<td>MUSEUM HILL WINES LTD</td>
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<tr>
<td>65.</td>
<td>YOGI PLUMBERS LTD</td>
</tr>
<tr>
<td>66.</td>
<td>VAJRA DRILL LTD</td>
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<tr>
<td>67.</td>
<td>MELVN MARSH INTERNATIONAL LTD</td>
</tr>
<tr>
<td>68.</td>
<td>KANDIAFRESH PRODUCE SUPPLIERS LTD</td>
</tr>
<tr>
<td>69.</td>
<td>FAYAZ BAKERS LIMITED</td>
</tr>
<tr>
<td>70.</td>
<td>SPECICOM TECHNOLOGIES LIMITED</td>
</tr>
<tr>
<td>71.</td>
<td>MOMBASA CANVAS LTD</td>
</tr>
<tr>
<td>72.</td>
<td>SILVERBIRDTRAVEL PLUS LTD</td>
</tr>
<tr>
<td>73.</td>
<td>IRON ART</td>
</tr>
<tr>
<td>74.</td>
<td>RADAR LIMITED</td>
</tr>
<tr>
<td>75.</td>
<td>MASTER POWER SYSTEMS</td>
</tr>
<tr>
<td>76.</td>
<td>HARDWARE &amp; WELDING SUPPLIES</td>
</tr>
<tr>
<td>77.</td>
<td>MASTERS FABRICATORS LTD</td>
</tr>
<tr>
<td>78.</td>
<td>SOFTWARE TECHNOLOGIES LTD</td>
</tr>
<tr>
<td>79.</td>
<td>HERITAGE FOODS KENYA LTD</td>
</tr>
</tbody>
</table>
80. AFRICA TEA BROKERS LTD
81. RAEREX (EA) LIMITED
82. TRAVELSHOPPE COMPANY LTD
83. ORIENTAL GENERAL STORES LTD
84. CHUMA FABRICATORS LTD
85. STATPRINT LTD
86. SOLLATEK ELECTRONICS LTD
87. SMARTBRANDS LTD
88. DE RUITER EAST AFRICA LTD
89. KISIMA DRILLING (EA) LTD
90. CARE CHEMISTS
91. BROLLO KENYA LTD
92. CANON ALUMINIUM FABRICATORS LTD
93. SATGURU TRAVEL & TOURS LTD
94. KUNAL HARDWARE AND STEEL
95. DEEPA INDUSTRIES LIMITED
96. SKYLARK CREATIVE PRODUCTS LTD.
97. UNEEK FREIGHT SERVICES LTD
98. BBC AUTO SPARES LTD
99. LANTECH (AFRICA) LIMITED.
100. POLYTANKS LIMITED

Source: http://eastafricatop100.com/top-100-companies/

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