

**THE RELATIONSHIP BETWEEN BANKING SECTOR
DEVELOPMENT AND ECONOMIC GROWTH IN KENYA.**

BY:

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DECLARATION

I declare that this Research Proposal is my original work and has not been submitted for examination in any other university or institution.


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May heavenly God the Father, bless you all abundantly.

DEDICATION

“And for support of this declaration, with a firm reliance on Divine Providence we mutually pledge to each other our lives, our fortunes and our sacred Honor.” Jefferson Thomas, declaration of independence (1776) USA.

In the strength of Thomas Jefferson words as I have quoted above, I thank God and dedicate this study to my dad, Fanuel Randiki, My mom, Janet, my sister Eunice and my brothers Evans, Dr. Jack and Jim for their understanding, support, and encouragement. They are my “dearest friend(s)” who have “softened and warmed my heart.”

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LIST OF ABBREVIATIONS

ASCA	Accumulating Savings and Credit Associations
ANOVA	Analysis of variance
BSD	Banking Sector Development
BS	Banking Sector
CBK	Central bank of Kenya
FDI	Financial Development Indicators
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
IEA	Institute of Economic Affairs
IMF	International Monetary Fund
IPAR	Institute of Policy Analysis and Research
IPPs	Independent Power Producers
KNBS	Kenya National Bureau of Statistics
LN	Natural Log
MFI s	Microfinance Institutions
SACCOS	Savings and Credit Cooperative Societies
SACU	Southern African Customs Union
SURE	Seemingly Unrelated Regression Estimation

ABSTRACT

Kenya as at end of December 2015, which has a population of 44 million people is served by forty two commercial banks, twelve microfinance banks and one mortgage finance company, offices of foreign bank representative are 8, 79 foreign exchange bureaus, and bureaus of credit reference are 3, all these constitute banking sector in Kenya. In a small comparison, while Kenya has 44 million people served by 42 commercial banks, compared with Nigeria that has 22 banks that serves 180 million populaces, while South Africa has 19 commercial bank that also serve 55 million.

There are various sectors that determine the economic growth of any particular country, therefore the study strived to establish the affiliation between banking sector improvement indicators such as sector assets, sector customer deposits as well as sector liquid liabilities and the real economic growth in Kenya. The study evidenced that a correlation of banking segment and economic growth in Kenya exist at a very weak level. The data was collected from published secondary sources from KNBS and CBK quarterly from 2005 to 2015. I analysed the data using SPSS version 20. In this study, various sector actors like financial assets indicates that a minimal positive statistical estimated relationship exist with economic growth, again at the correlation of coefficient, the study explains that every 2.438 million Kenya shillings invested in banking sector assets propels the economic growth by 1 million Kenya shillings. Empirical studies from other countries that support this study include Levine and Beck (2000) and Aghion, Howitt, Mayer- Foulkes (2005) that the more the investment in the banking sector then the real economic growth rate increases. The minimal relationship was also evidenced by deposits and liquid liabilities at weak negative correlations. This was depicted by other strand that sector of finance plays a minimal role if any, on growth of the economy Lucas, (1988) and Adusei, (2013). In order to build a much stronger banking sector that spurs economic growth in Kenya, the government and the sector actors may need to explore and revamp sector asset. The study may help the Kenyan government to forecast growth in the window of banking sector as explained by the coefficients of correlations under this study as to the number of times to build a million Kenya shillings in the GDP through sector assets, deposits and liquid liabilities.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The sector of banking on any given economy can be described as the sector markets and instruments that include the regulatory and legal framework which permits trade to be done by the extension of credit and deposits. Banking sector development (BSD) can either be in the fore front of growth in economy or it can take an extra flaccid roles (derived demand) as a rejoinder on increasing economics need. Theoretical connection between sector of banking and growth of the economy stems back on the research of Schumpeter (1911), Schumpeter engrossed particularly on the services provided by intermediaries of the financial arena, and he argued that it was important to the innovation and growth. Kenourgios, and Samitas (2007), stated that financial services offered by the banking sector are critical to the economic growth and development of a country where investment, insurance, bank debt and equity as well as savings enables the populace to save money, hence, safeguard themselves against unplanned financial circumstances, enable establishment of businesses, increase effectiveness and compete both at home and worldwide markets, while for the poor population, the financial services lessen vulnerability hence help them administer resources available to generate income through use of strategies to expand the growth of the economy.

A number of theoretical and empirical analysis indicate that growth in finance leads to growth of the economy and the researches that support this observation are those of Aghion, Howitt, Mayer-Foulkes (2005). These studies maintain that a strong financial

sector creates better incentive to invest and also enhances trade and commerce linkage and technological diffusion through mobilizing savings for productive investment which thus promotes economic growth. Odhiambo (2008), Waqabaca (2004), and Agbetsiafa (2003) believe that increase in the economic facilitate demand on services of finance, and, therefore, economic growth precedes financial development. Other forums hold that advancement of financials plays a minimal role if any, on economic growth (Lucas, 1988 and Adusei, 2013).

However, in the recent past, there has been empirical evidence that there is occurrence of a bi-directional connection on growth of the economy and financial growth (Patrick, 1996 and, Frey and Ulrich, 2011). A common suggestion states that the progress of the banking sector is anticipated to have an affirmative force to the growth of the economy.

1.1.1 Banking Sector Development

The financial sector development comprises majorly of commercial banks which are the fulcrum of a financial system and non-bank financial institutions. Levine, (2005) proposed that a sector of finance can accelerate growth of the economy by several avenues relieving exchange of services and goods by the facilitation of payment of services, pooling and mobilizing savings within numerous investors, acquiring information then processing on businesses and viable projects for investment, hence allotting savings to a more prolific use, monitoring the investments and carrying out corporate governance, diversification, growing liquidity and managing inter-temporal threat. All these functions has an impact on the investments and savings decisions, therefore economic growth. A good dimension of development of finance is fundamental

to assess the growth of the banking sector also to appreciate the levels of development of finance on growth of the economy and eradication of poverty.

It may be hard to measure financial development because it is a wide theme with a number of dimensions. Pragmatic work done is based on research quantitative indicators available for prolonged periods of various countries. For example, the ratio of banking sector assets that are financial to GDP, the ratio of banking sector liquid liabilities that to GDP, lastly the ratio of banking sector deposits to GDP. Solution to banking sector development in slow economies can be the eradication of disintegration in financial markets such that they steadily put more accuracy (in reliable manner) values to reveal the inadequacy of resources. Shaw (1973) and McKinnon (1973), considered the formation of positive real rates of interest as the initial step to the better direction, a base was provided from which the financial system may be developed to generate more polished prices. Nevertheless, a whole set of banking sector indicators of development should include intermediation of credit, control of liquidity, and the risk mitigation which are the features of the financial system.

1.1.2 Economic Growth

Growth of economy can be referred to as the upswing of the output that an economy yields in a given period of time, with two consecutive quarters as the minimum and it is measured conventionally as the increase of percentage rate in real GDP whereas economic development is measured through the welfare of humans in a society. Michael (2012), agrees that there is no unanimously accepted definition of economic growth, but most scholars think of the economic growth as the rise of per capita income of a given Country. GDP growth involves the analysis of the growth process in quantitative terms,

focusing on the functional relations among the endogenous variables. Economic growth can further be described as the process of increasing the size of an economy through macroeconomic indicators especially GDP per capita. The rise in the GDP per capita is an ascendant manner though not necessarily in a linear fashion. Economic growth can be zero, negative or positive. Zero economic growth is achieved when the average annual rates of growth of the macroeconomic indicators equal the population growth rate. Negative economic growth is realized when the pace of the population growth is higher than the rates of growth of the macroeconomic indicators. Positive growth of economy occurs where average yearly rates of macroeconomic determinants are higher than the average rates population growth (Gurley & Shaw, 1960).

Solow (1956) and Patrick (1966) established that the most prosperous economies are the ones that developed refined financial systems from the beginning. Economic growth in a Country can be measured using economic performance in terms of the value of National Income, National expenditure, and National output. Gurley & Shaw (1955), Robinson (1952), Patrick (1966), Goldsmith (1969) determined that the financial sector growth reaction to the demand shaped by a country's economic development, therefore, implying that growth of economy causes development of finance. Consequently, when financial services demand increase, a stimulus for the growth of the banking sector occurs from the economic growth. In other words, the banking sector do not control the factors that activates the economic growth.

1.1.3 Banking Sector Development and Economic Growth

Banking sectors in developed nations efficiently enable the mobilization of capital between deficit and surplus agents that in due course leads to growth of economy.

Banking sector in developing countries, for a while used to have lower efficient systems of finance with fewer levels of intermediation in the banking industry. Nonetheless, since 1980s, countries that are developing have enhanced the effectiveness of the financial markets but (Kar, 2011), established that the correlation between banking sector development and growth of economy in developing countries is still unsettled. It was suggested by (Schumpeter, 1934, and Levine, 1997) that an efficient and effective banking sector can spur economic growth. The banking sector facilitates positive externalities in many sectors that helps eradicate poverty as well as improve the living standards. Pagano (1993), reasons that a banking system delivers payments system, acts as a device for pooling funds, also transfers resources across time and locations, also controls risk and manage uncertainty, helps with providing information about prices to enable the economy to implement a devolved allocation of resources, it also enable control of an unequal information challenge that occurs when only one party to a financial transaction is aware of the information that the other party is clueless about.

Financial bazaars play a vital role in the progress of real economy and precisely the role of the banking sector as a facilitator to economic growth as per its role as a financier of viable investments. Levine and Beck (2000), concluded that a well-developed banking sector enables investments increase, which in turn may promote growth of economy. Cost of completing every transaction is associated with each investment. A well-structured banking sector mostly decreases costs of transactions and constraints of credits, conditions that may delay the growth of economy in a country. A banking sector that is not effective can by its ineffectiveness result in little activity and growth economic. The deficiency of effective financial markets may limit demanded credit to investments which

spur growth of economy. Capital accumulation and technological progress being the major channels to spur economic growth are affected negatively by the potential 'loan rationing.' It can be concluded that various studies shows that the positive improvement of banking financial system improves effectiveness in the distribution of scarce resources, hence accelerating the growth process.

1.1.4 Banking Sector Development and Economic Growth in Kenya

According to IEA and IPAR (2000), banking segment development within Kenya has grown tremendously; the real GDP growth has taken a different dimension. The growth rate in GDP has been very irregular at the lowermost on the negative 0.8 percent, as recorded in 1992. In the initial stages of independence in Kenya, there was impressive e growth in the economy as compared to countries in SSA. From 1975 to 1984, 4.7 percent was the mean yearly percentage growth in GDP. From 1985 to 1989, there was a dramatic increase of GDP at an average of 5.9 percent. Nevertheless, in 1991 the GDP growth rate declined at an average percentage of 1.4. From 1993 and 1995 there was a considerable increase in GDP. In 1992 GDP was negative 0.8 percentage which increased in 1993 to 0.4 percent later increased to 2.6 percent. In 1995, growth rate in GDP had reached 4.4 percent, however this high growth rate was temporary. In 1997, GDP growth rate decreased again steadily to 2.1 percent from about 4.4 percent in 1995, and 1.6 percent in 1998. Growth rate in GDP was about 1.3 percent in 1999. Most recently, the growth in real GDP in Kenya is estimated at about 5.6 percent.

Kenyan banking industry accounts for the largest proportion of the financial sector at 60.87 percent of nominal GDP in 2014. The subsector underwent growth in 2014, regardless of a cumulative deterioration in unaudited pre-tax profits by 1.6 per cent from

KSh. 71.1 billion in the period ended June 2014 to KSh. 69.9 billion in the period ending December 2014. Net assets in total grew by 9.9 % from KSh. 2,967.6 billion in June 2014 to KSh. 3,261.1 billion in December 2014, driven by growth in advances and loans. Government securities and advances and loans formed major components of banks' balance sheet items, accounting for 58.3 percent, 20.4 percent and 5.3% of net assets in total respectively. Advances and net loans rose by 10.5 percent to KSh. 1,901.5 billion in December 2014. Investment in Government Securities increased from KSh. 633.3 billion in June 2014 to KSh. 664.7 billion in December 2014. Customer deposits, key to the funding to the bank, increased by 8.6 percent to KSh. 2,331.6 billion in December 2014 on account of bank branch expansion and agency banking as well as receipts from exports (Central Bank of Kenya, 2014).

International Monetary Fund recommended for abreast monitoring of banks in Kenya to ascertain that their expansion regionally does not compromise the soundness of the banks. In recent review of the country's economic state of affairs, IMF evaluated that even though the economic conditions and risks from the global financial had decreased and indicators of financial had remained favorable, there was a need to be more vigilant, with the main focus on monitoring the health of the banking sector and acclimatize banking supervision to growing regionalization. Moody's which is a global rating agency gave Kenyan lenders a clean bill of financial health in February, this was after Dubai Bank and Imperial Bank went under receivership. The study focused on the stability of Kenya's 42 banks, analysed that most lenders exhibit growth prospects, however, it pointed out that the assets quality portrays risks stemming from rising interest rates and structural weaknesses, speedy loan growth (Olingo and Anyanzwa, 2016).

The Kenya's banking sector is more the prevalent, sound and well developed within East Africa but in comparison with other middle-income Countries, Kenya's financial sector still lags behind making it not fully exploit its capacity by allocating economic resources in the Country. The Kenyan financial sector comprises of the Capital market and the Money Market. Short term funds are traded from money market, these short term funds include; commercial paper, treasury bills and certificates of deposit. The Capital Market is the marketplace for long-term funds like shares and loans. In Kenya, capital market comprises the stock market, bonds market, financial development institutions, pension funds, and insurance funds. Since the 1920s the stock market has been in existence, and to date, has 61 firms and still growing. The bonds market is in its infancy stage.

Vision 2030 Republic of Kenya, (2007) states that, the banking sector has an important duty in accomplishing the objective of the vision 2030 through facilitating decent intermediation on the deficit and surplus sectors of the Kenyan economy. Therefore, there is need for experimental facts on actuality of extensive term relationship between growth of economy and banking sector development.

There are two divisions of financial sector: the informal and formal. The formal sub-sector encompasses of the Savings and Credit Cooperative Societies (SACCOs) banking, capital markets, pension funds, Development Finance Institutions and insurance. The formal sub-sector further includes the infrastructure of finance that facilitates trading, settlement and payments systems. Informal sub sector that is not regulated however provides services of financial. Some of the factions and organizations included in the unregulated sub-sector in Kenya includes merry go rounds also known as 'chamas,' the Rotating Savings and Credit Associations (ROSCAs), Accumulating Savings and Credit

Association (ASCAs), moneylenders and shopkeepers (Central Bank of Kenya, 2011). Banking sector in Kenya are majorly commercial banks. The Central Bank of Kenya which is the regulatory authority reported, 42 commercial banks 123 forex bureaus, 7 foreign banks representative offices, 12 deposit-taking microfinance institution (MFI), and 2 credit reference bureaus. 14 banks are owned by the foreigners while the rest are owned locally.

Developments in the banking sector have taken place with the setting up of the regulations on operations and appointment of Third Party Agents through Deposit Taking Microfinance Institutions (MFIs), over time there has been an increase in mobile banking. In the year 2014 the agents of commercial banks increased by around 31 percent in total from 71% in 2010. The agents of commercial bank normally do withdrawals for bank customers and receive their deposits in small cash. There has been an increase of the number of customers that access the facilities of commercial banks agents by 19.2 million in the year 2011 and this was possible by an increase of the agents. The overall value of transactions increased greatly from 2007 to 2015.

1.2 Problem of the Research

Levine (1997), described the theoretical relations between the systems operation of finance and economic growth, where he mentioned areas that needed additional research and he stated that there was no sufficient and precise understanding of the manifestation, progress, and economic effects of various financial structures. Additionally, he stated that there were no sufficient theories of why the structures of finance transform or why diverse structures of financial emerge. Moreover, analyst need to build up an analytical foundation for creating comparisons structures of financials; there is need for models that

clarify the conditions, if exist, where which various structures of finance are better at justifying transaction and costs information. Secondly, he mentioned that other areas that needed additional research involve the power of the level and economic growth rate on the financial system. It has been assumed by some models that a fixed cost exist to be a financial intermediary.

The growth of the economy reduces the magnitude of fixed cost and many people participate. Therefore, growth of economy enables the establishment of growth-promoting intermediaries of finance while the establishments of intermediaries of finance hasten growth by increasing the allotment of capital. In this way, economic development and financial and are jointly determined (Greenwood and Jovanovich, 1990). Patrick (1966), Greenwood and Jovanovich (1990), and Devereux and Smith (1994), suggested that future research may improve our understanding of the impact of growth on financial banking systems.

There have been several studies on banking sector expansion and economic growth. Nevertheless, most of them consider one component of sector of banking in relation to economic growth. Cojocaru, Hoffman & Miller, (2011), conducted studies on capital market and growth of economy, banking credit and growth of economy, foreign direct investment and growth of economy. The use of one component of the banking sector like the capital market or direct foreign investment as a representative of the entire banking segment is inadequate and inappropriate especially for a developing Country like Kenya.

Here in Kenya, a study done by Muli (2008), explored the empirical causal relationship between the level of financial development and growth of economy in Kenya from 1967 to 2006. His study stopped at showing that there was causation between financial

deepening as well as growth of the economy, but did not explain the nature of the relationship. Ndegwa (2008) studied the factors limiting the integration of the capital markets in East African Countries focusing on the high-interest rates on bank deposits which was associated with inefficiency in systems of the banks. Ndungu (2008) explored the effect of microfinance development and growth of the economy in Kenya focusing entirely on microfinance institutions. There is gap due to the need to provide an explanation concerning the relationship between the various indicators of banking development, namely, banking institutions' assets, deposits, and liquid liabilities with the economic growth on one end. The absence of such a study, and the disagreement among research findings on this relationship leave a research gap which this study wishes to fill. Hence, this study fills the gap by answering the question: what is the relationship between financial institutions' assets, deposits, and liquid liabilities, and economic growth?

1.3 Objective of the Research

To determine the relationship between the banking sector development and economic growth in Kenya.

1.4 The Study Value

The study adds value to diverse stakeholders in the field. Considering that the study topic has relevance and it is the demand of the present day as development in banking is expected to strengthen in the financial sector. To the management in the banking sector, this study informs them on the relationship between the banking sector development and the economic growth of the country. From this study findings, the banking sector management can strategize on how to realize a positive strong economic growth.

For various policy makers in relevant sectors, like the Kenyan Government and Central Bank of Kenya (CBK), this study is crucial in fast tracking the achievement of various economic development goals. Moreover, the findings are vital for policy makers and the government in formulating macroeconomic and fiscal policies necessary for improving stability in the financial sector in line with the vision 2030 which includes stimulation of a double-digit economic growth rate. Policy designers need to have precise information that can help them come up with policies that can stimulate economic growth through the financial markets. The policies can produce the greatest results if it is known which aspects of the financial market should be tackled in order to generate economic growth and, therefore, development. Furthermore, the research can be an addition to the knowledge pool of understanding the influence of the banking sector development to economic growth.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Literature, different theories and review of empirical studies both internationally and locally on Banking Sector Development and growth of economy are discussed in this chapter. It describes the literature overview which forms the premise for the latter analytical framework.

2.2 Theoretical Reviews

Several theories exist that seek to discuss the correlation between sector of finance progress and growth of economy in Kenya and globally. However, the three key ones, especially for developing countries like Kenya, are discussed below.

2.2.1 The Modern Economics Theory

This model was first suggested by Solow (1956) and later upheld by Swan (1956). The theory suggests that with increase in Capital amounts to diminishing returns. For that reason, growing capital has only limited and temporary impact on expanding the economic growth. When capitals boost the economy continue its stable condition rate of economic growth. Essentially, to increase the growth it is essential to strengthen improvement of technology and productivity of labor.

Currently, recent economics has discovered the several ways of which millions of decisions and anticipations by personalities enables the emergent features of societies and communities like level of national income, rate of inflation, and productivity gains,

cultural values, stocks and prices of different types of social norms and capital. (Sohail and Shanmugham, 2003) stated that there are two factors that pose a challenge to economic theory. Firstly, decisions made by individuals at any time are affected by these emergent features like; practice, learnings from past decisions, habit, expectations for the future. Secondly, emergent features controlled by economic theory which exist as well as policy apprehension on variables that are fast-moving. There are emergent properties which are slower that affect culture, institutional arrangements and attitudes are recognized, however, are poorly embraced.

Tiwari, Herstatt and Buse (2006), states that to successfully attain returns on finances from rapid changes enables gradual emergent, almost concealed, changes in slower structures and changes in deeper, changes that can eventually activate surprise and unexpected crisis. However the complexity comes up where many recent economists are aggravated in their efforts to demystify the connections between emergent features that are slow- and fast-moving.

The Modern economics hypothesis is important to this study because not only does it agree that a correlation between financial developments in and economic growth, but additionally offers an alternative explanation suggesting that banking aspects like technology and capital drive economic growth.

2.2.2 The Financial Intermediation Theory

This hypothesis was first put forth by Schumpeter (1911) and later supported by the works of Shaw (1973), McKinnon (1973), Gupta (1984), Fry (1988), Jovanovich and Greenwood (1990), Smith and Bencivenga (1991) among others. The conventional view

of this theory postulates that financial expansion causes the economy to grow. In a world with frictionless information, transaction, and costs of monitoring, financial intermediaries are not needed. If information, transaction, and monitoring costs are necessarily high, no exchange takes place between agents of economics. The desire to decrease the related costs and enable exchanges led to the financial markets emergence and institutions markets that make up sector of finance.

The theory posits that a strong developed sector of finance facilitates vital services that reduce transaction, information and monitoring costs and enhance the effectiveness of intermediation. As such it identifies and funds good business projects, mobilizes savings, enables trading and risks diversification, promotes exchange of services and goods, monitors the performance of managers. All these services results in effectiveness allotment of resources; lead to a quick increase of human and physical capital; and enables faster technological innovation. This eventually brings the outcome into faster and long-term economic growth (Schumpeter, 1911).

Besides, intermediation of finance is a practice that entails surplus component deposit finances with institutions of finance that loan to deficit component. Bisignano in (1992) recognized the intermediaries of finance may be differentiated in four categories. Firstly, the major category of deposits or liabilities is precise for a predetermined sum that is not associated to a portfolio performance. Secondly, deposits which are characteristically temporary and of a considerably temporary as compared to the assets. Thirdly, a high quantity of its liabilities is liquid that can be withdrawn as demanded, fourthly, assets and liabilities for the most part are not convertible. The vital influence of intermediaries is a stability and stable movement of finances from surplus then to deficit components.

Van Wensveen and Scholtens (2003) stated that the function of the intermediary of finance was fundamentally more specific to commodities of finance. Every time an intermediary realized they could sell them at prices which will cover all the cost associated with their production which are both opportunity costs and direct costs. Market imperfections created the existence of financial intermediaries. Hence, in a situation of a 'perfect' market, where there is no information or transaction, there would be no existence of financial intermediaries. Differences of information between sellers and buyers dominated numerous markets. Bias information are noticeable in financial markets. Typically, borrowers are aware of their industriousness, collateral and moral integrity well enough than the lenders. (Pyle and Leland, 1977) found out that, entrepreneurs are informed of private information regarding their viable projects they need to finance. Information transfer among participants in the market is vital factor for ventures of better quality to be well financed however the moral hazard poses a bottle neck to its flow.

Dybvig and Diamond (1983) analysed the prerequisite of liquidity which transforms of assets that are illiquid to liabilities that are liquid by banks. From Dybvig and Diamond model same depositors or investors are at risk reluctant and indecisive approximating the time of their prospect consumption urge minus an intermediary every investors are secluded to long term illiquid investments which generates high pay offs to later the consumers.

These theories are related to the study in question because it shows one of the possible elucidations of how growth in the financial sector affects economic growth. These correlation are the core to this study.

2.2.3 The Bi-directional Theory

The model was suggested by Jovanovic and Greenwood (1990) got support from Saint Paul (1992), Berthelemy and Varoudakis (1996) and Harrison, Sussman and Zeira (1999) (Cojocar, Hoffman, & Miller, 2011). This hypothesis upholds financial improvement and growth of economy causes one another thus the name bi-directional. Other studies also states that there are a two way correlation between sector of finance development and growth of economy where the markets of finance develops as a result of growth of economy that later feeds back which results to real growth rate. Thus the hypothesis is also known as the feedback hypothesis. Schumpeter (1934) illustrates that an economy well-endowed with financial system can enable high economic growth by both technological innovation and service development and product. Consequently this leads to the banking institutions adapting to the technological innovations and product development which stimulate a high economic performance e.g., Safaricom, which has catalyzed the mobile banking.

The conclusion is drawn from Shan, Morris and Sun (2001) after examining 30 developing countries is that the development of finance and banking sector and growth of the economy are mutually causal where the causality is bi-directional. This has been further supported by Wood (1993) and Chuah and Thai (2004). In Botswana (1972 – 1995) for example, there existed a bi-directional causality between per capita income and financial development (Akinboade, 1998), and hence growth of economy and financial development complement one another.

Jung (1986), researched the causality challenge, and deduced that financial unit development has a bi-directional correlation. While he included 56 countries in his study, he found out that causal trend from financial growth to growth of economy is more often

practical than the opposite when he analysed on regression between the proxies of financial development and per capita GDP. Captivatingly, Jung found out that developing countries are categorized by a causal direction running in the direction of financial to economic development while a reverse causal direction often characterizes developed countries.

Hussein and Demetriades (1996) carried out causality tests and found out that the outcomes were specified to particular countries under study, and as such there is no full support that ‘finance follows growth’ and that ‘finance leads growth.’ It’s worth noting that they included only 16 countries in their study, and used two same variables, one being bank liabilities and two is bank claims, as the gauges on the financial.

This hypothesis is important to this study since it harmoniously agrees that a correlation on development of finance and growth of economy in any country. However, the theory suggests that, the two variables affect each other simultaneously.

2.3 Economic growth Determinants in Kenya

For development economics it’s necessary to understand that the growth process is integral; whereas the theory is important to provide guideline for analyzing, identifying, and interpreting the indicators of growth, and how the procedure has failed or worked in various countries is at the end of the day an empirical concern. Many of the empirical literature are based on the regression of cross country growth, which are may be important in the identification of various features that continuously appear to be vital indicators. Conversely, cross country researches only pin-pointed what seemed to be core

on average or in general; Analysis of country studies are essential to understand the process and what features were the most significant in each counties that were studied.

In this study, we shall focus on financial institutions assets, deposits and liquid liabilities of the banking sector as some of the main indicators of economic growth in Kenya as a developing country.

2.3.1 Financial institutions' assets

The financial assets refer to the claims on real assets that are inclusive of current asset, credit portfolio, fixed asset, and other investments (Bondie, Kane, & Marcus, 2009). Financial assets therefore promote the development of the economy directly and indirectly by facilitating access to the pool of funds for financing company investments.

The finance and the investment manager of companies therefore use the financial assets by evaluating the usefulness of each investment option available. Moreover, investors are able to invest and willing to invest in financial assets as a result of their personal judgment, risks evaluation and the efficiency of the market. In finance, efficient market refers to security prices reflecting all available information, in the strong hypothesis.

2.3.2 Deposits

Deposits consist of money placed into banking institutions for safekeeping and they include savings, checking's and money market. Banks play an imperative part in economic growth by enabling a sound foundation for businesses and individuals to deposit or invest money, as such the banks can use the funds in possession to lend.

Consequently, the capability for the bank customers to receive the loans enables them to do purchases that propels the economy to diverse levels. The bank is able to take the

deposits, which start out as liabilities, and turn them into assets like long-term loans. Besides, some of the determinants of the level of intermediation of finance in an economy include bank deposits finance credit, as it is preferred to directly gauge the credit intermediation. In this study, customer deposits was used as an indicator

2.3.3 Liquid Liabilities

Liquid liabilities are short term deposits which are known as M3. These include sum of deposits and currency in a central banks (M0), in addition to transferable electronic currency and deposits (M1), in addition to transferable deposits in foreign currency, time and savings deposits, securities repurchase contracts, and certificates of deposit (M2), in addition to commercial paper, travelers' checks, market funds held by residents or shares of mutual funds and foreign currency time deposits. This indicator measures overall size on the formal intermediary of financial sector which has been found to be very significantly linked the rate of change and level of real per capita GDP (Levine and King, 1993).

2.4 Empirical Literature Review

The function of banking sector development (BSD) as a leading contributor to the economic growth is a vital aspect in most the recent debates, there are some who question the evidence for the positive causation of the development of banking sector to the growth of the economy and emphasize potential for bi-directionality and the variation due to specific conditions by country and time period (Lee, Lee, & Kim, 2007).

2.4.1 International Studies

Levine (2005) studied the influence of studying the influence of bank system development and stock markets on economic growth by sampling eleven Arab countries, he concluded that countries with undeveloped financial systems affects negatively the economic growth of those countries. He stressed that a sound financial system is vital. Hence Levine studied a negative link between banking development and growth of economy due to an inadequately developed financial banking system.

Ergungor (2006) studied and analysed the impacts of structures of finance to the growth of the economy from 1980 to 1995. Ergungor studied that the countries experiencing flexible judicial systems had stronger influence on progress of capital market, while in nations with rigid judicial systems had economic growth due to the development of the bank system. Consequently, this study depicted that there was a positive correlation between financial structure and growth of the economy.

Nieuwerburgh, Cuyvers and Buelens (2006) quantified the long run correlation between stock market developments (calculated as a logarithmic difference of GDP capital) in Belgium. Granger causality tests was performed and highlighted that the stock market development resolute growth of economy in Belgium from 1873 to 1935, also on the entire study from (1800 to 2000) with variation in times when institutional changes affected the stock market. So this study portrayed that there was a positive correlation between stock market expansion and economic growth.

Caporale, Raul, Sova, and Sova (2009) studied the correlation between financial growth and growth of the economy in ten Countries that were new members of European Union.

The study reviewed the major features of the financial and banking sector in the ten new members of European Union followed by test of the relationship among their development of finance and growth of the economy. Quantitative research was done by approximation dynamic panel model from the year 1994 to 2007. It was found that the credit markets and stock were still weakly developed in the tested economies and contribution to growth of economy was minimal due to insufficiency of financial depth. In comparison, efficient banking sector was tested accelerated economic growth. The Granger causality analysis pointed that causality stems from financial progress to economic growth, however not to the opposite direction. This study, therefore, showed there was a positive correlation between financial penetration in the credit sector and growth of the economy.

Moshabesha (2010) studied the correlation between financial deepening and growth in the Southern African Customs Union (SACU) countries namely Lesotho, Botswana, Swaziland and RSA, from 1976 to 2008. In the study, the independent variables were two quantitative of financial deepening: the ratio of liquid liabilities of commercial banks to GDP as well as the ratio of credit to the private sector provided by commercial banks while economic growth, epitomized by growth in manufacturing, was the dependent variable. A balanced panel of the four SACU countries for the period was estimated using the method of Zellner's Seemingly Unrelated Regression Estimation (SURE). The results of the correlation between the growth in manufacturing and Financial Development was feeble and insignificant among the four countries. The results of this study were frail perhaps because the manufacturing growth denoted economic growth to a meager magnitude.

2.4.2 Studies in Kenya

Ndwiga (2011) researched on the correlation between development of finance and growth of the economy in Kenya from 2007 to 2011. He utilized a multivariate regression model and found that expansion of financial sector is a key contributor to the growth of economy Kenya.

Muli (2008), sought to explore empirically the causal correlation between the level of financial development and growth of economy in Kenya from 1967 to 2006. The study applied two models, one Error Correction and two, the Granger-causality analysis. The results of the cointegration as analysed substantiated a stability of the long-run correlation between development of finance and growth of economy in Kenya. However, Muli's study did not explore nature of the relationship. The sector of financial services is the leading in the world, in terms of earnings. Despite of this capability to date, large commercial banks have experience limited expansion on economic opportunity to the countries that are developing, which experiences cycles of inappropriate products, insufficient information, inflexible regulatory environment and inadequate infrastructure which in turn has kept their prices and costs high which limits various companies' markets to potential clients within the top tiers of pyramid of economic. Although research about the sector of finance and economic growth has been addressed in depth, limited research was done on the function the financial sector will play towards the achievement of vision 2030.

Ndegwa (2008) studied the factors limiting the integration of the capital markets in East African Countries. He found that bank deposits that attracts high-interest rates associated with flaws in banking systems have added to the unmanageable capital inflows. A key

problem for policy makers within the regional countries market was found to be reducing their exposure to unstable flows of capital and to confirm that their flaws within sector of finance do not limit the capability of authorities to enhance macroeconomic policies that are needed for protection of monetary stability which results in economic growth.

Ndungu (2008), explored the effects of microfinance development and growth of economy in Kenya. He established that there existed an increased acceptability of microfinance which laid ground for more focus on microfinance or medium and small enterprise finance investment and loans greater than micro-loans. He also found that the informal financial sector contributed to 75 percent of job created in 2010 and observed that microfinance would lead to substantial growth in the informal financial sector which will enhance growth of economy.

Kogi (2003) did a study on the future collective investment schemes within Kenyan capital market. He hounds that the Kenyan capital markets will continue to deal on various investment products like bonds, shares, and unit trusts. Products types chosen by various collective investment schemes to obligate their capital will mostly depend on their volume of capital available and time frames of financial goals.

2.5 Literature Review Summary

Initially in this chapter I captured the theoretical frameworks where I discussed the major theories on which the study is based, the features of economic growth in relation to the banking sector and ending with the empirical literature before summarizing.

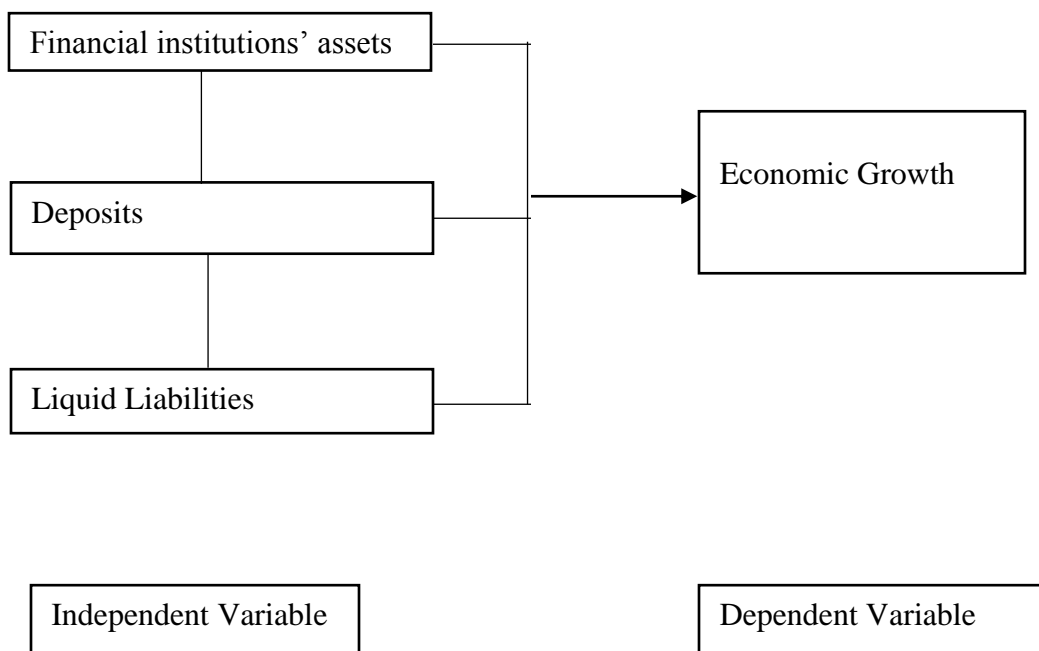
The theoretical view of a negative/positive effect on the correlation between banking sector development with growth of economy realized a great support from the empirical

literature. Nevertheless, significant variations have occurred in the world’s economy in the recent last two decades and in specific, various less developed nations have directly moved from relying on a primary economy to focusing on the sector of service which requires a more robust sector of finance in allotting resources. In addition, from the reviews of literature, the correlation between banking sector development and growth of the economy is not universal and this is deduced from the various findings concerning the relationship which use not more than three components especially for developing Countries and more so in Kenya. Further, the relationships among the variables within Kenya are not known. These research gaps provide the motivation for this study which intends to fill them up for the period of 2005 to 2015.

2.6 Conceptual Framework

I have chosen the following variables for my quantitative research as applied. The variables are considered realistic in the Kenyan context.

Figure 2.1 – Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, it will describe methodologies undertaken in steering the study. Specifically, it covers; research design, collection of data, analysis of data, analytical model and significance test. The focus of the paper was to measure the relationship of growth of the economy and banking sector development in Kenya. Under research methodology a specified explanation of how the study was conducted is entailed here was provided. This included specification of models and variables that were addressed by the research, data collection and lastly the analysis of data methods.

3.2 Design of the Research

Research designs are the methods and procedures followed in conducting the study. Moreover, research design is a technique of study in complexity rather than places and breadth with more emphasis on the total study of a specific number of circumstances or occasions and other interrelations.

This study uses a descriptive analysis and correlation study with the dependent variable being economic growth which is to be expressed as an annual growth rate of the real GDP while the variables that are independent are the financial institution assets which is expressed as a ratio financial institution assets to real GDP, sector customer deposits expressed as the ratio of customer deposits to the real GDP and sector liquid liabilities expresses as the ratio of liquid liabilities to the real GDP. This descriptive type is particularly imperative when a variable being studied outspreads over a significant time.

It is the only research design that considers a constant record of variations of study variables over the whole period of which the variables are considered. Therefore, this validates the use of descriptive and correlation analysis for this particular study because the aim of the study is to establish the correlation between economic growth and banking sector development variables by analyzing their behavior over time.

3.3 The Population of Study

Mugenda and Mugenda (2003) referred to population being the ‘universe’. Ngechu (2004), express population as all of the participants of a real hypothetical set of event, people or object which a research requires to generalize the outcome of the quantitative research or study. Following specific numbers of players in the banking industry, a census study was conducted which included the regulated banking. The population targeted for the study encompasses the real Kenya GDP for the last ten years on quarterly basis from 2005 to 2015, and a 44 data entry point from 2005 to 2015 on financial institution assets, liquid liabilities and deposits which are made up of the banking sector in Kenya as at December 2015 on quarterly basis.

3.4 Collection of Data

Data refers to all the information that the researcher collected and used for the study. The study involved utilization of secondary data from published sources. The data collection sheet was used to collect the data. Data was obtained at the quarterly interval for the period between 2005 and 2015 and included: Kenya's real GDP, Ratio of banking financial institutions assets to GDP, Ratio of banking sector Deposits to GDP, and ratio of banking sector liquid liabilities.

3.5 Analysis of Data

The data was collected and counter checked for completeness and consistency from published sources. The data was collected through excel spreadsheet and analysed through SPSS using multi regression analysis as well as other quantitative techniques in SPSS. The results were presented in tables and proportions.

3.5.1 Analytical Model

The regression model that was used in this study comprised of three independent variables and one dependent variable. Dependent variable was economic growth while variables that were independent included: Sector Financial Assets, Sector Customer Deposits and Liquid liabilities. It has been shown as follows:

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

Where:

Y= **Economic growth** which was measured as the quarterly growth rate of the real GDP,

α = Regression constant,

X_1 = Ratio of Financial institutions assets = $\frac{\text{FINANCIAL INSTITUTIONS ASSETS}}{\text{GDP}}$

X_2 = Ratio of Deposits to GDP = $\frac{\text{DEPOSITS}}{\text{GDP}}$

X_3 = **Ratio of Liquid liabilities** which is the annual growth rate of the real stock of liquid liabilities (M3) per GDP = $\frac{\text{LIQUID LIABILITIES}}{\text{GDP}}$

ϵ = Error term normally distributed about the mean of Zero and

$\beta_{1,2,3}$ =Regression coefficients of the variations to determine the volatility of each variable to economic growth in the regression model.

3.5.2 Test of Significance

The test of significance employed correlations of coefficients. It was preferred for his study as it gave the strength and the direction of relationship which was found to exist at weak level.

The data was then subjected to the regression model that was found to be significant at 0.000 with a variability of 89% and at a confidence level of 95%.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This episode discusses and describes analysis of data on the various research findings. It also establishes relations magnitude exhibited between banking sector and economic growth in Kenya through analysis. Data is presented after analysis in the form of tables and proportions. The project research was based on ten years quarterly data from 2005 to 2015 and the data was analyzed using the statistical package for social sciences version 20. Secondary data was used for the study as published by the Central Bank of Kenya as well as Kenya National Bureau of statistics. The central bank of Kenya published the data on two reports, one is performance and development in Kenyan banking sector quarterly reports and the second one is bank supervision annual reports which was useful in knowing various growth rates between years and this helped in double checking on quarterly reports data. Data collected is shown in appendices one and two. The data was then subjected to the required ratios for this study and dependent variable which is economic growth, reduced by the natural log. This study then presented analysis results which culminates to discussions with evidence of issues arising.

4.2 Response Rate

The data collected was based on secondary data, hence there was no questionnaires that would call for response rate and on the same breadth all the data required for this study were found on the secondary published sources.

4.3 Data Validity and Reliability

The data is actually valid as it from reliable published sources. The first source is the Central Bank of Kenya was established under article 231 of the Kenyan constitution. The second source is actually the Kenya National Bureau of Statistics established under the Statistics Act No. 4 of 2006 by Kenyan parliament. This is also to clarify that the data relied on carries with it any omissions or errors from the source, and as such it is believed that the data source is correct as published.

4.4 Descriptive Statistics

Table 1. Descriptive Statistics

	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
					Std. Error		Std. Error
ECONOMIC GROWTH	26.986020	.5156369	.266	.172	.357	-1.949	.702
BS ASSETS TO GDP	2.956034	.6690191	.448	.542	.357	-.509	.702
BS DEPOSITS TO GDP	2.202597	.4711593	.222	1.066	.357	.753	.702
BS LIQUID LIABILITIES TO GDP	2.322073	.5429395	.295	.676	.357	-.676	.702

Source: Authors Findings

This section describes and summarizes quantitative features of Banking Sector Financial Institution Assets, Deposits and Liquid Liabilities and Economic growth in terms of real GDP. Therefore the entire population under study from 2005 to 2015 quarterly data is summarized in Table 1 above on descriptive statistics.

From table 1 above, the central tendency of economic growth data is at 26.96020, sector assets data is 2.956034, sector customer deposits data is 2.202597 and liquid liability is 2.322073.

The variability of data used is generally a normal distribution; standard deviation for economic growth is 0.5156369, this means that the economic growth data are close together, that is, each quarter experiences smaller change, sector assets is 0.6690191 sector customer deposit is 0.4711593 and sector liquid liabilities is also 0.5429395, all the sector variables data are close together as shown by small standard deviation hence the increase/decrease from one quarter to the other quarter is not large.

The variance of the data for economic growth at 0.266 is small and this shows that each quarter the economic growth changes minimally, sector assets is at 0.488, sector customer deposits at 0.222 and sector liquid liabilities is at 0.295, again, the variability of the data is relatively small hence each quarter the change or growth is not huge.

From table 1 above, the whole data skewness is positive and normal as the mean is greater than the median marginally, therefore the whole data has the confidence of quantitative research as applied.

4.5 Correlations Analysis

From table 2 below for the study from quarterly data of the years from 2005 to 2015. This study depicted that banking sector financial assets which constitute; placements, balances at Central Bank of Kenya, Cash, investments, government securities, loans and advancements (net) plus other assets, has an existence of relationship at a minimal positive relationship at 0.20 with economic growth.

Table 2. Correlations

	ECONOMIC GROWTH	SECTOR ASSETS TO GDP	SECTOR DEPOSITS TO GDP	SECTOR LIQUID LIABILITIES TO GDP
ECONOMIC GROWTH	1	.020	-.120	-.353
SECTOR ASSETS TO GDP	.020	1	.978	.912
SECTOR DEPOSITS TO GDP	-.120	.978	1	.934
SECTOR LIQUID LIABILITIES TO GDP	-.353	.912	.934	1

Source: Authors Findings

Table 2 further explained the relationship between economic growth and sector deposits which constitute majorly customer deposits. The relationship exist and weak at negative 0.120.

The liquid liabilities which forms part of liquidity of the banking sector other than liquid assets, was used to asses relationship to the economy growth in this study. The Central bank of Kenya regulates each bank's liquidity at a minimum of 20%, this enable the

banks to expend their commitments as they become due. The correlations table 2 postulates that there is existence of a weak relationship of liquid liabilities at negative - 0.353 with the economic growth. This means that there is a minimal evidence that the liquid liability affects economic growth in Kenya.

The multicollinearity among the independent variables is present from the correlation analysis table 2, this is because they are all banking sector development indicators and factors of performance hence they are closely correlated to each other which in turn has a relationship with the economic growth.

4.6 Regression Analysis

The model summary in Table 3 explains 89% of the movement of the economic growth, this means that the bank sector assets, customer deposits explains 89% of the change in the economic growth

Table 3. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947	.897	.890	.1711779

Source: Authors Findings

In further analysis, from table 3 as explained by R in this study at 94%, this amounts to high degree of correlation. The 89% is very large hence, sector assets, sector customer deposits and liquid liabilities are well accounted for in this model.

Table 4, Analysis of variance (ANOVA) from below reports how well the regression equation fits the data, this means economic growth fits the regression equation.

The ANOVA indicates that the model is statistically significant at 95% confidence interval as is explained by a significant value of 0.000. Hence the model can be relied on to check the variability of economic growth in Kenya.

Table 4. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10.261	3	3.420	116.725	.000
Residual	1.172	40	.029		
Total	11.433	43			

Source: Authors Findings

From table 5 below, coefficients run has provided the necessary information that predicted correlations of coefficients on economic growth from sector assets, sector deposits and sector liquid liabilities. It also determined that the banking sector used variables that contributed statistically significantly to the model by the outcome of significance at 0.000. The constant is statistically significant at 95 % confidence which means that there is a level of economic growth that is not explained by the sector financial assets, sector deposits and sector liquid liabilities which is 27.444 million Kenya shillings.

A 2.438 million Kenya shillings investment of assets by banking institutions trigger real GDP to grow statistically by estimation of a million Kenya Shilling.

A decline by 1.623 million Kenya shillings of deposits affects the real GDP to shrink by a statistical estimation of a million Kenya shilling.

A decrease by 1.761 million Kenya shillings of liquid liabilities each quarter of the year shakes the Kenya economic growth to diminish by a statistical estimation of a million Kenya shillings.

These estimations are further explained by the significant of the analysis of variance on table 4 as well as at the significance of correlation of coefficient on table 5 both at 0.000.

In the realm of understanding, is that these estimates are smoothed over a long period of time and can be used as a forecast and stimulate the economic growth within a shorter period as adequate.

Table 5. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	27.444	.126		217.046	.000
1 SECTOR ASSETS TO GDP	2.438	.189	3.163	12.922	.000
SECTOR DEPOSITS TO GDP	-1.623	.306	-1.483	-5.297	.000
SECTOR LIQUID LIABILITIES TO GDP	-1.761	.134	-1.855	-13.119	.000

Source: Authors Findings

Hence to represent the regression equation;

$$\text{Estimated Economic Growth} = 27.44 + (2.438 * \text{Sector Assets}) + (-1.623 * \text{Sector Customer Deposits}) + (-1.761 * \text{Sector Liquid Liabilities}) + 0.1711779$$

4.7 Discussion of Research Findings

In the strength of evidence from the findings, the degree of correlation is at 94% as per the summary of the model. The relationships are minimal and is either positive or negative depending on the banking performance indicating factors under study. In this study the sector assets was weakly related to economic growth at a positive correlation of 0.20. The sector customer deposits and liquid liabilities also exhibits weak relationship at a negative 0.120 and 0.353 respectively. This weak correlation between banking sector and economic growth was once revealed in other countries by Nobel Laureate Robert Lucas, (1988 p. 6) and Adusei, (2013) who dismisses finance as an “over-stressed” determinants of economic growth and that financial development undermines economic growth in Ghana as well as Botswana respectively. Closer home, here in Kenya, Omondi (2013) who established that the relationship between financial deepening and economic growth is weak though exist where he used other variables in the financial sector.

The study also supports the theory of Bi-directional theory originally suggested by Greenwood and Jovanovic (1990) where bank assets-investments like technology in the sector spurs economic growth.

The regression model was satisfactory at 95% confidence level characterized by significance of 0.000.

89% of the economic growth is explained by sector assets, sector deposits and sector liquid liabilities which has also determined the weak relationship.

The results turned out to be a weak relationship between banking sector development and economic growth because there are other sectors that are highly related to the economic growth in Kenya as long as the environment is conducive, examples of these other sectors are Agriculture Mining and Quarrying, Manufacturing among others.

Again the result may have turned out like that because the Kenya banking sector has not been explored to its maximum potential.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected to substantiate the relationship between banking sector development and the economic growth in Kenya, as follows are the summary, conclusion and recommendations were made. This chapter further summarise the nature and strength of relationship as well as the magnitudes of coefficients of correlations.

5.2 Findings Summary

There are other sectors that are highly related to economic growth in Kenya given the conduciveness of the environment. This research has examined that the relationship between banking sector development and economic growth in Kenya, exist at a weak level. This was observed by various analysis of the banking sector indicators of performance and development which comprised banking sector assets, banking sector deposits and banking sector liquid liabilities. The ratios of these performance indicators to GDP were calculated. The study was from the years 2005 to 2015 of which quarterly reports were obtained from valid and reliable published sources. SPSS was used to do this quantitative research. Various empirical studies and theories supports this findings as discussed in findings clause 4.7 above.

5.3 Conclusion

There are various implications that can arises on a weak relationship of the banking sector and economic growth, however, a well governed and resilient banking sector

should perhaps be able to function at such levels of weak relationship with the economic growth.

Banking sector in Kenya contributes to economic growth in its relationship as per this study however minimal, hence there is need to revamp this sector further.

Banking sector has portrayed the poverty within the Kenyan community, as can be seen by a weak customer deposit to the Kenyan economic growth, it can as well be concluded that majority of Kenyans do not deposit their funds in the banks that results to a weak economic growth, again there could be nothing to deposit as perhaps Kenyans live from pay cheque to pay cheque hence nothing to save as deposits, which in turn dent the economic growth.

5.4 Policy Recommendations

These findings are critical and the policymakers should prioritize the banking sector reforms and allot attention to policy determinants of the banking sector development as a mechanism of promoting economic development. In the view of vision 2030 Kenya blue print, the sector of finance will be vital to attaining the objective of the vision in ensuring fabulous intermediation on the deficits and surpluses sectors of the Kenyan economy Kenya Republic (2007). Firstly, the banking sector should be pro-poor, by mitigating the degree to which the gap between the rich and the poor across generations can be filled. This stimulates economic growth by ensuring that there are better savings which translate to customer deposits in the banks, the findings in this study showed a weak negative relationship between the banking sector customer deposits and economic growth. Secondly, banking sector works quietly in the background and when things go wrong for

instance the 2007/2008 post elections violence in Kenya, banking sector failures were visible, in turn the economic growth was the poorest, hence the government needs to ensure stable political system, fiscal discipline and effective information infrastructure within the banking sector. Last but not least, various bank sector investments that translate to assets should be propelled to their potential to ensure maximum economic growth through the banking sector, this study findings was that there exist a weak positive relationship between banking sector assets and economic growth in Kenya.

5.5 The Study Limitations

The data that was collected for this study stems from secondary sources and any error in the original data could not be avoided, however all the data is from reliable and valid sources only.

There are various mixed findings in previous studies almost similar to this study that found out that there is strong relationship between finance institutions and economic growth, and these are highlighted in empirical reviews in this study and there are also similar studies that found out that the relationship is minimal or overstretched.

Desk reviews for published data is slim.

5.6 Further Research Suggestions

This research suggest that there is need for further research as to why the banking sector doesn't reach its potential in economic growth in Kenya.

If I were to do the research again I would change liquid liabilities as it plays negligible role in economic growth through the banking sector as per this study.

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APPENDICES

Appendix I: Independent Variables BSD *In Billions KES*

Year	Quarter	Financial Institutions' Assets	Deposits	Liquid Liabilities
2005	1 st	583.38	474.81	503.37
	2 nd	595.04	484.31	513.44
	3 rd	618.85	503.68	533.97
	4 th	637.41	518.79	554.60
2006	1 st	650.16	529.16	593.42
	2 nd	676.17	539.75	617.16
	3 rd	713.35	561.34	654.19
	4 th	756.16	597.00	657.70
2007	1 st	800.77	632.82	670.85
	2 nd	848.81	658.13	717.81
	3 rd	908.23	691.04	775.24
	4 th	951.20	709.80	821.90
2008	1 st	993.05	724.71	854.78
	2 nd	1,062.57	775.44	914.61
	3 rd	1,147.57	821.96	978.63
	4 th	1,183.60	864.00	1,018.00
2009	1 st	1,215.56	884.74	1,058.72
	2 nd	1,239.87	913.05	1,090.48
	3 rd	1,289.46	949.57	1,123.20
	4 th	1,353.94	1,006.54	1,157.20
2010	1 st	1,450.97	1,113.02	1,180.34
	2 nd	1,548.00	1,219.50	1,215.75

	3 rd	1,638.00	1,270.60	1,219.00
	4 th	1,678.00	1,236.50	1,243.38
2011	1 st	1,789.00	1,318.25	1,268.25
	2 nd	1,900.00	1,400.00	1,300.00
	3 rd	2,010.00	1,500.00	1,436.10
	4 th	2,020.00	1,490.00	1,457.40
2012	1 st	2,100.00	1,560.00	1,502.50
	2 nd	2,200.00	1,660.00	1,571.10
	3 rd	2,300.00	1,720.00	1,658.90
	4 th	2,330.00	1,760.00	1,705.10
2013	1 st	2,420.00	1,780.00	1,751.30
	2 nd	2,510.00	1,860.00	1,801.90
	3 rd	2,620.00	1,910.00	1,855.40
	4 th	2,700.00	1,940.00	1,925.05
2014	1 st	2,820.00	2,040.00	1,994.70
	2 nd	2,970.00	2,150.00	2,118.10
	3 rd	3,080.00	2,250.00	2,180.90
	4 th	3,199.40	2,292.20	2,268.10
2015	1 st	3,370.00	2,338.04	2,355.30
	2 nd	3,600.00	2,384.80	2,507.30
	3 rd	3,650.00	2,456.35	2,531.90
	4 th	3,492.60	2,485.90	2,540.27

Source: (Central Bank of Kenya)

Appendix II: Quarterly Real GDP Growth Rates *In KES*

Quarter Year	1 st	2 nd	3 rd	4 th
2005	281,332,000,000	277,854,000,000	303,053,000,000	313,010,000,000
2006	298,176,000,000	295,130,000,000	327,867,000,000	328,297,000,000
2007	319,269,000,000	319,654,000,000	348,661,000,000	349,263,000,000
2008	322,747,000,000	326,661,000,000	357,680,000,000	350,189,000,000
2009	343,838,000,000	333,173,000,000	364,388,000,000	351,776,000,000
2010	359,457,000,000	348,586,000,000	385,312,000,000	377,161,000,000
2011	845,861,000,000	818,825,000,000	805,573,000,000	823,766,000,000
2012	885,368,000,000	854,348,000,000	841,814,000,000	862,535,000,000
2013	936,746,000,000	918,833,000,000	895,161,000,000	889,416,000,000
2014	981,002,000,000	973,401,000,000	941,389,000,000	938,452,000,000
2015	1,029,805,000,000	1,030,912,000,000	997,946,000,000	992,185,000,000

Source: (Kenya National Bureau of Statistics)

Appendix III: List of values of Y and X's

YEAR	QUARTER	Y	X1	X2	X3
2005	1	26.36	2.07	1.69	1.79
	2	26.35	2.14	1.74	1.85
	3	26.44	2.04	1.66	1.76
	4	26.47	2.04	1.66	1.77
2006	1	26.42	2.18	1.77	1.99
	2	26.41	2.29	1.83	2.09
	3	26.52	2.18	1.71	2.00
	4	26.52	2.30	1.82	2.00
2007	1	26.49	2.51	1.98	2.10
	2	26.49	2.66	2.06	2.25
	3	26.58	2.60	1.98	2.22
	4	26.58	2.72	2.03	2.35
2008	1	26.50	3.08	2.25	2.65
	2	26.51	3.25	2.37	2.80
	3	26.60	3.21	2.30	2.74
	4	26.58	3.38	2.47	2.91
2009	1	26.56	3.54	2.57	3.08
	2	26.53	3.72	2.74	3.27
	3	26.62	3.54	2.61	3.08
	4	26.59	3.85	2.86	3.29
2010	1	26.61	4.04	3.10	3.28
	2	26.58	4.44	3.50	3.49
	3	26.68	4.25	3.30	3.16
	4	26.66	4.45	3.28	3.30
2011	1	27.46	2.12	1.56	1.50
	2	27.43	2.32	1.71	1.59
	3	27.41	2.50	1.86	1.78
	4	27.44	2.45	1.81	1.77

Y in Ln

Appendix III: List of values of Y and Xs Contd.

YEAR	QUARTER	Y	X1	X2	X3
2012	1	27.51	2.37	1.76	1.70
	2	27.47	2.58	1.94	1.84
	3	27.46	2.73	2.04	1.97
	4	27.48	2.70	2.04	1.98
2013	1	27.57	2.58	1.90	1.87
	2	27.55	2.73	2.02	1.96
	3	27.52	2.93	2.13	2.07
	4	27.51	3.04	2.18	2.16
2014	1	27.61	2.87	2.08	2.03
	2	27.60	3.05	2.21	2.18
	3	27.57	3.27	2.39	2.32
	4	27.57	3.41	2.44	2.42
2015	1	27.66	3.27	2.27	2.29
	2	27.66	3.49	2.31	2.43
	3	27.63	3.66	2.46	2.54
	4	27.62	3.52	2.51	2.56

Y in Ln

Source: Authors computation.