THE ROLE OF COMMERCIAL BANKS IN ECONOMIC DEVELOPMENT IN KENYA

 \mathbf{BY}

MOHAMED OMAR ABDULLAHI

A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI

OCTOBER, 2020

DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signature. Date....3/12/2020..........

MOHAMED OMAR ABDULLAHI D63/11352/2018

This research project has been submitted for examinations with my approval as the university supervisor.

Signed Date..3/12/2020......

Dr. Kennedy Okiro

Lecturer,

School of Business,

University of Nairobi.

ACKNOWLEDGEMENT

First of all, I am honestly grateful to the Almighty God for aiding me to undertake this study. I am also very grateful to my supervisor, Dr. Kennedy Okiro, for his supervision, patience and excellent ideas in writing this proposal. I am similarly grateful to the department of Business Administration, School of Business, University of Nairobi for their continued support. I am indebted a great deal of appreciation to the members of my family for their consistent honorable support all through my study period, for being appreciative of the demand of the course with regards to time and resources.

God Bless you all.

DEDICATION

I dedicate this research to my dear family for their great thoughts, support and inspiration that have kept me going all through the whole course, otherwise this research would not have been successful.

Thank you all.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix
LIST OF ABBREVIATION AND ACRONYMS	X
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Role of Commercial Banks	3
1.1.2 Economic Development	4
1.1.3 Role of Commercial Banks and Economic Development	5
1.1.4 Commercial Banks in Kenya	7
1.2 Research Problem	7
1.3 Research Objectives	9
1.4 Value of the Study	9
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Theoretical Review	10
2.2.1 Neo-Classical Model of Growth	10
2.2.2 Endogenous Growth Theory	11
2.2.3 Bi-Directional Theory	12
2.3 Determinants of Economic Development	13
2.3.1 Human Capital	13
2.3.2 Financial Institution Assets	14
2.3.3 Deposits	15
2.3.4 Liquid Liabilities	15
2.4 Empirical Review	16
2.5 Summary of Literature	21
2.6 Conceptual Framework	21
CHAPTER THREE: RESEARCH METHODOLOGY	23
3.1 Introduction	23
3.2 Research Design	23

3.3 Population Study	23
3.4 Data Collection	24
3.5 Diagnostic Tests	24
3.5 Data Analysis	25
3.5.1 Analytical Model	25
3.5.2 Tests of Significance	26
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION	27
4.1 Introduction	27
4.2 Diagnostic Tests	27
4.2.1 Normal Q-Q Plot	28
4.2.2 Autocorrelation	29
4.2.3 Multi-Collinearity	29
4.2.4 Homoscedasticity	30
4.3 Descriptive Statistics	30
4.4 Correlation Analysis	32
4.5 Regression	33
4.5.1 Model Summary	34
4.4.2 Analysis of Variance	34
4.4.3 Coefficients of Regression	35
4.5 Discussion of the Findings	36
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	38
5.1 Introduction	38
5. 2 Summary of Findings	38
5.3 Conclusion	39
5.4 Recommendations	40
5.5 Limitations of the Study	40
5.6 Suggestions for Further Research	41
REFERENCES	42
APPENDICES	47
Appendix I: Data Capture Form	47
Appendix II: List of Commercial Banks in Kenva	48

LIST OF TABLES

Table 4.1 Autocorrelation	29
Table 4.2 Multi-Collinearity	29
Table 4.3: Descriptive Statistics	31
Table 4.4: Correlation Analysis	33
Table 4.5 Model Summary	34
Table 4.6 Anova	35
Table 4.6 Coefficients	35

LIST OF FIGURES

Figure 2.1: Conceptual framework	22
Figure 4.1 Q-Q Plot	28
Figure 4.2 Homoscedasticity	30

ABSTRACT

The purpose of the study was to assess roles of commercial banks and economic development. To fulfil this purpose, the objective of the study was to examine the relationship between the role of commercial banks on the economic development in Kenya. Descriptive research design was adopted to achieve the study objective. The research focused on 42 CBS and 1 Mortgage finance bank in Kenya. Secondary data collection method was adopted, whereby data on GDP growth rate was sourced from CBK website, while data on annual Short-Term loan, annual Long-term loans, account deposits and annual market capitalization was sourced from the annual financial reports of the 42 CBS and 1 Mortgage finance bank in Kenya. The data encompassed a 10 year period (2009-2019). Data analysis was via descriptive statistics and inferential statistics. Information analyzed via descriptive statistics was presented via standard deviation and mean. Inferential statistics was carried out via multiple linear regression. Findings from the regression analysis determined that coefficient of correlation 0.81 and R² 66.3%. R of 0.81 shows that there was a strong linear relationship between long and Short term loans, account deposits and economic development. In addition, 66.3% of the variation in economic development could be explained by the model. This implied that they were still other factors that could help explain economic development in Kenya but where not captured in the study. The Anova revealed that the model was statistically fit and thus it would be accurate to predict economic development on the basis of short term loans, long term loans and account deposits. Findings from the coefficients table showed that each variable had a different strength in predicting economic development. Short term loans and account deposits were positive predictors of economic development while long term loans were a negative predictor of economic development. It was established that for every unit increase in short term loans economic development went up by a value of 1.424. For every additional account deposit that was made economic development went up by 1.039. Further for every unit increase in long term loans given economic development went down by a value of -0.578. The study recommends that CBK implement strategies that are effective in dealing with bad loans. Adaptation of better strategies to deal with such loans once adopted by commercial banks they can be able to recover bad loans and thus help turn long term loans to stimulate economic development. The study also recommends that commercial banks should invest more money in handing out short term loans that have proved to have a positive impact on economic development. The study also recommends that commercial banks continue upholding their banking policies that encourages account deposits. The study also recommends that the CBK provides a friendly environment that would continue to encourage commercial banks to give out loans to the people.

LIST OF ABBREVIATION AND ACRONYMS

CBK Central Bank of Kenya

EAI Educational Attainment Index

ED Economic Development

EG Economic Growth

GDP Gross Domestic Product

HDI Human Development Index

LEI Life Expectancy Index

PQLI Physical Quality of Life Index

R&D Research and Development

SMEs Small Medium Enterprises

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

It is widely recognized that the role of commercial banks (CBs) in Kenya is key towards fostering economic development as they channel funds from where they are in excess to where they are needed for the purpose of investment. It has been indicated that a substantial link exists between the role of commercial bank and economic growth (EG) and development (Yakubu & Affoi, 2014). It is for the fact that, ordinarily the role played by CBs to a nation which simply by mathematical understanding enhances a nation's GDP (Misati & Kamau, 2017). The Central Bank of Kenya (CBK) regardless of the political and economic policies that prevail is key in fostering economic development (ED) through its functions as well as it's services to CBs (Muriithi & Waweru, 2017). The first paradigm that anchored this investigation was the neoclassical growth theory. This theory was propounded by Solow and Swan (1956), they argued that for economic growth to be achieved their capital, labor and technology should work together and not in isolation. Thus availability of savings, capital and investments which are financial factors contributes to temporary economic growth. Endogenous growth theory was propounded by Romer (1990) who argued that for endogenous factors contributes to economic growth rather than external factors. The theory explained two factors that contribute to economic development, one innovation; knowledge and human capital and the other are external factors. The man underlying factor for the theory is the contribution of financial intermediaries in ensuring economic growth (Aghion & Howitt, 1998).

Bi-directional theory was propounded by Jovanovic and Greenwood (1990) it is a hypothesis that illustrates the dependency between the financial improvement and economic growth that's why it called bi-directional. The theory emphasized the correlation between the economic growth and financial improvement, in this case, it emphasized on the relevance of the economy in improving the market of financial institutions hence realizing profits resulting in economic growth on the country (Jovanovic & Greenwood, 1990). CBs have frequently been key in a nations's ED globally regardless of it political and economic policies. They do not act solely as wealth custodians of a nation but also fostering ED of nations worldwide (Saksonova & Koleda, 2017). Okechukwu and Nebo (2016) note that CBs are key in mobilizing funds for ED. They aid in accumulating capital, mobilizing savings, availing funds, industry financing. They are similarly key in foreign trade, optimum resources use, removing budget deficits, implementing new technology and providing essential services. All these services are key in fostering EG and EG. Paavo (2018) state that development of banking industry brings about growth in GDP, channeled by way of net interest revenue and financing banks' liabilities. The Kenyan government facilities lending to the Kenyan private sector by CBs. Misati and Kamau (2017) argue that enhancing financial access strengthens the financial sector which is significant to the EG. Kenya appears to be facilitating this and increasing access to more funding from CBs to foster EG. There has been a substantial growth of financial accessibility in Kenya. An indication of this endeavour to enhance financial access by way of credit is the increased inclusivity of the adult group into the banking facilities. There had been an improvement of aggregate accessibility to formal financial services and products improved to 82.8% in 2019 from 73.4% in 2016.

There has also been progress in accessing financial services to 89% in 2019 down from 26.9% in 2006, bringing about a dip in adult group who have been excluded financially to 11% in 2019 relative to 17.4% in 2016 (CBK, 2019).

1.1.1 Role of Commercial Banks

Machiraju (2008) defines commercial bank is a financial establishment whose function is to take deposits, provide credit and account checking services as well as general financial products such as savings accounts and certificates of deposit to individuals and small enterprises. Song, Yu and Lu (2018) note that it is a financial establishment undertaking the functions of deposits acceptance from individuals and offering credit for investment in order to gain profit. According DaCosta (2019) it is a financial establishment offering general investment products like savings and current accounts, and many more to people and businesses. CBS perform a function in the ED of the developing countries (Jha, 2018). They accumulate individuals' savings that are idle and avail them for investment. They similarly offer new demand deposits while they are offering credit and buying investment products. They promote trade both within and outside the nation through the bills of exchange acceptance and discounting. CBs similarly enhance the mobility of capital. In a countries such as Kenya that is still developing. Additionally, they are the most effective mechanism of facilitating flow of credit the market (Saksonova & Koleda, 2017). Therefore, for their effectiveness in promoting EG and development, it is imperative for them to do their operations under certain established standards such that their functions and services to various key economic sectors for growth and development could facilitate it.

Also, it is imperative that CBs effectively manage various risks they are exposed, so that their solvency can be maintained in the long-term and be capable of providing various sectors with long-term capital which is essential for EG. Hence, to foster ED, there is a need for a robust banking system that is resilient to turbulent environment and effectively act as financial intermediary to facilitate EG and ED.

1.1.2 Economic Development

As noted by Okechukwu and Nebo (2016) ED in the public sector is the process by which the economic well-being and standard of living of a nation or people are enhanced in line with the established goals. According to Sulaiman and Wale-Awe (2018) it is the means through which there is growth or transformation of a nation and becoming more advanced, especially in the enhancement of economic and social statuses. Nguyen *et al.* (2017) define it as the means through which underdeveloped economies turn into developed ones.

ED is essential to an economy as it results in creation of jobs. Those involved in ED offer essential information and assistance to companies that create jobs to individuals. Also, it brings about the diversification of industries. A major component of ED is diversifying the economy, reducing the vulnerability of a nation to a single industry. Whereas a single industry is key for job creation, ED facilities the growth of more industries, like digital media technologies, healthcare and life sciences, aerospace and defense, aviation, technologicsl manufacturing and many more. It similarly results in retention and expansion of businesses. A bigger percentage of employment opportunities in the nation in the existing establishments through expansion of their operations. It also fortifies the economy. It helps in safeguarding the economy of a nation against economic downturns through attraction and broadening of the country's major employers.

Furthermore, it results in increased tax revenue. As companies upsurge in the a country there is an increase in tax revenue for projects. There are a number of criteria to measure the ED, however not a single one produces an appropriate and a general ideal index of ED. Therefore, it is a difficult to answer about the measure of ED (Caudill, Zanella & Mixon, 2000). Lipsey (2004) contends that there exist several potential measures of a nation's level of ED. They comprise: the proportion of resources, income/capital/saving per head and social capital level. However, more generally employed standards of ED are surge in national income, per capita real income, living standards, comparative concept and community economic well-being amongst others. Morris (1979) developed a mixed Physical Quality of Life Index (PQLI). He ascertained that a number of metrics were inputs to the process of ED instead of outcomes of the process of development. These metrics pointed out that nations that are less developed economically are simply unindustrialized versions of developed nations. Therefore, he combined three component metrics of Life Expectancy, Basic Literacy and Infant Mortality to evaluate performance in meeting people's basic needs. Human Development Index (HDI): Pertaining to quality of Life Index, the United Nations originally established and publish HDI in 1990. It analyzes three key human aspects namely: Longevity using Life Expectancy Index (LEI); Literacy using Educational Attainment Index (EAI); and Living Standards using Real GDP per capita (Ofoegbu, Akwu, & Oliver, 2016).

1.1.3 Role of Commercial Banks and Economic Development

Several scholars have studied the link between CBs and ED. Kalpana and Rao (2017) argued that CBs are key to the economy since they have a bearing on the economic activities level for instance, through a surge and decrease in credit and investment.

These undertakings change a nation's supply of money, hence impact the loans size, production (level and location). Also, Sulaiman and Wale-Awe (2018) indicated that they are agents of ED as they directly carry out economic investments (for instance by buying other establishements' shares and securities) as well as granting them credit for investments. Jadhav (2020); Sarker (2016) note they put up branch networks in the rural areas to offer credit for agricultural undertakings as well as directly financing farmers for example in mechanizing farms, marketing produce, developing land, irrigation facilities, and many more bringing about enhanced agricultural production therefore ED. Jagadeswar-Babu (2016) state that they bring about agricultural development by granting financial assistance for animal and crop production. Kavvadia and Savvides (2019) maintaint that they contribute to ED as they aid to attain self-sufficiency by provising entrepreneurs with incentives in risk taking and utilizing untapped resources for enhanced production resulting in the development of a wide range of sectors of the economy therefore a decrease in imports and increase in exports.

Anyanwu, Ananwude and Okoye (2017) maintain that they bring about ED through mobilizing savings from the economic unit with surplus and directing them to those with deficits.

Hence, they help in finding investments. Several scholars similarly agree that mobilized savings from CBs are deployed in the economic unit with deficit for investment therefore enhancing capital accumulation, output expansion and always contributing to ED (Sulaiman & Wale-Awe, 2018; Paavo, 2018; Nguyen *et al.*, 2017).

1.1.4 Commercial Banks in Kenya

As at 2018, the Kenyan banking sector encompasses the CBK which controls the activities of CBs to ensure compliance with country's banking regulations, Kenya has a total of 43 banking institutions where forty banking institutions in the country are privately owned with three public holdings, 25 privately owned and 15 were foreign owned. 24 were CBs out of 25 locally owned while 1 was mortgage financier (CBK, 2018).

CBs perform an essential role to any nation, which include: acceptance of deposits; processing payments; giving credit; issuing bank checks and drafts; and providing safety deposit boxes for documents and other items. There are other smaller functions within this large perspective. They may similarly provide other services for instance insurance contracts brokerage, offering advice on investment among others. They similarly offer a larger spectrum of credit and provide other credit instruments for instance overdrafts and cards (Bakang, 2015).

1.2 Research Problem

The CBs perform an important function in the ED of the developing countries such as Kenya. They accumulate individuals' savings that are idle and avail them for investment. They similarly offer new demand deposits while they are offering credit and buying investment securities.

They promote trade both within and outside the nation through the bills of exchange acceptance and discounting. CBs similarly enhance the mobility of capital (Kavvadia & Savvides, 2019). In a countries such as Kenya that is still developing. Additionally, they are the most effective mechanism of facilitating flow of credit in the market.

In the Kenyan context the CBs have a several barriers to credit facilitation for instance lack of good liquidity, lack of adequate capital (fund), lack of borrower's collateral among others. These barriers of the CBs will be hindering the contributions of CBs on the country's ED.However, there has been a significant improvement in the level of accessing funds in Kenya. The improvement in financial access in Kenya is indicated by improved loan accessibility in Kenya at 89% by 2019 (Misati & Kamau 2017).

Several researches have been undertaken not internationally and locally with regard to the topics of CBs and ED. Globally, Okechukwu and Nebo (2016) analyzed the role of CBs in sustainable ED in Enugu Nigeria. The investigation utilized a survey approach. Udoka, Mbat and Duke (2016) evaluated the bearing of CBs' credit on Nigerian agricultural production. The research utilized an ex-post facto design. Data was obtained from published literature and statistical bulletin from the Central Bank of Nigeria. The investigation adopted ordinary least squares regression approach. Birara (2015) examined the role of commercial bank of Ethiopia in fostering Ethiopian economy for a period of 32 years from 1981-2012 using descriptive research design. The researcher employed Granger causality test and regression analysis.

Locally, Uddin, Sjö and Shahbaz (2013) explored the link between financial development and EG in Kenya between the yeara 1971 and 2011. The investigation employed a Cobb—Douglas production augmented using financial development.

Wanjau, Gakure and Kahiri (2012) scrutinized the role of quality in growth of SMEs and ED in Kenya. The investigation utilized an exploratory approach through a descriptive survey of 123 manufacturing SMEs. Isaac and Samwel (2012) explored the impact of fiscal policy on private investment and EG in Kenya.

The investigation utilized a time series data between 1973 and 2009. The researcher's emoloyed two stage instrumental variable measurement to perform the regression analysis. Going by the above studies, non of them analyses the role of commercial bank in ED in the Kenya context. This investigation therefore sought to bridge the existing gap by looking at the role of CBs in ED in the Kenyan context. The study therefore sought to answer the research question: what is the role of commercial banks in ED in Kenya?

1.3 Research Objectives

i. The objective of the study is to examine the relationship between the role of commercial banks on the economic development in Kenya.

1.4 Value of the Study

This research would be valuable to three groups of entities namely; Government, policy makers and researchers. This investigation would be of value to the government since it would aid it to establish proper developmental plans regarding ED and CBS.

Additionally, it would be valuable to policy makers as it would assist them develop policies that it would enable CBS to enhance the services they offer to the country as well as implementing advanced measures for the enhancement of the EG and development.

Lastly, this investigation would be of importance to other researcher as it would augment the researcher knowledge by providing more insight on the economic performance and importance of CBS. It would similarly provide a basis on which impending academicians and researchers would be able to utilize particular concepts and ideas for their work.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The following part incorporated literature review which would shed insight on the study topic. Various studies both locally and globally were reviewed with the aim of solving the research problem. This chapter consisted of four sections, the first is theoretical review, whereby two theories were reviewed. Secondly, the determinants of economic development, whereby various factors were discussed. Thirdly, the empirical literature which consisted of similar studies done both locally and globally that are related to the study topic. Finally, summary of literature review was discussed.

2.2 Theoretical Review

This section incorporateed various theories which are pertinent to the topic of investigation.

Two theories were expounded, they include, the bi- directional theory and the financial intermediation theory.

2.2.1 Neo-Classical Model of Growth

The theory was propounded by Robert Solow and Trevor Swan (1956), they argued that for economic growth to be achieved their capital, labor and technology should work together and not in isolation. Through functioning of the three phenomena above, the financing factor becomes an irrelevant role for economic growth, making the economic development process temporary (Solow,1956) and (Swan, 1956).

According to Meard (2013) Availability of savings, capital and investments which are financial factors contributes to temporary economic growth and technology should be adopted in this situation since it sustains the economic growth making it long-term. Technology facilitates circulation of finances in the economy allowing EG and development.

CBS in this case have adopted vast technological innovation making the finances that they have acquired from their customers to circulate easily in the market. Commercial bank acts as an avenue for circulating people's money to the economy hence economic growth. The paradigm is pertinent to the investigation since it access the role of CBS in sustaining EG and development. Nelson and Winter (1974) argued that the theory faces critiques since its assumptions are not realistic to given economies.

2.2.2 Endogenous Growth Theory

The theory was propounded by Romer (1990) argued that for endogenous factors contributes to economic growth rather than external factors. The theory explains two factors that contribute to economic development, one innovation; knowledge and human capital and the other are external factors. The man underlying factor for the theory is the contribution of financial intermediaries in ensuring EG (Aghion and Howitt, 1998).

Three authors supported this model illustrates that financial intermediaries are responsible for ED. As stated by Saint-Paul (1992) EG is facilitated by a functioning stock market among the business persons, in this case the business persons are the financial intermediaries between the economy and financial institution.

Levine (1997) agrees with Saint-Paul view whereby he added that liquid assets are relevant for increasing the investments by financial institution therefore frequent investment in the economy ensures economic development overtime. Lastly, Smith (1991) asserts that financial intermediation allows the liquidity assets to be exposed to minimum risk; this is because the customers are encouraged to invest their savings in the economy, and this in turn ensures that economic growth.

The following paradigm was pertinent to this investigation as it assess the role of CBS as financial intermediaries in ensuring economic growth. CBS are financial intermediaries due to the activities they conduct such as stock marketing and management of economic risks due to encouraging saving of finances from its customers. These activities are essential for realization of economic development. Pack (1994) criticized the theory by arguing that it is exposed to much assumptions and the empirical evidence is lacks validation.

2.2.3 Bi-Directional Theory

The theory was propounded by Jovanovic and Greenwood (1990) it is a hypothesis that illustrates the dependency between the financial improvement and economic growth that's why it called bi-directional. The theory emphasizes the correlation between the economic growth and financial improvement, in this case, it emphasizes on the relevance of the economy in improving the market of financial institutions hence realizing profits which contributes to EG of the country (Jovanovic & Greenwood, 1990). According to Schumpeter (1934) technological innovation, product and service development are catalysts for economic growth and the financial systems should endorse them for the realization of economic growth.

Financial institutions have adopted technological innovation for realizing profits through focusing on retention of many customers hence economic growth since more money is circulating in the economy.

The following hypothesis provided evidence for the correlation between the financial improvement and EG and various studies have proved the following hypothesis is true. Through the theoretical evidence, the government will be able to formulate legal policies that encourages sustainability of financial institutions since they understand the relevance it possess to economic growth. Finally, the theory assist the upcoming financial institution to realize the importance of adopting various technological innovation activities for the purpose of realizing profits hence improvement of the country's economic growth. Carby and Wright (2012) criticize the theory since it fails to focus on the role of the financial institution in dealing with factors such as inflation that occurs in the economy and hinders economic growth.

2.3 Determinants of Economic Development

2.3.1 Human Capital

This is an intangible quality asset which is not included in the company's balance sheet. Human capital has an effect on the economic growth since it focus on the provision of quality services and goods in the economy. It entails assets such as skills, education, intelligence which are valuable to the employers globally. In this case, employers invest much in employees for realizing quality production hence improvement of the economy of the country. Surge in human capital contributing to enhanced quality production hence profitability of the country which contributes to advancement in economy (Barro, 2001).

Financial institutions lately is investing in human capital. Through investing in training their employees to be competent they intern provide quality services which are adopted by the people hence increasing profitability and economic growth. They have also been financing the needy students in various countries for the purpose of promoting education activities hence providing skilled workers for economic development (Pelinescu, 2014).

2.3.2 Financial Institution Assets

According to Bondie and Kane (2009) financial institution assets are the liquid assets that are in ownership claim they are either tangible or intangible but their value is placed on documents. They include, investments, mutual funds, stock, fixed assets, credit portfolio and current assets. The financial institution assets promotes economic growth since it facilitates the financing of the company's investments. Through usage of financial institution assets, the company's investors are able to evaluate different investments options for realizing profits. This makes the firm to welcome various investors who are provided free investment options and willingly given an opportunity to choose the areas they want to invest in depending on the risk, personal decision and market efficiency.

The financial institution assets has two roles in the economy, firstly is to transfer of investments from those who have surplus to those who need to invest on tangible assets. Secondly, is to ensure that the investments is redistributed evenly in the market depending on the risk preferences. The financial assets of an institution is expected to generate future cash for the investors and the firms by the person or institutions that were offered the investments. Therefore, the financial assets are known to improve the economy of the country since investments have been done in which the cash has circulated hence generating profits (Roncalli & Weisang, 2015).

2.3.3 Deposits

Bank and Lawrenz (2013) stated that this is money that is transferred from one party to another for the purpose of safe keeping. In this case, the parties involving themselves in the keeping of the money should have a mutual argument between each other to avoid conflicts. Money placed in banking institutions by individuals who are customers of the bank is referred to as deposit. The deposited cash basically belongs to the customer and he or she can withdraw it at their own comfort and also transfer it to another account, in this case transaction fees is charged. When opening accounts, the banks has to ensure that one deposits an amount to their accounts for activation purposes hence accountability.

Banks largely contributes to economic growth since they allow individuals or businesses to deposit and invest money in which they in turn use for lending other people hence earning profit through interest charges. Through lending money to the people by the banks, they are able to start their own businesses or rather investments which is directly introduced to the economy hence facilitates economic growth. By turning the liability into useful long-term loan investments the bank is able to earn it profits (Sharma, 2016).

2.3.4 Liquid Liabilities

This are the compulsions which are supposed to be paid within the year by the firm. They include short term deposits done by the firm. It is calculated through adding the cash overdraft and the cash credit facilities, the sum is then subtracted from the current liabilities hence obtaining liquid liabilities. Liquid liability is acts as an intermediary between the economy and the financial sector since it measures the level of real per capita GDP and also the rate of change (Levine & King, 1993).

Liquid liabilities which are introduced by the banks enables cash to propel in the economy equally for the purpose of economic growth. When the commercial papers are circulated for instance traveler's checks, market funds held by residents, foreign currency deposits and shares of mutual funds people all those sectors gain profits which are dependent on the nature of the company. This enables them to improve their living standards hence gross domestic product. It also allows them to trade and invest in other sectors hence economic development since majority of the people are benefiting. Countries with improved technology has highly indicated economic development due to their innovation in realizing increased liquid liabilities, hence technology and innovation acts as catalyst of liquid liabilities in the economy hence development (Bakhang, 2015).

2.4 Empirical Review

Saini and Sindhu (2014) researched on the function that CBs have on the ED in India. Indian economy is highly supported by agricultural engagement by the local people. CBs provides direct investments to the people since they provide for them saving channel. Through depositing of cash, the customers are able to be provided loan which they inturn use as capital for their business. They also increase the mobility in accessing capital for the farmers in the rural areas who are actively engaging in agriculture hence promoting economic development. Through trading within and outside the country, the CBs are able to increase their profits hence earning the country foreign revenue. Effective and efficient banking systems provides capital for the people, controls the flow of the capital in realization of economic growth and also provides future saving opportunities and hence supports the individuals living standards.

The study recommends that the government should support the CBS since they improve the agricultural system directly which is an important element for economic growth.

Akubu and Affoi (2014) did an analysis on how the CBS of Nigeria has brought about ED in Nigeria. The study aimed at investigating the role of CBS in the realization of ED. The people from the management were interviewed the researcher managed to interview ten management officials. Through interview conclusions on the findings were made. Also records from 1992 to 2012 were gathered by the researcher and used in making conclusions. The findings indicate that, CBS as any private sector globally brings about EG. It mostly increases the GDP of the country's economy hence ED. This happens through creation of employment and hence improvement of the individuals' living standards. The investigation recommends that in order to ensure EG, CBS should be encouraged to strengthen and improve their credit for the purpose of accommodating more people as employees since they are making more profits hence increasing the GDP. The government should promote the CBS and come up with policies that favors their existence in the market. The CBS should also come up with legal framework for ensuring that they are able to sustain themselves in the market for the purpose of realizing profits hence EG through supporting of other people such as provision of capitals through loans.

Alkhazel (2017) did a research in Jordan in assessing the role of the CBS in ED. The investigation aimed at investigating whether the CBS promotes EG or not and how. The investigation adopted secondary data collection technique, whereby records form the 2010 to 2015 from CBS were obtained, analyzed and conclusions made. The findings indicated that, increase in profitability of the bank improves its performance hence EG, through increase of GDP.

This is because the bank improves the living standards of the people through offering those loans as capital for their investments. It also offers employment opportunity to people hence improvement of their living standards. Recommendations were made that the policy creators should come up with specific measures for ensuring that the CBS in Jordan are sustained hence advancing the economic growth. It was also noted that technology and innovation of the banks should be embraced for the purpose of catalyzing economic growth.

Muniswamy (2018) researched on the role played by CBS in economic growth. The study examined the role of CBS as capital formation and EG. The study adopted secondary data technique, whereby records from the 1980 to 2009 of CBS in India were used to determine the findings. Findings indicated that, gross fixed capital formation and GDP resulted to EG. Through frequent deposits made by the customers at the bank, it led to increase in gross fixed capital which was given to the customers as loan hence earning the banks interests. Also they used the deposits to invest more in other projects hence increasing its profitability and also circulating the cash in the economy. This also increased the GDP of the country since living standards are improved through increased employment and investments. Therefore, the GFCF and GDP has direct effect on economic development hence should be actively embraced by the CBS.

Wandera (2016) did an evaluation of the role of CBS and the effect they have on EG and development in Nakuru County, Kenya. The investigation involved a total of 33 banks which have branches in Nakuru town. Both the customers and the management were involved in the study, whereby, the key informant interview was conducted to the mangers at each bank branch and also, questionnaires administered to the customers of the banks.

The study findings indicated that the CBS plays a big role in realization of EG in Nakuru County. CBS have ensured capital formation for both high and low income earners, this is because it gives them a platform for saving their money and earn interest for the purpose of individual or group investments hence economic growth of the city. It enhances trade through provision of forex for both the importers and exporters in and out of the town. It also finances its customers for engaging in trading activities. Through providing loans to the farmers of Nakuru town, CBS have directly supported agricultural activities hence economic growth and finally, it has created employment to the people of Nakuru town hence improving their living standards as a result of increase in GDP. In conclusion, CBS have enhanced economic growth in different cities of the county and should be embraced by the government.

Mulu (2014) realized that the CBS activities has an effect on the EG of the nation. He assessed the roles of the CBS roles in the realization of ED. Records from the year 2008 to 2012 was used and 48 CBS in Kenya were involved in the investigation. The outcomes pointed out that, the loans offered by the Kenyan CBS has a direct effect on the ED. This is because the bank offers loans to its customers, the customers are required to invest the cash given to them and return it back to the ban with a given interest percentage. This enhances circulation of money in the economy since they want to gain profits and return the interest to the bank. Hence the CBS as a catalyst for economic development. The interest accumulated by the CBS after payment of loans is used by the bank to further their investments hence EG of the nation because of increased taxation. Finally the CBS offers scholarship opportunities to support the needy students through their foundations hence contributing to supporting education systems which intern led to economic development.

In conclusion, other than the CBS loans, there are many activities that the banks involves themselves in which spearhead the economic development.

Randiki (2016) scrutinized the link between the CBS and ED in Kenya. The investigation involved a total of 48 CBS which functions actively in the country. The findings indicated that the assets that the bank owns, deposits from the clients and the liquid liability of the bank has a direct effect on the economic development if properly utilized. Financial assets of the bank contributes to economic development, this financial assets are borrowed by different investors in setting up their companies as capital. Hence through their investments, they create employment and results to GDP. The banks has liquid liability which in obtains through the savings from their customers. It uses the savings to invest in some of their external businesses to maximize their profits hence ensures circulation of money in the economy hence economic development. Therefore, recommendations were emphasized on creating of legal policies that will encourage and sustain CBS into the country's economy.

Mulu (2015) assessed the link between financial sectors in Kenya and ED, the case was an assessment of CBS of Kenya. Secondary data collection techniques was adopted, whereby a total of 48 CBS were involved. The record used as sourced from the CBK and Kenya National Bureau of statistics of the years 1990 to 2013. For determination of link between the two variables, descriptive and regression analysis were employed. The findings indicated that, for the realization of economic development, the CBS have enhanced productive labor force, this was done through the employment of people. They have enhanced their capital formation through encouraging their clients to deposit and save their funds in the banks which is used in turn for investment purposes.

They have also increased the exports through engagement in forex trading hence earning the country foreign revenue. Finally they have reduced their liquid liabilities hence ensuring the EG of the nation. In conclusion, recommendations are emphasized on the improvement of the CBS services through diverse innovation hence economic growth.

2.5 Summary of Literature

CBS are known to play a direct role to economic development of different countries across the globe. They are known to increase labor production which directly has an impact on the gross domestic product hence economic development. They create employment for the local people in the areas in which they are situated hence improves their living standards. The also provide the capital for both the low and high income earners to improve their investments through loans in which promotes economic growth. CBS encourage customers in saving of their money hence financing their own trade. It also lays a platform for foreign trade where the locals can trade with the foreigners freely. Like any private firms in the country, CBS earn the countries revenue through taxation which assists in the ED of the nation by improving the nation.

2.6 Conceptual Framework

It indicates the link between the investigation variables. The independent variable will be represented by Short-Term loan, Long-term loans, and corporate tax whereas the dependent variable will be represented by ED. Moderating variable is represented by annual market capitalization.

Short-Term loan Measured by Annual short-term loans Long-term loans Measured by annual long-term loans Measured by annual long-term loans Account deposits Measured by total account deposits Stock market development

Measured as the annual market capitalization

Figure 2.1: Conceptual framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In this section, the following approach was followed for the purpose of conducting the study. The following sections was incorporated in the section, firstly, the research design, secondly, data collection, thirdly, diagnostic tests and finally data analysis.

3.2 Research Design

Mugenda and Mugenda (1999) it is the technique used by the researcher in solving the research problem. The research design adopted, often enables the researcher to make prior plans on how they are going to solve the problem. The following study adopted descriptive research design.

As noted by Kothari (1990) descriptive research design is a methodology that entailed descriptive data gathering, usage of descriptive research tools and analysing data descriptively for the purpose of clear solving of the research question. The investigation employed this design because of the following reasons, descriptive design ensured that the there is accurate data collection, it depicts the findings clearly through clarity in information, during data collection, in depth research was conducted and finally it was similarly allow the study collected data from a huge population efficiently.

3.3 Population Study

A study population is the characteristic group or items from which a investigation sought to obtain the study information.

For this investigation it encompassed 42 CBS and 1 Mortgage finance bank in Kenya (CBK, 2020). Due to the small number of CBS, all the banks participated in the investigation.

3.4 Data Collection

The following investigation adopted secondary data collection method, whereby data on GDP growth rate was sourced from CBK website, while data on annual Short-Term loan, annual Long-term loans, account deposits and annual market capitalization was sourced from the annual financial reports of the 42 CBS and 1 Mortgage finance bank in Kenya (Appendix II). The data encompassed a 10 year period (2009-2019).

3.5 Diagnostic Tests

Information collected underwent diagnostic tests. Diagnostic tests to be done include: normality test, autocorrelation, multi-collinearity test, homoscedasticity. Normality tests are used to determine if dataset has been taken from a population with normal distribution. A normal data distribution is a key assumption in parametric testing since their validity depends on it. Normality test of the data was tested through Q-Q plot. Data would have a normal distribution if the Q-Q plot is clustered around the horizontal curve. This would aid in identifying outliers. Autocorrelation is used to establish the degree or existence of association between the variable values across various data observations.

Autocorrelation was tested via DurbinWatson test. Durbin Watson tests vary between 0 and 4. Values nearer to 0 or 4 point out positive and negative link. Values nearer to 2 point out less autocorrelation.

Multicollinearity refers to high level of intercorrelation between the predictor variables in

a manner that the bearing of the predictor variables are inseparable. Multicollinearity was

tested via Vairance inflation factor When VIF=1 then there exists no link, 1<VIF<5 means

moderate link while VIF>5 reflects high link.

Homoscedasticity implied the link being investigated is similar for the whole range of the

output variable. Homoscedasticity is a test used to measure whether the variance of the

predictions determined by regression remain constant or differ. According to Lani (2011),

homoscedasticity defines a condition whereby the error term or the random disturbance in

the link between the investigation variables is the uniform all the independent variables

values. Lack of homoscedasticity was indicated by greater errors (residuals) for certain

parts of the range relative to others. Homoscedasticity was measured via Levene's test

(Garson, 2012).

3.5 Data Analysis

Data analysis was via descriptive statistics and inferential statistics. Information analyzed

via descriptive statistics was presented via standard deviation and mean. Inferential

statistics was carried out via multiple linear regression.

3.5.1 Analytical Model

The investigation used a multiple regression analysis model in predicting the a variable's

value in reference to other variables' values. Data analysis tool was Statistical Package for

Social Sciences. Multiple regression model was as follows:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Whereby: β_0 was the regression intercept; β_0 are the regression coefficients;

25

Y = Economic development measured by GDP rate;

 X_1 = Natural log of Short-Term loans

 X_2 = Natural log of Long-term loans :

 X_3 = Natural log of annual account deposits :

 X_4 = Natural log of annual market capitalization

 $\varepsilon = \text{Error term}$

3.5.2 Tests of Significance

To test the statistical significance the investigation employed F-test and T-test. F-test is a measure utilized to test the significance of the model in entirety, whereas t-test is a measure employed to test the individual significance of each variable at 5% level of significance.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This study was carried out with the aim of investigating the effect of the role of commercial banks on the economic development in Kenya and examining the link between the role of commercial banks on the economic development in Kenya. The study looked in detail the effects of annual long term loans, annual short term loans and total account deposits and their impact on economic development which was measured as the growth of the country's GDP.

This chapter focuses on data analysis, interpretation and presentation of the findings by presenting a discussion on diagnostic tests, descriptive statistics and regression analysis.

4.2 Diagnostic Tests

Diagnostic tests done on the data collected included: normality tests, auto correlation, multi-collinearity tests and homoscedasticity.

Normality tests are conducted to check if the data came from a normal distribution. A Q-Q plot was utilized by the study to test for normality. In a Q-Q plot if data comes from a normal distribution then points of the data will cluster and from a somewhat straight line.

Autocorrelation was used to measure relationship of observations in the data in different points in time to access where a trend emerges over time. The study used Durbin Watson test to test for autocorrelation. Durbin Watson tests vary between 0 and 4. Values nearer to 0 or 4 point out positive and negative link. Values nearer to 2 point out less autocorrelation.

The study carried out a multi-collinearity test to check if a predictor variable could be predicted by another predictor variable in the study to some degree. Variance inflation factor was used to test for multi-collinearity. If VIF=1 then there exists no link, 1<VIF<5 means moderate link while VIF>5 reflects high link.

Homoscedasticity was used to access if all the independent variables had the same finite variances. Lack of homoscedasticity is indicated by greater errors for certain parts of the range relative to others.

4.2.1 Normal Q-Q Plot

Normality test was tested via Q-Q Plot. The outcome of the analysis was presented in figure 4.1.

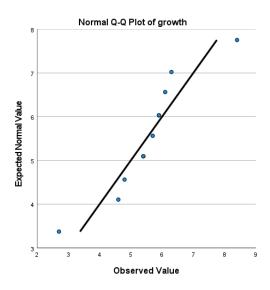


Figure 4.1 Q-Q Plot

Source: Secondary Data

Findings from the study showed that most of the points in the data set clustered around the best line of fit for a normal distribution. This was an indication that the data was came from a normal distribution.

4.2.2 Autocorrelation

Autocorrelation was carried out and presented Durbin-Watson. The data results is presented in Table 4.1.

Table 4.1 Autocorrelation

Autocorrelation	
Durbin-Watson	2.426

Source: Secondary Data

From table 4.2 the study established the value of autocorrelation to be 2.426. Since this value was close to 2 it implied that residuals from our observations were independent and thus uncorrelated.

4.2.3 Multi-Collinearity

The results for multi-collinearity was presented via Tolerance and Variance Inflation Factors. This is shown in table 4.2.

Table 4.2 Multi-Collinearity

Collinearity Statistics		
	Tolerance	VIF
GDP growth	0.762	8.374
Long term Loans	0.38	2.399
Short term Loans	0.976	2.565
Annual Deposits	0.38	1.29

Source: Secondary Data

From table 4.2 VIF indicates that long term loans, short term loans and annual deposits have values less than 5 indicating moderate multi-collinearity. GDP growth has a VIF factor greater than 5 an indication that it has high multi-collinearity and thus it can be influenced by other variables to some extent.

4.2.4 Homoscedasticity

Homoscadasticity was shown via Histogram. This analysis was presented in figure 4.2.

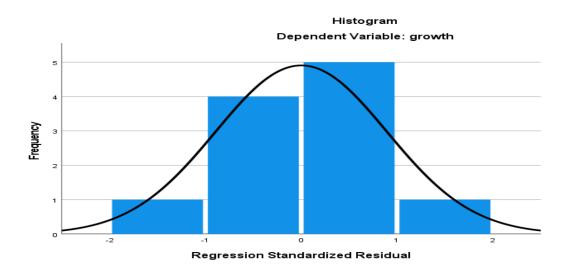


Figure 4.2 Homoscedasticity

Findings in figure 4.2 revealed that a relationship exists between the predicted variable and the residual variable. This implies that the homoscedasticity has not been violated by the plot and thus the data utilized by the study was normally distributed.

4.3 Descriptive Statistics

Descriptive statistics are used to describe basic features about a data in a study. They provide summaries from the data that help construct meaning of the data in a sensible way. The study utilized descriptive statistics such as minimum, maximum, mean, standard deviation and skewness.

Minimum was used to describe the lowest data point in the data set while maximum was used to describe the greatest number in a data set. The mean is used to describe the average value of a dataset. Standard deviation is a measure of dispersion and tells how spread out a data point is in reference to the mean. Standard deviations above the mean indicate that the data is dispersed far away from the mean while standard deviations below the mean indicate that most of the data points are close to the mean. Skewness is used to measure the departure of asymmetry of a data set in comparison to a normal distribution. A skewness value that is positive indicates that the distribution is skewed to the right while a negative skewness value indicates that a distribution is skewed to the left.

Table 4.3: Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
GDP Growth Rate (%)	4.6	8.4	5.85	1.374	-0.065	0.661
Short Term Loans (in Millions)	432969	1508166	1021312	369860	-0.368	0.661
Long Term Loans (in Millions)	288646	1005444	680875	246573	-0.368	0.661
Account Deposits (in Millions)	1006021	3460742	2217360	814652	0.044	0.661

From the table 4.3 the study established that GDP growth rate had a minim of 4.6 and a maximum of 8.4 percent. The mean GDP growth rate for the country was 5.85% over the past 10-year period with a standard deviation of 1.374. The distribution was slightly skewed to the left as indicated by the negative skewness value of -0.065.

Short term loans that were advanced by the bank had a minimum of 432969 (in millions) and a maximum of 1508166 (in millions).

The average value of short term loans over the past 10 years was indicated by the mean of 1021312 (in millions) and had a standard deviation of 369860.

The distribution of short term loans was skewed to the left as indicated by the negative skewness value of -0.368. Long term loans had a minimum of 288646 (in millions) and a maximum of 1005444 (in millions). The mean of long term loans was 680875(in millions) with a standard deviation of 246573. The distribution of these loans was also skewed to the left as indicated by the skewness value of -0.368. Account deposits had a minimum of 1006021(in millions) and a maximum value of 3460742 (in millions). The mean value for account deposits over the past 10 years was 2217360 (in millions) and had a standard deviation of 814652. Accounts deposit distribution was skewed to the right as indicated by the positive skewness value of 0.044.

4.4 Correlation Analysis

It is the determination of the link between two (or more) quantitative variables. It is essentially done on the basis of the postulation of a straight –line [linear] link between the quantitative variables. The study used correlation coefficient with values ranging from -1 to +1 to show that a coefficient of +1 indicates that the two variables are perfectly related in a positive [linear] manner. Conversely the study used a correlation coefficient of -1 to indicate that two variables are entirely linked negatively [linear] and the zero correlation coefficient to indicate that there was no linear link between the two variables under investigation.

The outcome of the correlation analysis was as indicated in Table 4.4.

Table 4.4: Correlation Analysis

	GDP rate	Short- Term loans	Long-term loans	annual account deposits	log of annual market capitalization
GDP Rate	1				_
Short-Term loans	0.366**	1			
Long-term loans	-0.222*	-0.607**	1		
Annual account deposits	-0.516**	-0.219*	0.478**	1	
log of annual market capitalization	-0.381**	-0.517*	-0.248**	0.541	1

Findings from the study showed that log of Short-term loans was positively correlated to GDP rate as shown by (r=0.366) and negatively correlated to long term loans (-0.222) and annual account deposits (r=-0.516). Short-term loans was negatively correlated with loans term loans (r=-0.607), annual account deposits at (r=-0.219), annual market capitalization (r=-0.517).

Long term loans in relation to annual accounts deposits exhibited a positive correlation (r=0.478). The Long term loans was also negatively affected by log of annual market capitalization since it produced an adverse correlation (r=-0.248). In addition, Annual account deposits was also positively correlated with the annual market capitalization by exhibiting that (r=0.541).

4.5 Regression

Regression analysis is a statistical method that is used to access and quantify a relationship between a dependent variable and one or more independent variables. The study makes use of regression analysis to explore the strength of relationship between economic development measured in terms of GDP growth and annual long term loans, annual short term loans and total account deposits. Findings from this analysis are represented in the model summary, Anova and coefficients tables.

4.5.1 Model Summary

The model summary table summarizes the strength of relationship between the model and the dependent variable. In our study the model summary the model summary table provides information about the variation of economic development that is explained by the fitted model.

Table 4.5 Model Summary

			Adjusted	R	Std. Error of the
Model	R	R Square	Square		Estimate
1	.817ª	0.663	0.538		55.810

a. Predictors: (Constant), long term, short term, deposits

Source: (Secondary Data, 2020)

R Square from the table 4.5 divulges that 66.3% of model that is used predict economic development is explained by long term loans, short term loans and account deposits. The rest of the variation in economic development is explained by other factors not captured by the study.

4.4.2 Analysis of Variance

The Anova table in regression analysis is used to access whether the model is statistically fit to predict the relationship of the variables under study. Results from our study are as shown in table 4.6.

b. Dependent Variable: GDP

Table 4.6 Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression Residual	5003747.384 24918.341	2 8	2501873.692 3114.793	803.223	.000 ^b
	Total	5028665.726	10			

a. Predictors: (Constant), long, short, deposits

From the Anova table above F values (803.223) at a significance level of 0.00 implies that the model is significantly fit to predict economic development based on long term loans, short term loans and account deposits.

4.4.3 Coefficients of Regression

The regression coefficients are used to indicate the strength of each independent variable towards the prediction of the dependent variable. Findings from the study are as presented in the coefficient table.

Table 4.6 Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	1990.04	51.571		38.588	0.000
Short term loans	1.424	0.084	0.1562	0.460	0.000
Account deposits	1.039	0.112	1.194	9.306	0.000
Long term loans	-0.578	0.369	-0.201	1.566	0.000

a. Dependent Variable: GDP

Source: Secondary Data

From the findings it was deduced that the model for predicting economic development can be written as;

 $Y = 1990.044 + 1.424X_1 + 1.039X_2 - 0.578X_3$

Y = Economic development measured by GDP rate;

 $X_1 = Short term loans$

 $X_2 = Account deposits$

 $X_3 = \text{Long term loans}$

From these findings it can be deduced that the constant value for economic development is 1990.044. This means that if short term loans, long term loans and account deposits didn't contribute to economic development it would still have a value of 1990.044. Short term loans had a beta coefficient of 1.424 this means that for every unit increase in short term loans economic development went up by 1.424. Account deposits had a beta coefficient of 1.039 which implied that for every unit increase in account deposits economic development went up by 1.039. Long term loans had a beta value of -0.578, which meant that for every unit increase in long term loans economic development

4.5 Discussion of the Findings

Findings from the descriptive statistics indicate that economic development, short term loans and long term loans had distributions that were slightly negatively skewed as indicated by the respective skewness values of -0.065, -0.368 and -0.368. Account deposits were slightly positively skewed as indicated by the skewness value of 0.044. The descriptive statistics further revealed that standard deviations of economic development, short term loans, long term loans and account deposits were below the mean which was an indication that the data points in these data sets were consistently clustered around the mean.

Findings from the regression analysis revealed that R Square was 0.663 which implied that 66.3% of the variation in economic development could be explained by short term loans, long term loans and account deposits.

Results from the Anova table further revealed that the regression model was statistically fit to predict economic development based on short term loans, long term loans and account deposits. From the coefficients table it was determined that account deposits and short term loans had a positive influence on economic development as indicated by the respective beta coefficients of 1.039 and 1.424. Long term loans were found to have a negative influence on economic development as indicated by the beta value of -0.578.

Findings of these study agree with those of Aurang (2012) who conducted a study in Pakistan to access the role of commercial banks in the economic development of Pakistan over a period between 1981 and 2010. Results from his study concluded that account deposits had a significant impact on the economic development of Pakistan.

The findings of this study also concur with those of Zhang, Wang & Wang (2012) who carried out an investigation to establish the role of the finical sector in the economic development of China. In their study they concluded that credit, account deposits and savings had a positive impact on the economic development of China.

The findings of this study further agree with those of Waiyaki (2013) who conducted a study assessing financial development, economic growth and poverty in Kenya between 1997 and 2010. In his study he concluded that money supply and account deposits were crucial determinants of Kenya Economic development and growth.

The findings of the study however, differ with those of Mulu (2012) who despite establishing that loans had a negative impact on economic development of Kenya, he concluded that loans were not a significant predictor for economic development for the country.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND

RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the findings, conclusion, recommendations and limitations of the study based on the research objectives. The study was carried with the purpose of investigating the effect of the role of commercial banks on the economic development in Kenya and examining the link between the role of commercial banks on the economic development in Kenya. This chapter further provides suggestions for further research.

5. 2 Summary of Findings

The study was carried out with the aim of assessing the role of commercial banks on the economic development in Kenya and examining the link between the role of commercial banks on the economic development in Kenya. On accessing whether the data utilized by the study came from a normal distribution, the normality Q-Q plot confirmed that the data didn't have a significant departure from a normal distribution and thus it was concluded that it was approximately normal.

Findings from the descriptive statistics revealed that economic development, short term and long term loans had distributions that slightly distorted to the left as indicated by the skewness values of -0.065, -0.368 and -0.368 respectively. Account deposits was positively skewed as reveled by the positive skewness value of 0.044.

Over the 10-year period the study was conducted it was established that the mean GDP growth rate for the Kenya was 5.85 percent with a standard deviation of 1.374. Short term

loans averaged 1021312 (in millions) and had a standard deviation of 369860 while long term loans had a mean of 680875(in millions) with a standard deviation of 246573.

Account deposits had a mean of 2217360 (in millions) and had a standard deviation of 814652. It is important to note that for all the variables under investigation in the study the standard deviation was well below the mean an indication of consistent trends in the data sets throughout the 10-year period.

Findings from the regression analysis determined that 66.3% of the variation in economic development could be explained by the model. This implied that they were still other factors that could help explain economic development in Kenya but where not captured in the study. The Anova revealed that the model was statistically fit and thus it would be accurate to predict economic development on the basis of short term loans, long term loans and account deposits. Findings from the coefficients table showed that each variable had a different strength in predicting economic development. Short term loans and account deposits were positive predictors of economic development while long term loans were a negative predictor of economic development. It was established that for every unit increase in short term loans economic development went up by a value of 1.424. For every additional account deposit that was made economic development went up by 1.039. Further for every unit increase in long term loans given economic development went down by a value of -0.578.

5.3 Conclusion

From the analysis it was revealed that the average GDP growth rate of the country was at 5.85 percent over a period of 10 years with the rate even experiencing a maximum of 8.4 percent in one of the years. This was a clear indication that economic development in the

country is growing. Data for accounts deposits, short term and long term loans didn't have a significant departure from a normal distribution. The standard deviations also showed that the data points were around the mean. This implies that country's' policies towards lending and account deposit has remained fairly the same over the 10-year period and thus explains the normal distribution in the data.

From the findings it was also concluded that long term loans adversely affect economic development in the long run while account deposits and short term loans stimulate economic growth in the long run.

5.4 Recommendations

The study recommends that CBK implement strategies that are effective in dealing with bad loans. Adaptation of better strategies to deal with such loans once adopted by commercial banks they can be able to recover bad loans and thus help turn long term loans to stimulate economic development.

In light of the study conclusion, the study recommends that commercial banks should invest more money in handing out short term loans that have proved to have a positive impact on economic development. The study also recommends that commercial banks continue upholding their banking policies that encourages account deposits. The study also recommends that the CBK provides a friendly environment that would continue to encourage commercial banks to give out loans to the people.

5.5 Limitations of the Study

The study was limited in terms of the time frame. The study looked into economic development over a period of 10 years. Thus it is not possible to tell if the results would have remained the same if a longer period of study was put into consideration.

The study cannot also ascertain that the conclusion for the time studied would hold for another 10-year period.

The study was also limited to secondary data sourced form the CBK website. Thus, the validity of the study is tied to the validity of the data presented by the CBK which cannot be fully ascertained by the researcher.

The time set aside to carry out the research was also limited. With adequate time, the researcher would have looked at economic development for a longer period of time and tried to evaluate what other factors could account for it other than the one's investigated.

5.6 Suggestions for Further Research

The study established that 66.3% of the variation in economic development was explained by short term loans, long term loans and account deposits. Thus it is prudent for another researcher to investigate what other factors account for economic development that were not captured by the study.

The research was also tied to the role of commercial banks in the economic development process. Thus, it is also important for other studies to assess the role of other sectors in the economy and investigate their role in economic development as well.

REFERENCES

- Aghion, P., Ljungqvist, L., Howitt, P., Howitt, P. W., Brant-Collett, M., & García-Peñalosa, C. (1998). *Endogenous growth theory*. MIT press.
- Alkhazaleh, A. M. K. (2017). Does banking sector performance promote economic growth? Case study of Jordanian commercial banks. *Problems and Perspectives in Management*, 15(2), 55-66.
- Anyanwu, F., Ananwude, A., & Okoye, N. (2017). An empirical assessment of the impact of commercial banks' lending on economic development of Nigeria. *International Journal of Applied Economics, Finance and Accounting*, *1*(1), 14-29.
- Aurang Z. (2012). Contributions of banking sector in economic growth: a case of Pakistan, Economics and Finance Review, 2(6), 45 54
- Bakang, M. L. N. (2015). Effects of financial deepening on economic growth in Kenya. *International Journal of Business and Commerce*, 4(7), 1-50.
- Bank, M., & Lawrenz, J. (2013). Deposit finance as a commitment device and the optimal debt structure of commercial banks. *European financial management*, 19(1), 14-44.
- Bardhan, P. (2016). Endogenous Growth Theory to the *Analysis of Development Problems: An. New Theories in Growth and Development, 97.*
- Barro, R. J. (2001). Human capital and growth. *American economic review*, 91(2), 12-17.
- Bencivenga, V. R. 7 Smith, B. D. (1991). Financial Intermediation and Endogenous Growth. Review of Economics Studies 58(2), 195–209.
- Birara, F. (2014). Role of Commercial Bank of Ethiopia in Fostering Ethiopian Economy. Adama Science and Technology University, Ethiopia.
- Bisignano, J. (1992). Banking competition, regulation and philosophy of financial development: a search for first principles' in the internationalization of capital markets and the regulatory response. *John Fingleton(ed.). London: Graham and Trotman*
- Bondie, Z., Kane, A., & Marcus, J. A. (2009). Investments (8th ed.). Canada: McGrawHill.
- Carby, Y., Craigwell, R., Wright, A., & Wood, A. (2012). Finance and growth causality: A test of the Patrick's stage-of-development hypothesis. *International Journal of Business and Social Science*, 3(21). Wandera, A (2016) The role of commercial banks in economic growth and development of Nakuru Town, A case study of Cooperative bank of Kenya. *UoN Repository*
- Caudill, S. B., Zanella, F. C., & Mixon, F. G. (2000). Is economic freedom one dimensional? A factor analysis of some common measures of economic freedom. *Journal of economic development*, 25(1), 17-40.
- CBK (2019). 2019 Financial access household survey. Accessed from https://www.centralbank.go.ke/uploads/financial_inclusion/1275230559_2019%20FinAcces% 20Report%20(web).pdf on 11th May, 2019.

- CBK (2020). Directory of licenced commercial banks mortgage finance institutions in Kenya. Accessed from https://www.centralbank.go.ke/wp-content/uploads/2017/05/Directory-of-Licenced-Commercial-Banks-Mortgage-Finance-Institutions-and-NOHCs.pdf on 17th May, 2020
- Chu, A. C., Cozzi, G., Furukawa, Y., & Liao, C. H. (2017). Inflation and economic growth in a Schumpeterian model with endogenous entry of heterogeneous firms. *European Economic Review*, *98*, 392-409.
- Coccia, M. (2018). New directions in measurement of economic growth, development and under development. *Journal of Economics and Political Economy-JEPE*, 4(4), 382-395.
- Cooper, R., & Bedford, T. (2017). Transformative education for gross national happiness: A teacher action research project in Bhutan. In The Palgrave International Handbook of Action Research (pp. 265-278). New York: Palgrave Macmillan.
- DaCosta, M. (2019). Finance and Development: The Role of International Commercial Banks in the Third World. Routledge.
- Gaikwad, S. B., & Suryawanshi, J. R. (2020). Role of commercial Banks in Agricultural Finance. *Our Heritage*, 68(25), 204-212.
- Greenwood, J., & Jovanovich, B. (1990). Financial Development, Growth and Distribution of Income. *Journal of Political Economy*, 1076-1107.
- Isaac, M. K., & Samwel, K. C. (2012). Effects of fiscal policy on private investment and economic growth in Kenya. *Journal of Economics and Sustainable Development*, 3(7), 8-16.
- Jadhav, H. L. (2020). Role of Commercial Banks in Agricultural Development of India. *Studies in Indian Place Names*, 40(64), 256-263.
- Jagadeswar-Babu, A. (2016). Role of commercial banks in the development of agriculture in Andhra Pradesh.
- Jha, S. (2018). Performance appraisal of commercial Lordkipanidze, R. (2018). Polar Difference in Economic Regulation of Developed and Developing Countries.
- Kalpana, B., & Rao, T. V. (2017). Role of commercial banks in the economic Development of India. *International Journal of Management and Applied Science*, 3(4), 1-4.
- Kavvadia, H., & Savvides, S. C. (2019). Funding Economic Development and the Role of National Development Banks-The Case of Cyprus. Available at SSRN 3477858.
- King, R. G., & Levin, R. (1993). Finance and Growth: Schumpeter Might Be Right. The Quarterly Journal of Economics, 108(3), 47-62
- Levine, R. (1997). Stock markets, growth and tax policy. The Journal of Finance, 46(4), 1445-1465.
- Lipsey, R. G. (2004). The new economy: theory and measurement. In The New Economy in East Asia and the Pacific (pp. 48-75). Routledge.
- Machiraju, H. R. (2008). *Modern Commercial Banking (Second)*. USA: New Age International (P) Ltd.

- Meade, J. E. (2013). A Neo-Classical Theory of Economic Growth (Routledge Revivals). Routledge.
- Misati, R., & Kamau, A. (2017). Local and international dimensions of credit provision by commercial banks in Kenya. *Banks & bank systems*, 12(3), 87-99.
- Muli, K. O., & finance, I. (2015). The relationship between financial sector development and economic growth in Kenya. *An unpublished masters project of the University of Nairobi*.
- Mulu M. (2021). The effect of commercial bank loans on the economic growth of kenya, University of Nairobi.
- Mulu, M. J. (2014). The Effect of Commercial Bank Loans on the Economic Growth of Kenya. *Signature*, 63, 72503.
- Muniswamy, D. (2018). Role of commercial banks in economic development: Indian perspective.
- Muriithi, J. G., & Waweru, K. M. (2017). Liquidity risk and financial performance of commercial banks in Kenya.
- Nelson, R. R., & Winter, S. G. (1974). Neoclassical vs. evolutionary theories of economic growth: critique and prospectus. *The Economic Journal*, 84(336), 886-905.
- Nguyen, N. V., Ngo, V. M., Phan, Q. T. P., Ho, T., & Phan, D. (2017, September). Analysis of Economic Development of Czech Republic and Vietnam. In Proceedings of the 4th International Conference on Finance and Economics (pp. 215-224).
- Nordhaus, W. D., & Tobin, J. (2018). Is growth obsolete?. In Green Accounting (pp. 49-72). Routledge.
- Ofoegbu, G. N., Akwu, D. O., & Oliver, O. (2016). Empirical analysis of effect of tax revenue on economic development of Nigeria. *International Journal of Asian Social Science*, 6(10), 604-613.
- Okechukwu, E. U., & Nebo, G. (2016). Role of Commercial Banks in Sustainable Economic Development in Nigeria. *NG-Journal of Social Development*, 417(3947), 1-18.
- Paavo, E. (2018). The impact of commercial banks development on economic growth in Namibia (Doctoral dissertation, University of Cape Town).
- Pack, H. (1994). Endogenous growth theory: intellectual appeal and empirical shortcomings. *Journal of Economic Perspectives*, 8(1), 55-72.
- Pelinescu, E. (2015). The impact of human capital on economic growth. *Procedia Economics and Finance*, 22(1), 184-190.
- Randiki, D. A. (2016). The relationship between banking sector development and economic growth in Kenya.
- rgandoña, A. (2016). Gross Domestic Product (GDP) and Gross National Product (GNP). Encyclopedia of Business Ethics and Society, Forthcoming.

- Roncalli, T., & Weisang, G. (2015, May). Asset management and systemic risk. In *Paris December 2015 Finance Meeting EUROFIDAI-AFFI*.
- Saini, P., & Sindhu, J. (2014). Role of commercial bank in the economic development of India. *International Journal of Engineering and Management Research* (*IJEMR*), 4(1), 27-31
- Saint-Paul, G. (1992). Technological choice, financial market and economic development. European Economic Review, 36(4), 763-782.
- Saksonova, S., & Koleda, O. (2017). Evaluating the Interrelationship between Actions of Latvian Commercial Banks and Latvian *Economic Growth. Procedia Engineering*, 178, 123-130.
- Sarker, M. N. I. (2016). Role of banks on agricultural development in Bangladesh. *Internationally Journal of Ecology and Development Research*, 1(1), 010-015.
- Scholtens, B., & Van Wensveen, D. (2000). A critique on the theory of financial intermediation. *Journal of Banking & Finance*, 24(8), 1243-1251.
- Schumpeter, J. A. (1911). The Theory of Economic Development. *Cambridge,MA: Harvard University Press*.
- Schumpeter, J. A. (1934). The Theory of Economic Development. *Cambridge, MA: Harvard University Press*.
- Sharma, D. (2016). Nexus between financial inclusion and economic growth. *Journal of financial economic policy*.
- Solo, C. S. (1951). Innovation in the capitalist process: A critique of the Schumpeterian theory. *The quarterly journal of economics*, 417-428.
- Solow, R. M. (1956). A contribution to the theory of economic growth. Quarterly Journal of Economics, 70(1), 65-94.
- Song, H., Yu, K., & Lu, Q. (2018). Financial service providers and banks' role in helping SMEs to access finance. *International Journal of Physical Distribution & Logistics Management*.
- Streimikiene, D., & Kasperowicz, R. (2016). Review of economic growth and energy consumption: A panel cointegration analysis for EU countries. Renewable and Sustainable Energy Reviews, 59, 1545-1549.
- Sulaiman, L. A., & Wale-Awe, O. I. (2018). The Contribution of Listed Banks to Economic Development in Nigeria. *Journal of Economics & Business Research*, 24(1).
- Swan, T. W. (1956). Economic growth and capital accumulation. Economic Record, 32(63), 334–361.
- Uddin, G. S., Sjö, B., & Shahbaz, M. (2013). The causal nexus between financial development and economic growth in Kenya. *Economic Modelling*, *35*, 701-707.
- Udoka, C. O., Mbat, D. O., & Duke, S. B. (2016). The effect of commercial banks' credit on agricultural production in Nigeria. *Journal of Finance and Accounting*, 4(1), 1-10.

- Waiyaki, I. N. (2013). Financial development, Economic Growth and Poverty in Kenya, School of Economics, University of Nairobi
- Yakubu, Z., & Affoi, A. Y. (2014). An analysis of commercial banks' credit on economic growth in Nigeria. *Current Research Journal of Economic Theory*, 6(2), 11-15.
- Zhang, J. Wang, L. & Wang, S. (2012). Financial development and economic growth: evidence from China" Department of Economics, Hong Kong University of Science and Technology.

APPENDICES

Appendix I: Data Capture Form

Variable	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
GDP rate										
Annual short-term loans										
Annual long- term loans										
Annual account deposits										
Annual market capitalization										

Appendix II: List of Commercial Banks in Kenya

- 1. African Banking Corporation Ltd.
- 2. Bank of Africa Kenya Ltd.
- 3. Bank of Baroda (K) Ltd.
- 4. Bank of India
- 5. Barclays Bank of Kenya Ltd.
- 6. Charterhse Bank Ltd.
- 7. Chase Bank (K) Ltd.
- 8. Citibank N.A Kenya Ltd.
- 9. Commercial Bank of Africa Ltd.
- 10. Consolidated Bank of Kenya Ltd.
- 11. Co-operative Bank Ltd
- 12. Credit Bank Ltd.
- 13. Development Bank of Kenya Ltd.
- 14. Diamond Trust Bank Kenya Ltd.
- 15. DIB Bank Kenya Ltd.
- 16. Ecobank Kenya Ltd
- 17. Spire Bank Ltd.
- 18. Equity Bank Kenya Ltd
- 19. Family Bank Limited
- 20. Fidelity Commercial Bank Ltd
- 21. First Community Bank Ltd
- 22. Guaranty Trust Bank Limited

- 23. Guardian Bank Ltd.
- 24. Gulf African Bank Ltd
- 25. Habib Bank A.G Zurich
- 26. Habib Bank Ltd
- 27. Imperial Bank Ltd.
- 28. I & M Bank Ltd
- 29. Jamii Bora Bank Limited
- 30. Kenya Commercial Bank Ltd
- 31. Middle East Bank (K) Ltd
- 32. National Bank of Kenya Ltd
- 33. NIC Bank Ltd
- 34. Oriental Commercial Bank Ltd
- 35. Paramount Universal Bank Ltd
- 36. Prime Bank Ltd
- 37. Sidian Bank Ltd
- 38. Stanbic Bank Kenya Ltd
- 39. Standard Chartered Bank
- 40. Trans-National Bank Ltd
- 41. UBA Kenya Bank Limited
- 42. Victoria Commercial Bank Ltd
- 43. Housing Finance Ltd

Source: (Central Bank of Kenya, 2020)