THE IMPACT OF COMMERCIAL BANKS' CREDIT ON SMALL AND MEDIUM ENTERPRISES FINANCING IN KENYA.

BY

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DECLARATION

I declare that this project is the work of my own hands and has not been presented to any other institution for an Academic award.

Signature……. …Date…….…….

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

Signature……. Date……

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DEDICATION

This research project is dedicated to my parents who committed to give me good education and have always encouraged and supported me to be the best that I can be. To my siblings- Jimmy, Evelyn, and Betty who challenge motivate, and inspire me to grow and be a better person, to my friends Jane Njoki and Teresia Nduati who has stood by me at all times and to all my fellow students who made the journey worthwhile through their cooperation and team spirit.

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Thank you all.

Acronyms and Abbreviations

SMEs- Small and Medium Enterprises

NGOs- Non- Governmental Organizations

GDP- Gross Domestic Product

GoK- Government of Kenya

LDCs- Less Developed Countries

ABSTRACT

The study was seeking to determine the impact of commercial banks credit on SME financing in Kenya. The scope of the study was the 43 commercial banks presently operating in Kenya. A descriptive survey was undertaken in order to measure the cause and effect of relationships between the commercial banks returns on equity and SMEs financing. It also described the relationship between the ratio of commercial bank loans to SMEs to the total loans in the Economy. Secondary data was obtained from the World Bank and the Kenya National Bureau of Statistics. The research employed a time series correlation study. SME finance, the dependent variable, was correlated with the annual rates of changes in lending by commercial banks as presented in financing arrangements of commercial banks. The data on SME finance (SMEF) and the ratio of SME loans to the total credit in the economy(SMETC) was obtained from the Kenya National Bureau while the data on Commercial banks return on equity of the 43 commercial banks in Kenya was obtained from the World Bank. The data used covered a 10-year period from 2003 to 2012 and covered all the 43 commercial banks. SME finance was regressed against rates of change in amounts lent by commercial banks lagged one year. The study found out that the ratio of SME loans to total credit in the economy has been declining over the years. On the other hand, commercial banks return on equity increased thereby increasing the amount of SME finance.

The study recommends that a further research could also be done to look into different financing strategies adopted by commercial banks in serving the SME sector.

Keywords: Small and Medium Enterprises, Commercial Banks return on equity, SMEs Financing

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CHAPTER ONE

INRODUCTION

This chapter gives an overview and introduction of the research study to be conducted. It gives the background information to the study, the problem statement, and the purpose of the research, the specific objectives of the study, significance of the study, the research questions, and the scope of the study, limitation of the study and the justification of the research.

1.1 Background to the study

Small and Medium Enterprises (SMEs) have been perceived as driving force for financial development in any country. Empirical evidences have demonstrated that they offer more openings for work, eradicate poverty and lead to increased output productivity level in a country. Access to a bank account gives an individual greater control and security over their money, and a loan from a credit organization can be vital in promoting enterprise development (Upadhyaya, 2011). Banks need to address the needs of these SMEs so that they can grow and expand and therefore be a major driver in the growth of the economy. Funds are of incredible significance to the prosperity of SMEs. In acknowledgment of the role of SMEs in the economic development process of Kenya, the government has increased endeavors to quicken the growth of SMEs and also extend business enterprise SMEs access to funds.

Access to finance is key to business development. Investment and innovation are not possible without adequate financing. A difficulty in getting finance is one of the main obstructions to the growth of many businesses, particularly small and medium sized enterprises (SMEs). Financial flows to SMEs are increasing but remain subdued (Berger ,2004).

According to a World Bank study, access to finance is perceived as one of the main obstacles to doing business. Such situations may be due to the inability of the SME to offer sufficient loan

collateral. Commercial banks play a major financial deepening and intermediary role of financial support to SMEs. Through banking institutions savings are mobilized hence providing a major source of finance required for economic development of individuals and the country (Klapper, 2005). As the Kenyan to embarks on a period of relatively high growth, the financial sector's role to channel credit affordably and efficiently to small and medium enterprises (SMEs) will become ever more central for inclusive and sustained economic development.

Recently, commercial banks have significantly expanded their offerings of financial services to consumers and units of the government all over the global economy.

1.1.1 Bank definitions of micro, small and medium enterprises

One of the main challenges in the analysis of SME finance is that the definition of what is considered a micro, small, medium or large enterprise differs widely across banks. While the Government of Kenya (GoK) has proposed to adopt a unified definition of the micro and small enterprise sector in terms of turnover and number of employees, banks' definitions differ significantly both in terms of the information that is being collected and the categorization of enterprises. According to the GoK, firms are defined as 'micro' when they have between 1 and 10 employees and a turnover not exceeding KSh500,000. They are considered 'small' when they have between 11 and 50 employees and a turnover not exceeding KSh5 million14.

1.1.2Key drivers to banks involvement with SMEs

Financial returns are the driving force for banks to target SMEs. The high profitability of the SME sector, combined with growing competition in the corporate sector and the consequent reduction in profit margins encourages banks to grow their SME portfolio. This partly confirms an argument known as the 'middle-market' hypothesis: as numerous banks entered the market with a specific focus on either the corporate sector or the microenterprise sector, the new frontier for expansion for many institutions is the SME market. Clearly the strategy of engagement with SMEs is different depending on the entry point. Corporate-oriented banks tend to offer scaled-down versions of their financial products and aim to capture small businesses in the supply chains of their existing large-scale clients. Banks with a focus on microenterprises tend to scale-up their services in order not to lose their clients as they grow from microenterprises to SMEs.

Future returns in the sector are considered an important factor for engaging with SMEs: banks aim to position themselves ahead of competitors in a market that is perceived as both fast growing and fast evolving. Banks compare costs, risks, and profitability of the SME sector relative to the

corporate sector, the large majority of banks conclude that SMEs tend to be much costly and riskier than large corporates, but also more profitable. Cross-selling and supply-chain links are more important drivers as well.

1.1.3 Obstacles to bank involvement with SMEs

The analysis of the obstacles to SME financing depicts a clear picture of the specific challenges faced by financial institutions in the SME sector. The most significant obstacles are Macroeconomic factors such as inflation and foreign exchange risk followed by SME-specific factors. In this category, most of the reports on commercial banks highlighted three main issues: the poor quality of financial records, inadequate (or complete lack of) collateral, and informality. Some banks are also cautious that SMEs tend to suffer from poor managerial practices and an inability to manage risk. The SME sector is termed by most banks as particularly risky, both because dealing with SMEs implies high operating costs and because banks often lack proper risk appraisal and management processes for this client sector. The survey results also showed that the legal framework affecting banks and SMEs was identified as a significant or very significant obstacle by a number of banks. In many cases banks relate problems to the inefficiency of the judicial system, shortcomings in the collateral law, and overly stringent anti-money laundering regulations for the SME sector.

1.2 Statement of the problem

Prior analysts have recognized the absence of funds as a danger to the performance of SMEs. For SMEs to play out their role in the economy, they require adequate finances in terms short and long-term loans. Satisfactory financing of SMEs is the way to their survival, as it has been recorded in writing that financial imperative is one of the fundamental reasons SMEs do not prosper in Kenya. Financing quality is the principle determinant of small and medium enterprises development in developing countries. The study will focus the internal factors that determine the lending of commercial banks to SMEs. The problem will be tackled using time series regression to show how the Commercial banks in Kenya have led to gradual increase in SME financing.

1.3General objective

The purpose of this study is to assess impact of commercial banks' credit to SMEs financing in the Kenyan Economy.

1.4 specific objectives

1. To evaluate the relationship between commercial banks return on equity and SMEs finance in the Kenyan economy.
2. To find out how the ratio of SME credit to Total Credit in the Economy affects SME finance.

1.5 Research questions

1. How do commercial banks return on equity affect SMEs finance in the Kenyan economy?
2. How does the ratio of SMEs credit to the total credit affect SME finance in the Kenyan economy?

1.6 Significance of the research

This study will be of significance to monetary authority, policy maker, government, academia and the general public. The findings of this study will help the government and the monetary authorities to see the effectiveness of monetary policy in the management of the Kenyan economy in terms of credit demand and supply to SMEs which have a spillover effect on Kenyan economic growth. It will also assist the government to make better policies that can favor the development of the microfinance sector of the economy. The results of this study will also offer valuable insights to investors, donors and providers of financing services in the monitoring of their activities. Both loan officers and the institutions managers will be able to evaluate and assess their impact in the growth of micro-enterprises and general alleviation from poverty of those associated with micro credit. This research work further serves as a guide and provides insight for future research on the topic and related field for academia's and policy makers who are willing to improve on it. The study will also contribute to knowledge by appraising the impact of commercial bank returns of equity and government expenditure on the growth of SMEs output in Kenya.

1.7 Scope of the study

This research study was undertaken in Kenya, covering all the forty-three banks licensed, supervised and regulated by CBK as at December 2013. The study covered a time frame of 10 years starting from 2003 to 2012.

1.8 Limitations and delimitations of the study

Most small and medium enterprises to lack of collateral, credit history, financial statements and banking history. This is the main limitation making most specific questions to lack answers. The data available lacks the right format to give relevant answers to current study. Despite all the existing articles about the development and operations of SMEs in Kenya, very little knowledge is known about them. The most recent research found that there are now 7 million independent companies in Kenya. It is very difficult to acquire precise insights of independent companies in SMEs or in the different divisions of the economy. This data is inaccessible on both a common and nationwide level. The absence of exact information makes the appraisal and measurements of access to credit gap a mammoth assignment. It additionally hampers research and the capacity of Government offices and non-governmental organizations(NGOs) to offer the right directed help to SMEs. The absence of information is especially perceptible among unregistered organizations that utilize either easygoing work or offer business just to the proprietor. While in many developed nations these organizations are viewed as minimal in their commitment to Job creation and GDP, in Kenya as in many LDCs, these casual and small scale businesses are vital to the work and survival of a large number of people.

Adding to the disarray and difficulties in SME estimation and general comprehension are the contrasts in definitions. Most of the reports measure business enterprise but not the number of SMEs in making of the universal research on the rate of business crosswise over countries. Data will therefore be sourced from the World bank and Kenya national bureau of statistics which contain the history of loans from banks to growing firms.

1.9 Justification of the study

Access to finance is vital to business advancement. Venture creation and development are most certainly not possible without sufficient financing. A difficulty in getting money is one of the principle obstacles to the development of numerous organizations especially small and medium enterprises. Access to fund is still seen as critical issue by a few SMEs. Looking at changed sorts of investments, small scale undertakings and more inventive organizations specifically consider their financing as the most squeezing problem. Apart from this, critical contrasts in financing conditions for SMEs between member states keep on prevailing. Countries with common intermediation models have assorted qualities which are reflected in the relative significance of different funding sources utilized by firms and also the level of advancement of different sorts of monetary establishments. This include banks, speculation assets, protection and annuity funds and fragments of monetary markets.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter contains a detailed review of the determinants for SMEs financing which include; capital requirements for lending and the importance of vibrant markets to SMEs financing. The chapter gives a clear picture of connection between the variables in question and their relation to SMEs funding activities.it also contains the gaps in previous researches and their critiques.

2.1Theoretical literature

The finance based theory has the belief that the proceedings of commercial organizations act as an important tool for facilitating increased productivity in an economy. The theory argues that nations that have better-developed financial process develop faster. The significance of financial organizations has been discussed in literature. Early economists like Schumpeter (1911) pointed out the role of commercial banks in the SMEs sector. Schumpeter believed that proper allocation of savings by means of identification and financing of business operators have high chances of succeeding through putting innovative products and the tools that lead to growth. Subsequent economists including McKinnon 1973, Fry 1988, King and Levine 1993 have also offered support on the above postulation on the importance of commercial banks to the growth of an economy.

There exists an array of transmission channels via which monetary policies influence economic undertakings and these channels have been widely examined in different monetarist schools of thought. The monetarists believe that a change in the money magnitude is as a result of a change in the supply money. Open market operations initiated by the Central Bank normally leads to an increase in the stock of money. This increases the cash reserves held by the commercial banks

enabling them to increase their ability to offer credit hence increase money supply through multiplier effect. In an attempt to cut down the amount of money in their portfolios, banks and non-bank institutions buy securities which possess the same characteristics as those sold by the Central bank. This stimulates operations in the real sector like the SMEs.

In a closely related research, Beneivenga and smith (1991) stated that growth of banks and efficient funding intermediation stimulates economic development by directing savings to the most productive operations and cutting on liquidity risks. Their final conclusion was that financial assistance generates growth. Based on this findings, this research examines the extent to which credit offered to SMEs has led to the sectors development. This implies that commercial banks funding can be of great importance to the growth of SMEs.

2.2 Empirical literature

On macroeconomic level, commercial banks stand for the primary source of credit to smallest businesses and many individuals. Bank deposits represent the most form of liquid money such that the central bank efforts to control the nation's money supply and level of aggregate economic undertaking is accomplished by introducing a change in the availability of loans at banks.

Umaru, Hamidu & Musa (2006) conducted a thorough examination on debt and economic growth in Kenya. The key point of the review is to establish the relationship between economic development, external and domestic obligation. The study used available information on external debt, domestic debt and on economic growth for the period between 1970 and 2010. To create the relationship, Ordinary Least Square analysis was used. The research also applied the Augmented Dickey-Fuller technique in testing the unit root property of the arrangement and Granger causality test to determine the causation between GDP, external debt and domestic debt. The causality test

proposed that there is a bi-directional causation between external debt and GDP, but no causation between domestic debt and GDP. The OLS analysis, however, uncovered
a negative relationship between external debt and financial development and a positive relationship between domestic debt and economic growth. This study concluded that debt, local or external, did not contribute to economic development. It also concluded economic growth increased with an increase in domestic debt but fell when external debt increased.

Maana, Owino & Mutai (2008) conducted a research with the aim of coming up with the development in public domestic debt in Kenya and its impact on the economy between 1996 and 2007.The research analyzed the relationship between macroeconomic Variables model and economic growth. The macroeconomic variables used in the research include lagged real GDP growth, ratio to GDP of government expenditure, private sector credit, broad money supply (M3), secondary school enrolment, and trade. The ratios to GDP of credit to private sector and broad money supply were used in the measurement of financial development. The research findings were that expansion of domestic debt had a positive but not critical effect on economic growth in that period. The conclusion of the research was that domestic debt did not have an
effect on economic growth.

Marijana (2009) additionally conducted another research concentrating on money related intermediation by banks and economic growth. The goal of the study was to examine empirical research that had been conducted to create the link between financial intermediation by banks and economic development in the two decades between 1989 and 2009. The review gave consideration to the issues of causality, non-linearity, time viewpoint, monetary intermediaries and association

terms. The survey demonstrated that the relationship between financial intermediation by banks and economic growth cannot be underestimated. In reality the study scrutinized the prioritization of financial sector approaches for economic development. The study cast doubts on the affirmation that financial intermediation by banks drove economic growth.

Zhang, Wang & Wang (2012) conducted a study on financial development and economic growth in China. The objective of the study was to investigate and establish the relationship between financial development and economic growth in China. The study was done at city level where 286 Chinese cities were studied over the five -year period between 2001 and 2006. The study applied both traditional cross-sectional regression and first differenced and system GMM estimators for dynamic time series. The results of the research suggested that most traditional indicators of financial development like Credit, Deposit, Savings, the share of fixed asset investment financed by domestic loans relative to that financed by state budgetary appropriation positively related to economic growth. However, the ratio of corporate deposits to total deposits had a negative effect on economic growth. This study showed that credit had positive effect on economic growth.

The study by Aurang (2012) is done on the contribution of the commercial banking sector on economic growth in Pakistan. The aim of the study was to investigate the contributions of the commercial banking sector on Pakistan's economic growth. The study was done on 10 banks for the period of 1981 to 2010. Analysis of the data from the 10 banks was done using the Augmented Dickey Fuller (ADF), Philip Perron unit root test, ordinary least square and the granger causality test. The regression results indicated that deposits, investments, advances, profitability and interest earnings had significant positive impact on economic growth. The Granger-Causality test

confirmed that there is a bidirectional causal relationship between deposits, advances and profitability and economic growth. The study concluded that activities in the banking sector, including advances by the commercial banks affected economic growth.

Aliero, Abdullahi & Adamu (2013) did a study on private sector credit and economic growth in Kenya. The study sought to analyze and establish the relationship between private sector credit and economic growth in Kenya. The study is conducted for the period 1974-2010. The Autoregressive Distributed Lag (ARLD) bound F-test for integration approach is used for analysis of the data. The results indicated that a long run equilibrium relationship existed between private sector credit and economic growth. However, causality results indicated that there is no causal relationship between private sector credit and economic growth. The conclusion is that that private sector credit did not affect economic growth.

Waiyaki (2013) did a study focusing on financial development, economic growth and poverty in Kenya. This study was conducted with the aim of finding out the nature of the relationship between financial development, economic growth and poverty. The study covered the period 1997 to 2010 using data from annual reports from the Central Bank of Kenya. Data was analyzed using unit root tests, co- integration analysis and granger causality tests. The study found mixed results concerning the relationship between financial development variables and economic growth. For instance, for the benefit of this research, money supply and bank deposits had a significant influence on economic growth. On the other hand, financial indicators like stocks volume had no significant influence on real GDP. The conclusion is that money supply and bank deposits had great positive effect on economic growth.

Abubakar & Gani (2013) conducted study on financial development and economic growth. The aim of the study was to examine and establish the long run relationship between financial development indicators and economic growth in Kenya. The study was done for the period of time between 1970 and 2010. Among other indicators of financial development, the study also made use of liquid liabilities of commercial banks, credit to the private sector, interest rate spread and government expenditure. The study applied the Johansen & Jwill uselius (1990) approach to co-integration and Vector Error Correction Modeling (VECM). The study found that in the long-run, liquid liabilities of commercial banks exerted significant positive influence on economic growth while credit to the private sector, interest rate spread and government expenditure exerted significant negative influence. The study concluded that credit to the private sector deterred economic growth.

2.3 Critique of existing literature

As shown in the literature review, there seems to be agreement among the theories of working capital management that effective funding has an effect on economic growth. However, the nature of the effect varies from context to context. Some studies show a close connection between lending by commercial banks and economic growth with some showing causality between them. On the other hand, other studies show weak relationship or none at all.

Kenya being a country that has for some time followed the route of improving access to credit in the SME sector as a mechanism of spurring economic growth provides the opportunity for the investigation of whether this policy will yield results. There is need to conduct a research to find out the relationship between SME finance and Kenya's economic growth. This provides the motivation for this research.

2.4 Research gaps

The main identified gap that necessitated this study is the perceived problem of inadequate financing from commercial banks in Kenya to SMEs. Therefore, this study aims at investigating the impact of commercial banks on SMEs financing in Kenya as well as specifically appraising the impact of the returns on equity of the selected banks on SMEs financing; hence, a time series data regression approach is followed so as to incorporate the cross-sectional data on return on equity of the banks drawn into the sample. The period under review is between 2003 and 2012. The rest of this study is segmented as follows section two reviews related empirical studies, section three discusses the materials and method, section four discusses the findings and section five focuses on conclusion and recommendations.

2.5 Theoretical framework

This research was based on Wicksell Theory of Lending and Economic Growth. This theory was proposed by a Swedish economist called Knut Wicksell in 1901 with solid impact from the quantity theory of money. Wicksell based his theory on a comparison of the marginal product of capital with the cost of borrowing money. The theory by Wicksell therefore took a monetary approach to economic growth. Wicksell (1901) argued that if the interest rate of borrowing money is below the natural rate of return on capital, entrepreneurs would borrow at the money rate to purchase capital goods. This would lead to increased demand for all types of resources and in turn, their prices. Conversely, if the interest rate of borrowing money is above the natural rate of return on capital entrepreneurs would sell the capital goods and hold money. This would lead to a higher demand for money and in turn the cost of borrowing. Wicksell connected the rate of interest with the production gap. The production gap represented the variance between what ought to be produced and what is produced.

This theory is important to this study since it will give a direct connection between the demand for and the cost of money and output in a country. It shows how interest rates affect borrowing, which in turn affects the purchase of capital goods and how production is affected. If interest rates are higher than the natural rate of return, borrowing will reduce therefore reducing economic growth as a result of low investment. On the contrary, if the rate of interest is lower that the natural rate of return, then more borrowing will take place and this will spur economic growth through more investment in the SME sector.

2.6 Conceptual framework

Dependent variable Independent variables

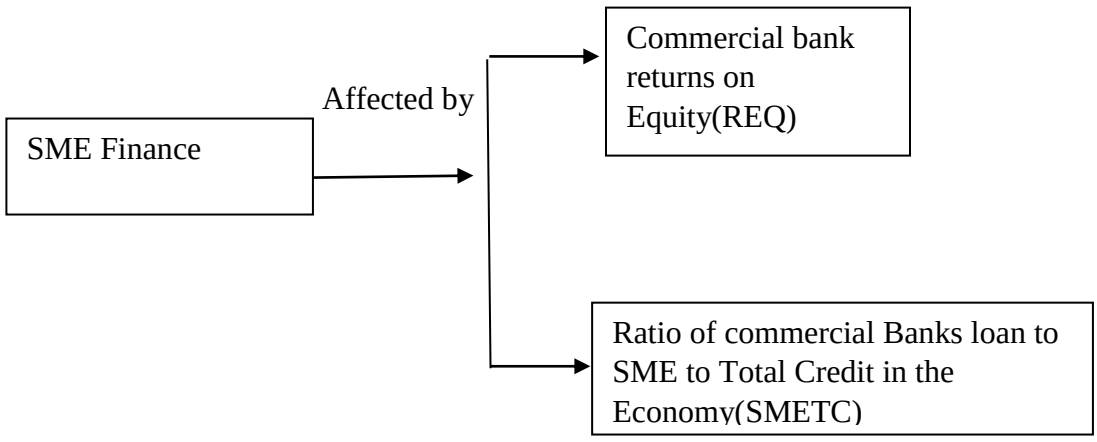

Figure 2.6 Conceptual framework.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter outlines the research methodology as the mode of achieving the purpose of the study. It specifically highlights the methods used in carrying out the study in an attempt to answer the research questions. In addition, various methodological issues discussed in the chapter include population, sampling technique, sampling size, data collection and analysis of the methods which were adopted in conducting the study.

3.2 METHODOLOGY.

The data used in the research was obtained mainly from secondary sources. These include the World Bank and the Kenya National Bureau of statistics. This paper utilized time series regression for the period 2003-2012 which presents pooled regression (constant effect) estimates to analyze how the commercial banks in Kenya have succeeded in promoting economic growth through their funding of SMEs. This study will examine the impact of commercial banks in financing SMEs using a sample of the 43 commercial banks present in Kenya. These banks dominate the banking sector with asset base of more than 50% of the total assets in the sector.

3.3 RESEARCH DESIGN

A descriptive survey design was embraced for this study. It is best for this study because it enables the researcher to collect a large quantity of in-depth information about the population being studied. This descriptive design discovered and measured the cause and effect of relationships between the commercial banks returns on equity and SMEs financing. It also described the

relationship between the ratio of commercial bank loans to SMEs to the total loans in the Economy. A descriptive research determines and reports the way things are and attempts to describe possible behavior, attitude, values and their characteristics. This study design is advantageous in that it results in formulation of knowledge and solutions to problems.

3.4 MODEL SPECIFICATION

The model for this study assumes an underlying relationship between some commercial banks variables that can influence or determine the level of their finance on small and medium scale enterprises of a nation. The model specifies the dependent variable measured with Small and Medium Enterprise Finance dependent on Commercial Banks return on Equity (REQ) and ratio of Commercial Banks Loans to SME to Total Credit in the Economy (SMETC), representing the independent variables. The functional relationship is presented as:

SMEF = f (REQ, SMETC)

The model is expressed in econometric equation as:

$SMEF=\beta o+ \beta 1REQ+\beta 2SMETC+ \mu$ ……. (1)

$Y= \beta o+ \beta 1X1+ \beta 2X2+ \mu$…… (2)

Where Y represents Small and Medium Enterprises financing, X1 represents commercial banks returns on equity and X2 represents ratio of Commercial Bank Loans to SME to Total Credit in the Economy (SMETC).

$\beta 0$ Intercept of the model/Constant parameter; $\beta 1$, $\beta 2$, $\beta 3$ Coefficient of the independent variables/Regression parameters; μ - Stochastic/Error term

The theoretical expectations in the model are $\beta 1, \beta 2, \beta 3 > 0$ (indicated by the positive sign) i.e. an increase in either $\beta 1$, $\beta 2$ or $\beta 3$ leads to an increase in SMEF.

3.2 TARGET POPULATION

The study was carried out on 43 Commercial banks currently operating in Kenya. The banks are of particular focus for this study due to their large profitability and growth in the past years and up to date.

3.3 SAMPLE AND SAMPLING TECHNIQUES

The study aimed at collecting information from specific sources which have recorded data on banks finance to SMEs. The technique that effectively suited this study was purposive sampling technique. This is a technique that is understood as the process of choosing respondents, based on specific features identified as selection criteria for the target population. Purposive sampling technique ensures that the information is provided as required since the available data sources offer enough knowledge and understanding of the research under consideration.

3.4 RESEARCH INSTRUMENTS

Many methods of data collection exist and therefore a choice of a tool and instrument depends mainly on the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. The study employed secondary data collection. Secondary data was acquired from the World bank and the Kenya national bureau of statistics.

This method is cost effective, easy to administer and large amounts of data can be collected in a short period of time enabling comprehensive analysis. The researcher administered this method of data collection because most businesses and entities, the target population in the study area were in close proximity to each other. The researcher maintained records of all data acquired administered to ensure they were all received.

3.5 DATA COLLECTION

All the data used in the study was obtained from the World bank and the Kenya National Bureau of Statistics. The researcher accessed published financial statements for the ten- year period of study from the World bank to obtain data on the return on equity of commercial banks and the Kenya National Bureau of Statistics to obtain the data on the ratio of commercial Bank loan to SME to Total Credit in the Economy (SMETC). The data used covered the period 2003 to 2012.

3.6 DATA PROCESSING AND ANALYSIS

This research used data for two variables namely: the commercial bank returns on equity (REQ) and the ratio of commercial Bank loans to SME to Total Credit in the Economy (SMETC). The annual values of financial arrangements obtained from the annual financial records of the 43 banks were summed up to provide a single value of financial arrangements for the whole sector in a year. The values of SMEs finance market growth used were calculated from values obtained from the Kenya National Bureau of Statistics. The relationship commercial bank returns on equity and the change in financing arrangement was determined using a regression model. The regression model places SMEs finance as the dependent variable while commercial bank returns on equity (REQ) and the ratio of commercial Bank loans to SME to Total Credit in the Economy (SMETC) as the independent variables. However, in the regression, the change in financial arrangements was lagged by one year since the results of changes in the financing policy are realizable in the economic performance reported in the following year.

CHAPTER 4

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter presents results of the study based on the formulated objectives as presented in chapter one. This chapter analyzes the variables involved in the study. Descriptive design is appropriate as it assisted in describing the state of the Commercial bank in regard to the loans they lend to the SMEs. This chapter presents the analysis of the results and gives an interpretation of the same based on each objective. Collected data is summarized and analyzed using descriptive statistics. The results were presented using bar charts, frequency and percentage tables.

4.2 Presentation of findings

The result of the time series regression analysis is presented in the constant effect otherwise known as pooled Ordinary Least Square (OLS) regression. The significance of the parameters in the model and the model in entirety is determined using their respective probability value (p-value). The condition for statistical significance at 5% significance level is that p-value must be less or equal to 0.05.

4.2.1 Descriptive statistics

Table 1: Descriptive statistics

	N	minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
SMEF	10	3.0226	13.4521	6.836920	1.1491750	3.6340105
SMETC	10	3.7000	25.6000	11.220000	2.4620136	7.7855707
REQ	10	16.7682	25.9751	21.541890	.8032250	2.5400205
Valid N (List wise)	10					

From the findings in the table above, the study found that the mean of the ratio of commercial banks SME loans to total loans over the period was 11.22%, the mean of the commercial banks returns on equity given over the period was Kenya shillings 21.54189 million. The highest rate of the ratio of commercial banks SME loans to total loans was 25.6% while the lowest was 3.7%. The highest amount of commercial banks returns on equity stood at Kenya shillings 25.9751 million while the lowest was Kenya shillings 16.7682 million. The highest SME finance generated was 13.4521million while the lowest SME finance generated amounted to Kshs. 3.0226 million.

4.2.2 Correlation Analysis

The table below shows the Pearson correlation coefficient generated from the data.

Table 2: Pearson correlation coefficient

	SMEF	SMETC	REQ
SMEF	1	-0.822**	0.508
SMETC	-0.822**	1	0.070
REQ	0.508	0.070	1

Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

A correlation coefficient, denoted by r, enables one to quantify the strength of the linear relationship between ranked or numerical variables. This coefficient takes the values between -1 and +1 (Saunders, Lewis, & Thornhill, 2009). There is a strong negative correlation between the ratio of SME loans to total credit in the economy (SMETC) and SME financing ($r= -0.822$, $p<0.01$). However, there is a statistically strong positive correlation between SME financing and commercial banks return on equity ($r= 0.508$, $p< 0.01$).

4.2.3 Regression Analysis

Table 3: Model Summary

Model summary

Model	R	R Square	Adjusted R square	Std. Error of the Estimate
1	.822[a]	0.676	0.583	2.3461393

a. Predictors: (Constant), REQ, SMETC

From the finding in the above table the adjusted R squared($\hat{\mathbf{R}}^2$) is the coefficient of determination which shows the variance(proportion) of SME financing due to changes in commercial banks return on equity (REQ) and the ratio of SME loans to total loans in the economy (SMETC) which is 0.583, which means that 58.3% of the total variance in the SME financing has been explained jointly by the two independent variables and the remainder of 41.7% is accounted for by the stochastic term or factors not specified in the model. The R squared (R2) is 0.676 which means that 67.6% of variation in the SME financing was explained by the changes in the commercial banks return on equity and the ratio of SME loans to total loans in the economy (SMETC).

Table 4: Anova

ANOVAb

Model 1	Sum of Square	df	Mean Square	Sig.
Regression	80.324	2	40.162	.019[b]
Residual	38.531	7	5.504	
Total	118.854	9	9	

a. Dependent Variable: SMEF

b. Predictors: (Constant), REQ, SMETC

In order to determine the goodness of fit of the model ANOVA analysis was done. From the above table the significance level of the model is 0.019% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p- value) is less than 5%.

Table 5: Regression Coefficients

Model 1	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	10.130	9.184	---
SMETC REQ	-0.375 0.043	0.125 0.383	-0.804 0.03

a. Dependent Variable: SMEF

From the findings of the regression the following regression model was established;

Y= 10.130+0.043X1-0.375X2

From the findings of the regression analysis, it was found that holding the ratio of SME loans to total loans in the economy and commercial banks return on equity at constant zero the SME finance generated would be 10.130 million. The model further reveals that a unit increase in commercial bank return on equity would lead to increase in SME financing by 4.3%, a unit increase in the ratio of SME loans to total loans in the economy would lead to a decrease in SME financing by a factor -37.5%. The above findings are statically significant at 5%.

4.2.4 SMEs finance, commercial banks return on equity and the ratio of SME loans to total credit per year.

Table 6: SMEs finance, REQ Vs SMETC.

YEAR	**SME Finance (millions) SMEF**	**Commercial banks return on equity(%) REQ**	**Ratio of SME loans to total credit in the economy (%)SMETC**
2003	3.0226	16.7682	25.6000
2004	3.1857	19.6711	21.3000
2005	4.1049	22.7370	16.9000
2006	4.6529	23.3937	14.1000
2007	5.3380	19.6434	7.8000
2008	6.6462	21.6289	7.0000
2009	6.7206	20.5204	6.7000
2010	9.2067	25.9751	5.3000
2011	12.0395	23.0958	3.7000
2012	13.4521	21.9853	3.8000

4.3 Summary and Interpretation of the Findings

Correlation analysis revealed that there was no statically relationship between the ratio of SME loans to total credit in the economy (SMETC) and SME financing (r= -0.822, p>5%).It also revealed a strong relationship between commercial banks return on equity and SMEs financing (r= 0.508, p<5%).This implies that revenue collection is strongly affected by Commercial banks return on equity and weakly affected by the ratio of SME loans to total credit in the economy. The coefficient of determination(R2) which shows the variance of SMEs financing jointly explained by both commercial banks return on equity and the ratio of SME loans to the total credit in the economy was 0.583 showing that 58.3% in the variation in SME finance generated was jointly explained by Commercial banks return on equity and ratio of SME loans to total credit in the economy. ANOVA revealed that the data used in the model was resourceful to make conclusion since the value of significance(p-value) was less than 5%. Regression analysis meant to obtain OLS estimates showed a strong relationship between commercial banks return on equity and a weak relationship with ratio of SME loans to total credit in the economy. The findings of the analysis above led to the formulation of the model below; Y= 10.130+0.043X1-0.375X2

With reference to the model, the amount of SME finance that would be generated when both commercial banks return on equity and ratio of SME loans to total credit in the economy was zero would be Kshs.10.130 Million. An increase in commercial banks return on equity by one unit while holding the ratio of SME loans to total credit in the economy constant would increase SME finance by 4.3% while increase in the ratio of SME loans to total credit in the economy by one unit while holding commercial banks return on equity constant would decrease SME finance by 37.5%. This is an implication that the ratio of SME loans to total credit in the economy has been declining

over this period marginally. This shows that the government ought to step up efficient and effective SME finance management strategies focusing on increasing the ratio of SME loans to total credit in the economy in the speediest and cost efficient way.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION OF THE RESEARCH

5.1 Introduction

This is chapter presents the summary of the study finding according to the objectives of the study, conclusion of the research, recommendations and suggestions for further study.

5.2 Summary of findings

Descriptive analysis of the study found that the mean of SME finance generated was Kshs. 6.836920 million, the mean of commercial bank return on equity over the period under study was Kshs. 21.541890 million and the mean of ratio of SME loans to total credit in the economy over the period was Kshs. 11.22%. The highest amount of commercial bank return of equity amounted to Kshs 25.9751M while the lowest collected commercial banks return on equity amounted to Kshs. 16.7682 million. The highest SME finance generated was Kshs.13.4521 million while the lowest revenue collected amounted to Kshs. 3.0226 million.

There is a strong negative correlation between the ratio of SME loans to total loans in the economy (SMETC) and SME financing ($r= -0.822$, $p<0.01$). However, there is a statistically strong positive correlation between SME financing and commercial bank return on equity ($r= 0.508$, $p< 0.01$).

Analysis of variance was done to test for goodness of fit denoted as adjusted R squared($\hat{\mathbf{R}}^2$), which shows the variance(proportion) of SME finance generated due to changes in commercial banks return on equity and the ratio of SME loans to total credit in the economy which is 0.583, which means that 58.3% of the total variance in the SME finance generated has been explained by the independent variables. The R squared (R2) is 0.676 which means that 67.6% of variation in the SME finance generated was explained by the changes in the commercial banks return on equity

and the ratio of SME loans to the total credit in the economy. This showed that the existing loan management tools are not efficient to bring enhance SMEs finance.

Regression analysis on the data was done to explain the relationship between SME finance and commercial banks return on equity. This led to the construction of the model

Y= 10.130+0.043X1-0.375X2.

From the findings of the regression analysis, it was found that holding commercial banks return on equity and the ratio of SME loans to total credit in the economy at constant zero the revenue collected would be Kshs. 10.130 million. The model further revealed that a unit increase in the commercial banks return on equity would lead to increase in SME finance generated by 4.3%, a unit increase in the ratio of SME loans to total credit in the economy would lead to a decrease in SME finance generated by a factor 37.5%. The above findings are statically significant at 5%.

5.3 Conclusion and Recommendations

SMEs are hazardous and when they are so important for the prosperity of any economy, somebody must bear the hazard for financing them. Through the better data and calls for more noteworthy straight forwardness, it is conceivable to make them less unsafe and their financing all the more productively but only partially. This uncommon and basic blend between high risk and a key financial capacity makes this issue a basic test for administrative changes and requires a profound, efficient and adjusted appraisal of their effect.

A dataset comprising macroeconomic time series data and individual data of 43 commercial banks was built. The empirical results suggest that commercial banks have significant impact on SMEs and their financing regardless of the general perspective that commercial banks shy away from lending to the SMEs. This confirms that commercial banks still remain an important source of finance for SMEs and an avenue through which SMEs can grow. In order for SMEs to enjoy greater

benefits, they should see bank credit as a source of finance to be utilized for the expansion of their business. Government should encourage commercial banks to lend to SMEs by providing incentives and persuade the banks to give preference to SMEs. Also, SMEs on their own part should keep adequate financial accounts of their business operations as this is one of the pre-requisite in securing loans from banks.

Concerning the skewness of economic growth rates that are skewed towards six percent, this study wishes to recommend that mechanisms are put in place to push Kenya's SMEs financing rate even further. Basing on the correlation between SMEs financing and the ratio of SME loans to the total credit in the economy which is weak, the study recommends that changes in amounts lent by commercial banks cannot be used as strong indicators of an increase in SMEs financing in Kenya. Concerning the weak regression between SMEs financing growth rate and lending, this study wishes to recommend the use of other driving forces to increase SMEs financing. This is because SMEs financing does not seem to respond to loans from commercial banks. In fact, at best, the loans seem to be suffocating economic growth in Kenya.

SMEs should adopt a savings culture and use the savings to buy fixed property which can be used as collateral security to access bank credit. They should work together as groups and register effective associations. These co-operations help in knowledge transfer, developing and accessing markets, attracting investors and accessing bank loans.

Commercial banks in Kenya should provide advisory services to SMEs. They should introduce leasing as an alternative source of funding which reduces the need to provide collateral security by SMEs. Commercial banks should develop more innovative financing structures by increasing accessibility through the use of technology to cut on costs of banking products.

5.4 Suggestions for further research

The research specifically investigated the role of commercial banks in economic development of Kenya. In future, the researchers should replicate this study to cover the infant industries in the country. A similar study can also be carried out in other countries which shares resemblances with Kenya to determine whether the case in this study can be comparable in other parts. Further research can also be carried out to determine the role of other financial intermediaries with mentorship from commercial banks towards achieving a sustainable economic development in the country. The researcher also sees it of importance to research more on the impacts in future, other researchers can carry out the same research to determine whether there have been changes. Type o

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APPENDICES

6.1 Appendix 1: SPSS Output

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
SMEF	10	3.0226	13.4521	6.836920	1.1491750	3.6340105
SMETC	10	3.7000	25.6000	11.220000	2.4620136	7.7855707
REQ	10	16.7682	25.9751	21.541890	.8032250	2.5400205
Valid N (List wise)	10					

Correlation Analysis

	SMEF	SMETC	REQ
SMEF	1	-.822**	0.508
SMETC	-.822**	1	-0.595
REQ	0.508	-0.595	1

Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05

level (2-tailed).

Regression

Model summary

Model	R	R Square	Adjusted R square	Std. Error of the Estimate
1	.822[a]	0.676	0.583	2.3461393

a. Predictors: (Constant), REQ, SMETC

ANOVA

Model		Sum of Square	df	Mean Square	Sig.
	Regression	80.324	2	40.162	.019[b]
1	Residual	38.531	7	5.504	
	Total	118.854	9	9	

a. Dependent Variable: SMEF

b. Predictors: (Constant), REQ, SMETC

Coefficients

a. Dependent Variable: SMEF

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
Constant	10.130	9.184	---
SMETC	-0.375	0.125	-0.804
REQ	0.043	0.383	0.03

6.2 APPENDIX 2: SMEs finance, REQ Vs SMETC.

YEAR	**SME Finance (millions) SMEF**	**Commercial banks return on equity(%) REQ**	**Ratio of SME loans to total credit in the economy (%)SMETC**
2003	3.0226	16.7682	25.6000
2004	3.1857	19.6711	21.3000
2005	4.1049	22.7370	16.9000
2006	4.6529	23.3937	14.1000
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2010	9.2067	25.9751	5.3000
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2012	13.4521	21.9853	3.8000