THE IMPACT OF INTEREST RATES ON THE PROFITABILITY OF COMMERCIAL BANKS IN UGANDA

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SEPTEMBER, 2018

DECLARATION

I, Katumba Alexander hereby declare that this is my original work and has never been presented to any Board of examiners for any award in any institution.

Signed; ……[illegible]……………Date; ……24/09/18……

APPROVAL

This dissertation has been done under my supervision and it has been submitted for examination to my supervisor Mrs **Mudondo Erina**

Sign.. Date.....24th Sept, 2018.....

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ABSTRACT

The core objective of this project is to analyze the impact of interest rates changes on the profitability of commercial banks being operated in Uganda by examining the financial statements of the banks and to suggest solutions thereof. Recent movements in interest rates, inflation and exchange rates present real dangers to economic stability commercial banks in Uganda continue to report increase in profits due to the increase in the interest rates. The study done is descriptive in nature and it is based on secondary reliable data obtained from commercial banks websites, annual financial reports, and personal interactions with banks officials such as Uganda commercial bank Uganda branch. Since the efficiency of banking sector is considered most important for economic growth, monetary policy implementation and macro-economic stability. From the past few years, interest rates spread of banking sector of Uganda implying that the higher the interest rates, the better the performance of commercial banks. The study also found that the model containing interest rates and size of commercial bank can explain 64% of the changes in commercial banks profitability. The study recommended that policies to be put in place to shield bank lending rates and ensure monitoring the same. Further, so as to cushion consumers from exploitation by commercial banks, the Central Bank need exercise their monitoring roles strictly and discipline any commercial banks that may be increasing the interest rates arbitrary to boost their profitability. The study also recommends that in times of poor performance of commercial banks and the need to boost their profitability may be necessary for their role in economy, Central Bank of Uganda should come up with monetary policy that will lead to rise in interest rates and hence improving banks profitability.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Banking sector of Uganda has revealed massive growth and potential over the years. There is a considerable expansion in the profitability of banking sector demonstrated by performance and stability indicators. After the massive growth, the banking sector of Uganda is facing some pressures like liquidity and solvency problems which have considerable impact on the performance of banking sector and financial system. If the financial institutions have enough amount of liquidity to respond to their obligations then they can manage the situation easily. As banks are operating in very competitive environment, it has become obligatory to pay handsome rates to depositors to attract liquidity. To ease the liquidity in the market State Bank of Uganda has decreased the cash reserve requirement (CRR) and statutory liquidity Requirement (SLR) on demand and time liabilities. Instead of developing its own resources the government allows the banks to generate money and subsequently issues loan to clients at different rates.

When a borrower takes loan he not only pays the amount of interest but also he has to pay some other cost as a percentage of principal known as "points" on mortgage loan. A single point is equal to one percent of the amount of mortgage loan. When a lender makes the loan he charges his fee on the loan known as points. Some lenders strategically charge extra points but lower interest rate as compare to others. To evaluate the total cost of mortgage loans.

The bank of Uganda plays an important role in the efficient and effective growth of economy by providing guidelines to the commercial financial institutions thus facilitating the investors and mobilizing the resources of the economy for development in the country. . The cheapest source of funding for competitive banking institution is profit and it is the major requirement of a banking institution. The rising competition in financial market makes it necessary for the success of banking industry. These key facts are the reasons to focus on the present issue of banks profitability. These key facts are influencing the efficiency and effectiveness of banks to handle their portfolios like assets and liabilities to attain profitability and discover the areas where it might have potential room for increasing their profitability.

Banks provide financial services to its customers who are different from other firms and as a reward banks charge interest .conversely most funds are provided by depositors and they also receive interest. The difference among the banks earnings on its assets and payments to depositors is called interest margin. During the last decade there has been an increasing trend. The borrower or depositor or both would be affected by an increase in the interest rates to depositors

1.2 Background of interest rate

. Interest rate is described the certain amount of cash compensated by someone on the utilization of funds for a specific time period. The banking sector in Uganda, has a very important position in the sector of finance, especially when it comes to the service of deposit taking and collection and providing funds to the borrowers.

Analyzing the banks spread of rates of interest is the center of understanding the process finance and microeconomics environment in which operations of the banks take place Uganda central bank records show that in 2012 the interest rates were between a high of 14.98% and a low of 13.85%,in 2013 there was a sharp rise between a high of 20.04% and a low of 13.88%, in 2014the rates were between a high of 20.34% and a low of 17078%indicating increase in the lowest rates offered.in 2015 the rates were 18.13%and 16.86%the lowest. According to Uganda central bank records, the average rate for lending in has been 16.5% the period between January 2012 and December 2017.During this period, the lending rate oscillated between a low of 13.85%to a high of 20.34%.The decrease in the value of money and regular inflations has greatly contributed to the rise of interest rates in commercial banks hence this in turn contributes to their profitability.

1.2.1 Decreasing Effect

The decline in the interest rate as a common rule is most excellent for the economic atmosphere because customers can easily pay for taking loan as they don't have to pay higher interest rate for taking the loans. To regulate the economic development, interest rate is used as a device. As economy developed rapidly it will cause inflation in the economy. In other words prices go up to higher point which reduce the buying power of people which affect the demand of people for goods and services because of the shifting accessibility of bank loans. But on the other hand when interest rates are low the cost of borrowing decline which increase the buying power of public and as result they tend to make investments and spend in different forms. Lower interest rate also gives opportunity to businesses to take capital investment loan. By making huge investment in rising sectors and making significant profit, it also enhances the firm's confidence. As result the economy become stable and employment opportunities in the country increases. Another feature of lower interest rate is that it reduces the risk of other party to failure to pay. It shows that when interest rates are lower people have more disposable income to pay off their loans and to make savings decision. When trade rates decline, the demand for those manufacturers that sells their goods and services in international markets increase which enhance the export's growth and as result it will increase collective demand and improves the economy. Moreover, boost the income factor of those in work. And it directs to amplify the level of national income

1.3 . Bank Profitability

The profitability of bank is typically spoken as a function of interior and exterior determinants. The interior determinants are called micro or bank specific determinants of profitability because they are initiated from bank accounts like balance sheet or profit and loss account. While on the other hand the exterior determinants are the variables which are not in the control of bank's management. These variables reflect the legal and economic environment which can influence the process and performance of an economic body. Moreover the expenses of bank are considered significant determinant of bank's profitability which is directly associated to the concept of capable management. For instance encouraging affiliation among profitability and better-quality management. Another appealing matter is that whether the bank's ownership status is associated with its profitability or not but to support the assumption that private organization will earn comparatively higher profit, small proof is founded. The study is from one of the few studies contributing cross country proof of direct negative correlation among public owned organization and the profitability of banks. The final set of the determinants of banks profitability works with macro-economic control variables. Growth rate of money supply, inflation rate and long term interest rates are usually used as variables. The issue of the association among inflation and bank's profitability has been introduced by He noted that the consequence of inflation on the profitability of banks depends upon whether wages and other operating expenses of banks are increasing faster than the inflation.

1.3.1 Commercial banks profitability

Costs associated with transactions from agent and information failure lead to rise of intermediation in finance. The intermediaries assist in solving challenges created from transaction related costs and information asymmetry. They make diversification, deposit mobilisation, allocation of resources and risks associated with borrowing and lending of money smooth. The receipts of deposit and loans do not come in at equal levels, therefore go between for example commercial banks have also expenses to deal with.

Therefore a charge has to be levied for the mediation extended without certainty, and the levels of interest for deposits received and credit extended are set.

The difference in charge between what a borrower pays to access funds that they do not have and what the banks to the customer, whose funds have lent out is the commission that goes to the banks in form of earnings thus its profitability. The amount of risk assessed by banks is too much because investment will depend quite heavily in financing through until the whole debt is fully settled by the client and this goes to explain why there is a lot of demand for borrowed funds from banks to finance businesses, developed activities by individuals among others.

The commonest ways of measuring the profitability are;-

The return on assets (ROA); This is the ratio of the net income for the year of the assets in total. Usually this is the average value throughout the entire year. This enables the company to know how to employ the assets at its disposal in order to generate maximum profits.

The return on equity(ROE); This however measures the internal performance of shareholders value, it seeks to find out the capacity of a company to generate profits from investments of shareholders in a company and it is a very popular measure of performance.

1.4 The relationship between interest rates and commercial banks profitability

Among all factors that can have a great impact on a financial institution return on stock and profits made, interest rates is the most significant. Income earned from interest rates is a great source of money for financial institutions. Commercial bank are continually exposed to interest rates risk, it therefore goes without saying that interest rates changes affect commercial bank profitability essentially through increase in the cost of funding, also by reduction in the return on assets and lowering the value of banks equity. Therefore if a bank is not lending there is no likelihood that any profits will be realized from the depositors. As a result, high lending rates can have far reaching implications for financial intermediations as they can lead to high cost of capital and therefore limiting financial resources availability to would be borrowers hence reduction in the volume of investments opportunities to sub optimal level.

1.5 Contextual Background

Uganda has been characterized by interest rate volatility in the last five years whose effect on commercial banks remains unknown. The instability on macroeconomic variables was witnessed in year 2016 where interest rates rose to over 30%, inflation rate to 13.97percent compared to 3.9 percent in 2010 and Uganda shilling greatly weakened against Major world currencies. Against the US dollar, the shilling averaged 101.270 in October, 2016 from 81.029 in January 2016. In order to increase their profitability, commercial banks in Uganda started to diversify their revenue streams. Uganda has been characterized with volatile interest rates in the recent past whose effect on commercial banks performance remains unknown. However, commercial banks profitability has remained high compared to the rest of the world.

Uganda has of late initiated a framework and infrastructure to encourage lending through public and private credit reference bureaus, institutional strategies to spur economic development in Uganda and financial systems approaches which include alternatives to collaterals in order to access credit. Commercial banks are custodians of depositor's funds and operate by receiving cash deposits from the general public and loaning them out to the needy at statutorily allowed interest rates. Commercial banks in Uganda dominate the financial sector. In a country where the financial sector is dominated by commercial banks, any failure in the sector has an immense implication on the economic growth of the country. This is due to the fact that any bankruptcy that could happen in the sector has a contagion effect that can lead to bank runs, crises and bring overall financial crisis and economic tribulations.

Commercial banks in Uganda have been performing very well in terms of profitability. Despite the good overall financial performance of banks in Uganda, there are a couple of banks declaring losses. The current banking failures in the developed countries and the bailouts thereof call for Uganda authorities to take precautionary and mitigating measures, there is need to understand the performance of banks and how the macroeconomic variables have been affecting banks profitability. According to Central Bank of Uganda (2016) Supervision Report as of December 2016 out of the commercial banks 30 of them are domestically owned and 13 are foreign owned. In terms of asset holding, foreign banks account for about 35% of the banking assets (BOU, 2016).

The banking sector is one of the key industries in Ugandan economy just like in any other country and is highly affected by macroeconomic variables than any other industry. To ensure that the industry remains profitable and hence to be able to achieve its role in economic development, the sector has experienced major transformation in its operating environment. In a number of countries, financial sector reforms have been implemented. In these reforms, the role of commercial banks has remained central in financing economic activities in the various segments of the markets. In recent years, a growing number of developing countries including Uganda have embarked on reforming and deregulating their financial systems, transforming their institutions into effective intermediaries and extending viable financial services on a sustainable basis to all segments of the population .In the process, a new world of finance has emerged which is demand-led and savings driven and conforms to sound criteria of effective financial intermediation. Research shows that both external as well as domestic factors have contributed to growth in performance of commercial banks in the last two decades. The studies conducted suggest that, given the importance of commercial banks in Uganda, better understanding of the determinants of their performance is important.

1.6 Value of the Study

Empirical evidence clearly shows that studies focusing on Uganda's financial sector are still scanty and limited. Even those which have been carried out point to a need for further investigation of the factors which have continued to cause poor financial performance in the country, notwithstanding the reforms. Most of the evidence in regard to commercial banks' performance largely focuses on the developed economies environments and the conclusions may not be useful for Uganda's financial sector planning. Therefore the study will be important to various stakeholders with interest in Uganda's economy including the government, citizens, the banks, foreign investors and academicians.

To the government and macroeconomic policy makers, the study is significant to them since they will understand the relationship between the effects of interest rates on bank performances. They will have more knowledge and hence come up with better policies to ensure banks financial performance is restored so as to boost economic growth. The Ugandan citizens will benefit from the implementation of the study findings and due to improved access to financial services and favorable interest rates environment. This will lead to improved lifestyles, high employment and increased households' incomes. To the banks and foreign investors, they will be able to plan and determine the most appropriate time to make investments in financial sector based on interest rates prevailing. To academicians, the study has added to the existing body of knowledge on bank performance and form a basis for further research.

1.7 Problem statement:

The need for this study is further supported by the fact that most studies conducted in relation to bank performances in Uganda has focused on sector-specific factors that affect the overall banking sector performances or determinant of bank performance with no Study focusing on interest rates and commercial banks financial performance. The focus of this study is to find out the impact interest rate of the commercial banks in Uganda.

1.8 Research Questions:

What is the impact of interest rate changes on the profitability of the commercial banks in Uganda? This main question can be brake down into two questions

- What impact will be on the profitability of commercial banks if interest rate increases?
- What impact will be on the profitability of commercial banks if interest rate decreases?

1.9 Research objectives

- To determine the relationship between market interest rates on the commercial bank profitability
- To determine the negative attributes of the commercial bank profitability being dependent on lending.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

To check the effect of changes in interest rate on commercial bank's profitability in Uganda, number of studies has been conducted in the past decades. In this section researchers will describe the profitability of commercial banks and interest rate with the review of previous literature on this topic. Interest rate is described the certain amount of cash compensated by someone on the utilization of funds for a specific time period. This chapter focuses on theoretical, empirical literature, review of the local literature and ends by a chapter summary. The chapter starts by section 2.2 that has discussed theoretical literature, followed by section 2.3 that contains the empirical literature on Macroeconomic variables and commercial banks performance.

2.2 Theoretical Review

Various theories have been discussed presenting arguments that guided this study. These theories include Schumpeter economic cycle theory, Keynesian liquidity preference theory and macroeconomic theory as clearly described below.

2.2.1 Schumpeter Economic Cycle Theory

The theory was propounded by Schumpeter (1939) who indicated the process of economic change or evolution that consists of two distinct phases, "prosperity" and "recession". One under which the impulse of entrepreneurial activity, draws away from an equilibrium position, and the second of which it draws toward another equilibrium position. Schumpeter calls those fluctuations/cyclical processes in economic life business cycle. Schumpeter shows the intermediary role of financial sector between those who save and invest, through a process referred to as credit creation by bank financing that leads to economic growth and development. The effect of this process leads to profit and loss generation by the lender and the borrower.

Certain macroeconomic variables typically display unique pattern of boom and recession in a business cycle. A crisis is said to occur at the peak of expansion when growth in real GDP and domestic demand decline leading to acceleration in inflation. During periods of economic expansion, firms and their respective sectors profits increases, asset prices rises aggregate sectoral demand for credit facilities expands leading to growth in bank lending resulting to increased interest income. Banks may underestimate their risk exposures, relaxing credit standards and reduce provisions for future losses while the economy indebtedness rises. As the downturn sets in individual's, firms and sector profitability deteriorates The theory assumes that recessions and periods of economic growth are efficient response to exogenous changes in the real economic environment and that decline in profitability result in fall of asset prices, non-performing loans, lowers borrowers' financial capacity, fall in employment levels, and depresses the value of collaterals as secondary means of servicing debts. Banks' risk exposure increases, and consequently raises the need for larger loan provisions and higher levels of capital, exactly when it is more expensive or simply not available. This may lead to banks reacting by reducing the amount of lending, especially if they have low capital buffers above the minimum capital requirement, thus increasing the effects of the economic downturn as well as increasing the lending rates. Critics of the theory states that it is a common misconception that macroeconomic purely based on shocks to supply, as opposed to shocks on demand, and this leads to the common criticism of Schumpeter economic cycle theory by ignoring the demand side of the economy. However, in real business cycles situation, consumers will change their intertemporal consumption and savings decisions based on the real interest rate available to them, which is a shift in demand.

In relation to the study, the theory views interest rates changes as normal economic occurrences which will affect commercial banks performance. It disregards the argument that interest rates are determined by the liquidity in the economy but are determined by, the prevailing macroeconomic environment as determined by the business cycles. Hence,according to the theory, interest rates will keep on changing according to the prevailing macro-economic conditions.

2.2.2 Keynes's Liquidity Preference Theory

The theory was advanced by Keynes (2006). According to the liquidity preference theory, the interest rates are determined by the demand for and supply of money balances. The theory assumes that people's demand for money is not for transactions purpose but as a precaution and for speculative purposes. The transaction demand and precautionary demand for money increase with income, while the speculative demand is inversely related to interest rates because of the forgone interest. The supply of money is determined by the monetary authority (the central bank), by the lending of commercial banks and by the public preference for holding cash. Therefore, interest rates are expected to increase as the maturity profile of securities increases. This is so because the longer the maturity, the greater is the uncertainty; and therefore the premium demanded by investors to part with cash increases as the maturity profile increases. The expectation, therefore, is that forward exchange rates should offer a premium over expected future spot exchange rates since those who are risk-averse demand a premium for securities with longer-term maturities. A premium is offered by\ way of greater forward rates in order to attract investors to longer-term securities. consequently, current interest rates reflect expected inflation rates, income (GDP) and expected money supply changes. Critics of this theory argue that the liquidity preference theory of interest suffers from a fallacy of mutual determination. Keynes alleges that the rate of interest is determined by liquidity preference. In practice, however, Keynes treats the rate of interest as determining liquidity preference. The critics state that "The Keynesians therefore treat the rate of interest, not as they believe they do- as determined by liquidity preference- but rather as some sort of mysterious and unexplained force imposing itself on the other elements of the economic system.

In relevance to the study, the theory views interest rates as being mainly driven by the liquidity level in the economy. The theory does not recognize the role of macroeconomic policies formulated by the central bank but interest rates are purely driven by the demand of money in the economy. Therefore, interest rates will go up and down according to the level of liquidity in the economy and preference for the liquidity by the users of funds.

2.2.3 Macroeconomic Theory

The theory was proposed by Friedman, (1963). The theory views interest rates as always and everywhere a monetary phenomenon . Further, macroeconomic theory assumes that growing the money supply in excess of real growth causes interest rates to rise. This is also the result from the Harberger (1963) model, which assumes that prices adjust to excess money supply in the money market. It is on the basis of this assumption that it is possible to invert the real money demand and control interest rates. Interest rates volatility in open economies results from different disequilibria in many markets specifically, the domestic money market, external/foreign markets and the labour market. Thus increase in interest rates emanates from three main sources that include excess money supply, foreign prices and cost push factors .The theory is related to keysian liquidity preference theory but recognizes additional sources of interest rates not only demand for money but also foreign prices and cost push factors. Critics of this theory base their argument on the grounds that governments would in practice be unlikely to implement theoretically optimal policies. According to them, the implicit assumption underlying the macroeconomic revolution was that economic policy would be made by wise men, acting without regard to political pressures or opportunities, and guided by disinterested economic technocrats. They argued that this was an unrealistic assumption about political, bureaucratic and electoral behaviour. In relevance to the study, macroeconomic theory views growing money supply in excess of real growth as the cause of interest rates to rise. Interest rate volatility is seen by the theory as emanating from three main sources that include excess money supply, foreign prices and cost push factors. Interest rates volatility will also results from different equilibria in many markets specifically, the domestic money market, external/foreign markets and the labour market. Hence controlling interest rates volatility will involve dealing with disequilibrium in the markets.

2.3 Determinants of commercial Banks Profitability

Determinants of bank profitability can be internal or external. Internal determinants of banks financial performance normally consist of factors that are within the control of commercial banks. They are the factors which affect the revenue and the cost of the banks. Some studies classified them into two categories namely the financial statement variables and non-financial variables. External factors are said to be the factors that are beyond the control of the management of commercial banks. The external determinants of commercial banks profitability are indirect factors, which are uncontrollable, but have an enormous impact on bank's profitability.

2.3.1 Interest Rates

Interest rates instability generally has been associated with poor financial performance of commercial Banks. Without interest rates stability, domestic and foreign investors will stay away and resources will be diverted elsewhere. In fact, econometric evidence of investment behavior indicates that in addition to conventional factors (past growth of economic activity, real interest rates, and private sector credit), private investment is significantly and negatively influenced by uncertainty and macroeconomic instability.

Although it is difficult to prove the direction of the relationship between interest rates and profitability, studies confirm that interest rates instability affects commercial banks financial performance with studies giving contradicting findings.

2.3.2 Deposits

Banks are said to be heavily dependent on the funds mainly provided by the public as deposits to finance the loans being offered to the customers. There is a general notion that deposits are the cheapest sources of funds for banks and so to this extent deposits have positive impact on banks profitability if the demand for bank loans is very high. That is, the more deposits commercial bank is able to accumulate the greater is its capacity to offer more loans and make profits. However, one should be aware that if demands for banks loans are low, having more deposits could decrease earnings and may result in low profit for the banks. This is because deposits like Fixed, Time or Term deposits attract high interest from the banks to the depositor.

2.3.3 Bank Size

Bank size affects the firm's market share which affects profitability. The bigger the firms market share, the more the sales; so in the case commercial banks are able for example to offer more loans then they stand a greater chance of increasing interest income as well as profits. Market share or size of banks is normally used to capture potential economies or diseconomies of scale in the banking sector. Secondly, the size of banks as a variable control for cost differences and product and risk diversification.

2.4 Empirical Literature

Studies on the effect of interest rates on commercial banks profitability are numerous with most of them studying macroeconomic variables relationship with profitability. This section has reviewed some of the studies, their methodology and findings.

2.4.1 International Empirical Literature

Yuqi (2008) examined the determinants of 123 United Kingdom (UK) banks profitability and its implication on risk management from 1999 to 2006. The study utilized multiple regression models and panel data estimation. The econometric results indicate that capital adequacy has significant positive impacts on profitability but inflation has insignificant positive impact on profitability. Liquidity and credit risk had significant negative impacts on profitability though; GDP and interest rate have insignificant negative impacts on the profitability of banks in UK. Buyinza (2010) investigated samples of 23 commercial banks profitability from 1999 to 2006 in Sub Sahara Africa countries. The study utilized panel data and the regression results revealed that capital, efficient expenses management, bank size, credit risk, diversified earning ability of the banks, per capital

GDP, growth rate and inflation have significant and positive impact on banks' profitability.

Ali, Akhtar, and Ahmed (2011) examined the bank specific and macroeconomic indicators of 22 public and private sector commercial banks profitability from 2006 to 2017 in Pakistan. The research made use of multiple regression models and panel data estimation. The study found that bank size, operating efficiency, asset management and

GDP had positive effect on banks' profitability. However, capital and credit risk had negative effect on banks profitability in Pakistan.

Gul, Irshad, and Zaman (2011) studied the factors affecting samples of 15 commercial banks profitability from 2012 to 2017 in Pakistan. The investigation utilized a regression model, panel data estimation and Pooled Ordinary Least Square (POLS) method of computation with the aid of an econometric package. The econometric result indicated both internal and external factors such as bank size, loan, deposit, GDP, inflation and market capitalization have significant positive influence on banks profitability measured by Return on Assets (ROA). Still in Pakistan, Gilchris (2013) examined the influence of bank specific and macroeconomic factors on samples of 25 commercial banks ,profitability from 2014 to 2011 in Pakistan. The regression results indicated that bank size, net interest margin, and industry production growth rate had positive and significant impact on the profitability (ROA and ROE). Non- performing loan to total advances and inflation have negative and significant impact on ROA while GDP has positive impact on ROA. Capital ratio has positive significant impact on ROE. Saidu and Tumin (2011) investigated the performance and financial ratios on samples of four Malaysian and nine Chinese commercial banks from 2001 to 2014. The research made use of panel data and the regression results show that credit, capital and operating ratios have influence on the performance of banks in China which is not true for Malaysia. The study found that liquidity and size of the banks do not influence the performance of the banks in both countries.

Khrawish, and Siam, (2011) investigated the determinants on samples of three Jordan Islamic banks profitability from 2012 and 2017. The multiple linear regression results show capital, bank size, financial risk, GDP growth rate, inflation, and exchange rate have significant negative relationship with profitability but credit risk has insignificant positive relationship with the profitability of Islamic banks in Jordan.

Rachdi (2013) examined what determines the profitability of banks during and before the international financial crisis. The study samples 10 Tunisian banks from 2000 to 2010. The regression results indicate that, before the US subprime crisis, capital adequacy, liquidity, bank size and yearly real GDP growth affect positively the performance (ROA, ROE and NIM) of Banks. However, cost-income ratio, yearly growth of deposits and inflation rate are negatively correlated across all measures of bank profitability. In crisis period, bank profitability is mainly explained by operational efficiency, yearly growth of deposits, GDP growth and inflation.

2.5 Summary

Most studies conducted in relation to bank performances have focused on sector-specific factors that affect the overall banking sector performances or determinant of bank performance with no study focusing on interest rates and commercial banks financial performance. None of these studies have examined the effect of interest rates on commercial banks financial performance, yet interest rates have been very volatile of late and there is the need to determine how they affect commercial banks performance. The empirical review above indicates that macroeconomics indicators are critical factors that determined the performance of commercial banks in their financial intermediary role of lending. Most studies on this subject were done in different regions, on different macroeconomic indicators and sectors with scanty studies done in developing countries and particularly in Uganda specifically on interest rates. There is therefore a gap in literature regarding the effect of interest rates on commercial banks performance in Uganda. This study seeks to bridge this gap.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the research methodology used to meet the objectives of the study. It describes the research design, population of the study, sample size, sample frame, data collection methods and data analysis and presentation of the research findings. The chapter has section 3.2 which covers the research design, section 3.3 on the target population and sample frame, section 3.4 on data collection methodology and instruments and section 3.5 covering the data analysis techniques applied, the conceptual and analytical model. It also describes the different inputs and preparations that went into completing the project. For the purpose of research, several methods and approaches are used. The methods and approaches used in data collection and the tools that are used to analyze the collected data. For the purpose of research, two types of approaches are widely used. These are quantitative approach and qualitative approach.

3.2 Research Design

The research employed descriptive research design. Descriptive research design method helps in gathering information about the existing status of the phenomena in order to describe what exists in respect to variables. This method is used because it addresses the objective of the study in investigating the relationship between the variables of the study relation to the target population, the variables under the study, the approaches to the research, and the methods employed in data collection. correlation method was used to determine the relationship between interest rates and profitability of commercial banks. The study used time series empirical data on the variables to examine the relationship between interest rate by establishing correlation coefficients between the variables and profitability of commercial banks measured by ROA.

3.3 Population of the Study

A population is defined as an entire group of individual or objects having common observable characteristic. It refers to the entire group of people, items or things of interest that the researcher wishes to investigate and from which the sample will be drawn and studied. It is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming. The target population for this study was all commercial banks in Uganda. There were many commercial banks in Uganda as at August 26th 2014. These commercial banks will constitute the study population of only bank of Baroda Uganda

3.4 Sample and Sampling Techniques

The sampling frame describes the list of all population units from which the sample is selected .It is a physical representation of the target population and comprises all the units that are potential members of a sample. All the co banks constituted the study sample. A census design was applied where all the commercial banks were studied. A census is a collection of information from all units in the population or a complete enumeration of the population. A census design is used where the population is small and manageable using bank of Baroda bank

3.5 Data collection Sources used in this Research

Data collection refers to the means by which information is obtained from the selected subjects of an investigation or a study. It refers to the techniques applied in extracting the required study data for analysis. The data required for the study was obtained from secondary sources that were used to investigate the relationship between dependent and independent variables This research has been conducted majorly by use of secondary data from financial reports of commercial bank in Uganda such as Uganda commercial Bank Uganda to facilitate the useful information for this study to get desired goals. Secondary data means the data that has been collected by scholars and documented in articles, books and other publications. Secondary data is very useful for research with its significant advantages: time saving and rapid accessibility. This, however, depends on if the data is already collected and published or internally exists and also on the cost. It could also be freely available at different sources with detailed information.

3.6 Data analysis

Data analysis is the process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, suggesting conclusions, and supporting decision making. Data analysis has multiple facts and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains .The study used quantitative method to determine the relationship from the data obtained. This model of analysis examined the simultaneous effects of the independent variables on a dependent variable.

A descriptive analysis technique was employed to analyse data. This included the use of table, charts, graphs, percentages and frequencies. Multiple regressions were used to determine the relationship between profitability and various interest rates. . In order to review this impact in detail from a theoretical and analytical perspective, i have selected and employed the relevant literature and findings of empirical studies on impact of interest rate changes on the profitability of commercial banks in Uganda. I have therefore discussed, theoretically, this factor and elaborated the main components of this factor in alignment with previous researches that have been done in this field. On the basis of this theoretical discussion i have tried to find the relationship between interest rate and commercial banks profitability. In this regard, Researchers selected relevant material articles, annual reports, and various archives of records in order to get a comprehensive view of these factors. After reviewing theoretically these factors, Researchers revised these factors analytically to determine the nature of relationship between interest rate and commercial banks" profitability in Uganda. For this purpose, Researchers used Pearson correlation Method and have taken the period.

3.6.1 Conceptual Model

The following function shows the mathematical relationship between the dependent and independent variable.

ROA=f (INT, Size) (1)

Where:

ROA = Return on Assets which is a measure of commercial bank financial performance

INT = Interest rates measured as the average commercial banks lending interest rate provided by commercial bank

Size = Size of commercial banks as measured by asset base

3.6.2 Analytical Model

This study employed an empirical model to determine the relative significance of each of the variables identified above. The model took the following format;

ROA= β0+ β1INT+ β2Size + ε (2)

Where:

ε = Represents the error in the model which was assured to be zero

β1, β2 are the coefficient of the explanatory variables

The analysis of variance (ANOVA) was used to test the significance of the overall model at 95% level of significance. Coefficient of correlation (R) was used to determine the strength of the relationship between the dependent and independent variables. Coefficient of determination (R2) was also be used to show the percentage for which each independent variable and all independent variables combined were explaining the change in the dependent variable.

3.6.3 Validity and reliability of Data.

The data employed in this research study is collected from authentic sources which included official websites of Uganda commercial Bank Uganda. The data available on the archives of these banks is prepared by high level experts and professionals. These banks have copyrights and are fully responsible about the validity and reliability of data. Therefore, i trust this data with assurance of validity and reliability in terms of collection, compilation and measurements. The data used in this research study is provided with complete references to ensure the validity and reliability of data

3.6.4 Person correlation method

A correlation is a number within the range -1 and + 1 that measures the degree of association between two variables call them X and Y. The association between these two variables could be positive or negative. If the correlation is positive between two variables; it means that there is a direct relationship between them (if the value of one variable(X) is increased/decreased then the value of second variable(Y) will also be increased/decreased). Contrary to this, if the correlation is negative between two variables (X and Y), then it means that there is an inverse relationship between the two variables (if the value of one variable(X) is increased/decreased then the value of second variable(Y) will be decreased/increased). Researchers employed Pearson correlation method to measure degree of association among interest rate and commercial banks profitability in Uganda and tried to find out some extent of association among these variables.

3.6.5 Test of significance.

A Pearson coefficient analysis(r)was used in this study to establish the linear relationship that existed between the lending interest rates and profitability of commercial banks. The coefficient of determination (R2) was added to show the percentage for which each independent variable explaining the change in dependent variable. Analysis variation (ANOVA) was employed to test the significance of the model at a significant level.

3.6.6 Data collection and Statistical Analysis

The data has been collected from the above mentioned resources and analyzed by using Pearson co-relation method to find out the relationship between interest rate and commercial banks profitability. The value of correlation coefficient indicates the strength and weakness of relationship either strong or weak.

3.6.7 SAMPLE OF A QUESTIONNAIRE TO BE USED IN DATA COLLECTION

Dear Sir/Madam

You are invited to participate in the above mentioned research project. The survey should only take 10 – 15 minutes to complete. To ensure confidentiality of all responses, you are not obliged to provide your name. The information you give in response to this survey will be purely used for academic purpose towards the completing of my research work.

1. Respondent's Highest Educational Qualification

i)Certificate/Diploma [ ]

ii) Undergraduate degree [ ]

iii) Master's degree [ ]

iv) Others [ ]

v) PhD [ ]

2. Time spent in the bank

i) Less than 6 months [ ]

ii) 6 months-1 year [ ]

iii) 1-2 years [ ]

iv) 2-3 years [ ]

v) 3-4 years [ ]

vi) More than 4 years [ ]

3. How frequent does your bank review its interest rates?

1) After 5 years [ ]

ii) Annually [ ]

iii) Half-yearly [ ]

iv) When need arises [ ]

4. In your opinion, does your bank's system of interest rates sufficiently and effectively contribute to the profitability of your bank? How does your role support it?

Explain...

....

5. Are the systems of interest rates referred to in 4 above functioning as they are intended to?

a) Yes ( )

b) No ( )

6. How would you generally rate the interest rates system in your organization in relation to bank profitability?

a) Very ineffective ( )

b) Ineffective ( )

c) Uncertain ( )

d) Effective ( )

e) Very effective ( )

7. Please rank the following statements in each area of interest rates system on scale ranging from strongly disagree to strongly agree where: 1 = strongly disagree; 2 = disagree;3 = not sure; 4= agree; and 5= strongly agree.

Interest rates 1 2 3 4 5

Control Environment

Rank Control Environment statements on Liker scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5=strongly agree

1234

.i) Fraud detection, and fraudulent activities are inherently unpredictable difficult to detect and they affect the performance of the bank

ii) Measures that can enhance the efficacy of auditors are important for effective fraud detection

iii) There is honest and fair dealings with all stakeholders for the benefit of the organization

iv) Management is committed to the ethical values in the operation of the banking system

v) Standards for audits and audit-related services influence the performance of commercial banks

vi) Internal audit evaluate and contribute to the improvement of bank profitability, control and governance using a systematic and disciplined approach in the banking

99In your opinion, how can we improve in commercial banks?

Bank profitability Rank

Bank profitability statements on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

1) Management has defined appropriate objectives for the bank profitability

2) .ii) Management identifies risks that affect achievement of the bank objectives

3) .iii) Management has a criteria for identification of profits to the bank most critical.

4) iv) Management has put in place mechanisms for mitigation of critical risks that may lead to bank's loss due to failure to pay

5) .v) Management has a criteria for ascertainment of which risks to the bank are most critical

6) .vi) There is frequent escalation and reporting of bank's departmental rates to the management to assist in quick access to loans

100enough before it develops to loss

.vii) All instructions received from bank clients are thoroughly scrutinized (e.g. signature verification) before execution to prevent processing fraudulent transactions.

Information and Communications System

Rank Information and Communication system statements on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

i) Management has identified individuals who are responsible for coordinating the various activities within the bank to ensure appropriate communication on interest rates

.ii) All employees understand the concept and importance of interest rates, including the division of responsibility

iii) Effective communication helps to evaluate how well guidelines and policies of the bank are working and being implemented

.iv) The reporting system on banking structures spells out all the responsibilities of each section/unit of the bank. Is there effective interest rates communication and proper flow of information down, across, and up within all the sections of the organization?

Interest rates

Rank interest rates statements on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

i) Appropriate measures are taken to correct misfeasance in operation of Accounting & Finance Management System

.ii) Bank system access is only allowed to authorize personnel.

iii) Accounting records in the bank are limited to employees with designated responsibility for such records.

.iv) Reconciliation of the banks' accounts done on a daily basis to ensure no outstanding items that may result to bank's loss.

v) All bank processes have effective control measures (maker, checker, and verifier)

vi) Management closely monitors implementation of interest rates systems in the bank.

102vii) frequent reviews of operating performance done both to staff (appraisals) and the bank systems.

Monitoring of interest rates

Rank Monitoring statements on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

i) There are independent process checks and evaluations of controls activities on ongoing basis

ii) .ii) Internal reviews of implementation of interest rates in units are conducted periodically

iii) .iii) The bank staff make daily reconciliations on accounts in the bank

iv) iv) Management has assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items noted in those audit reports

103v) Management control method is adequate to investigate unusual activities in the bank. Are there proper mechanisms put in place to monitor the quality of interest rates structure in commercial banks over time?

Bank of Uganda Prudential Regulation

These statements are on BOU Prudential Regulation, rank them on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

i) The set regulations are strictly adhered to

ii) Fraudulent activities are kept at minimal due to the regulations.

iii) Stern measures are taken by BOU towards violation of any regulations

iv) Adherence to set regulations positively contributes to financial performance of the organization. Are BOU prudential regulations enough to curb all commercial banks' irregularities?

Thanking you for your participation

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the data analysis, interpretation and discussion of the research findings. The collected data was analyzed and interpreted in line with the objective of the study which was to determine the effect of interest rates on financial performance of commercial banks in Uganda. The chapter is divided into section 4.2 on summary of statistics, section 4.3 on estimated model, section 4.4 on discussion and section 4.5 on summary.

4.2 Summary of Statistics

Both descriptive and inferential statistics were employed specifically using regression and ANOVA to establish the significance/fitness of the model and also to establish the link between interest rates and profitability of commercial banks as illustrated below.

Response rate:

The study wanted to establish the level of response rate by number of questionnaire filled and returned. The number of questionnaires issued was 50 and only 36 questionnaires was returned and filled which represents 72% of the response rate and 14 (28%) questionnaires was not returned. The number of questionnaires returned indicated that the majority of the respondents had accepted the study.

Table 1: **Response rate**

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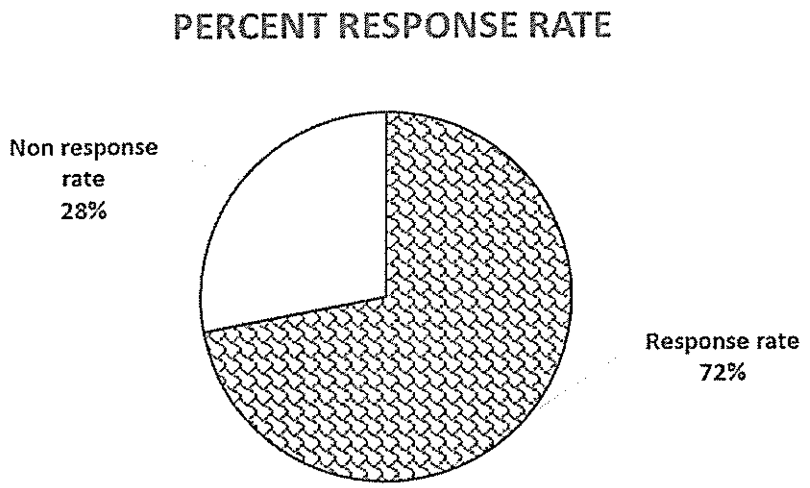
Aspect	Frequency	Percent
Response rate	36	72
Non response rate	14	28

Field Data (2018)

Figure 1 Response rate



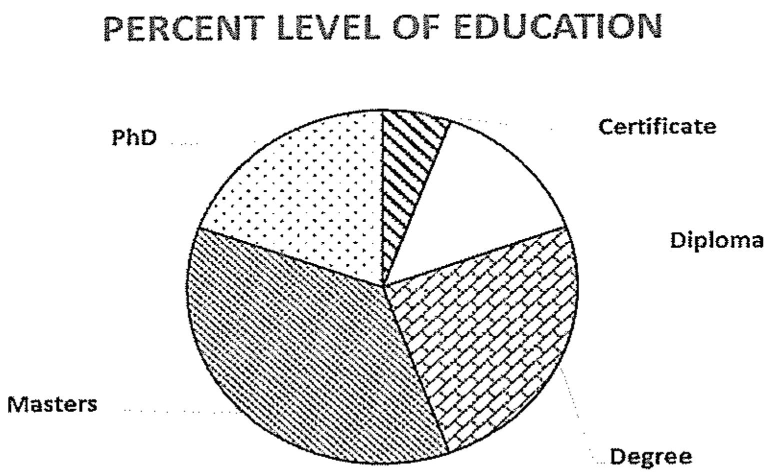
Level of education:

The study sought to establish the level of respondents by education qualification and found out that Certificate diploma, Degree, Master, and PhD this indicated that 44% 5.6 % of the respondents had the lowest level of education with the majority qualified in the bank as shown below

Table 2. **Level of education**

Level of education	Frequency	Percent
Certificate	2	5.6
Diploma	5	13.9
Degree	9	25
Masters	13	36.1
PhD	7	19.4
Total	36	100

Figure 2 level of education



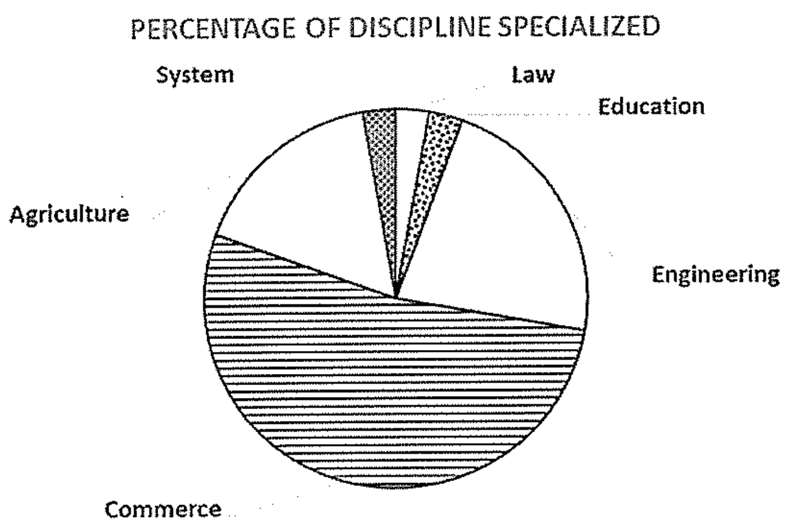
The discipline specialized.

The study wanted to investigate the specialized course for someone to work in the bank and obtained the results shown in Table 4 which indicated that the majority of the respondents were specialized in commerce at 82.9% in the bank while the rest 17.1 are distributed from other field

Table 3 The discipline specialized.

The discipline specialized.	Frequency	Percent
Law	1	2.8
Education	1	2.8
Engineering	8	22.2
Commerce	19	52.8
Agriculture	6	16.6
System	1	2.8
Total	36	100

Figure 3 The discipline specialized



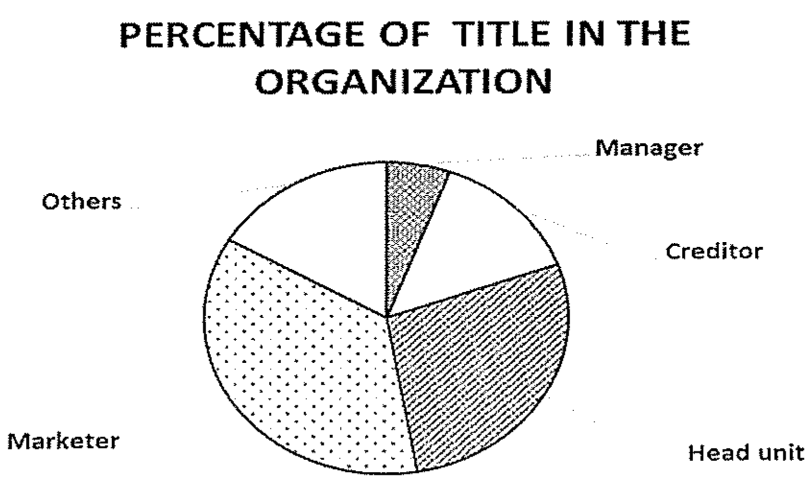
The Title in the organization:

The study to examine the title of the respondents in their responsibility in the banks and the results showed in shown in Table 5 which indicated that the majority of the respondents were marketers at 36.1% in the bank while the rest under study 63.9% were randomly distributed in other titles as shown in Table 5.

Table 4 The Title in the organization:

	Frequency	Percent
Manager	2	5.6
Creditor	5	13.9
Head unit	10	27.8
Marketer	13	36.1
Others	6	16.6
Total	36	100

Figure 4 The Title in the organization



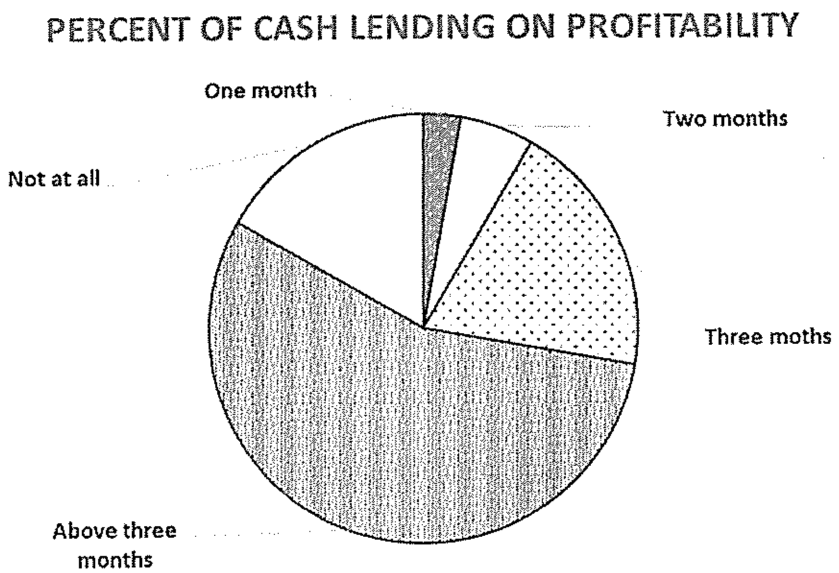
Cash Lending on profitability

The study had three objectives which were analyzed by their variables; this is the first objective among other objectives. The Period given as a grace for cash lending when lending is done was analyzed by number of months given and the results showed that the lender were given above three months which was highly indicated by 55.6% majority of the respondents while the rest of the respondents were still dispersed among other months representing 44.4% as shown in Table 5

Table 5: Cash Lending on profitability

	Frequency	Percent
One month	1	2.8
Two months	2	5.6
Three moths	7	19.4
Above three months	20	55.6
Not at all	6	16.6
Total	36	100

Figure 5 Cash Lending on profitability



Interest rates on profitability of commercial banks

The study wanted to investigate whether there are any techniques of analysis used before granting cash services to the clients and found out that the loan is paid back by interest rates at 3.50. Are there penalties for investors defaulters 3.72 and central banks CBs take lawful actions when credit is not repaid in time indicated at the 3.86. The study found out that securities loan collateralized by cash are by far the most popular form of securities lending transaction. The findings showed that there was influence of loan repayment on profitability of banks in Table 6.

Table 6 Interest rates on profitability of commercial banks

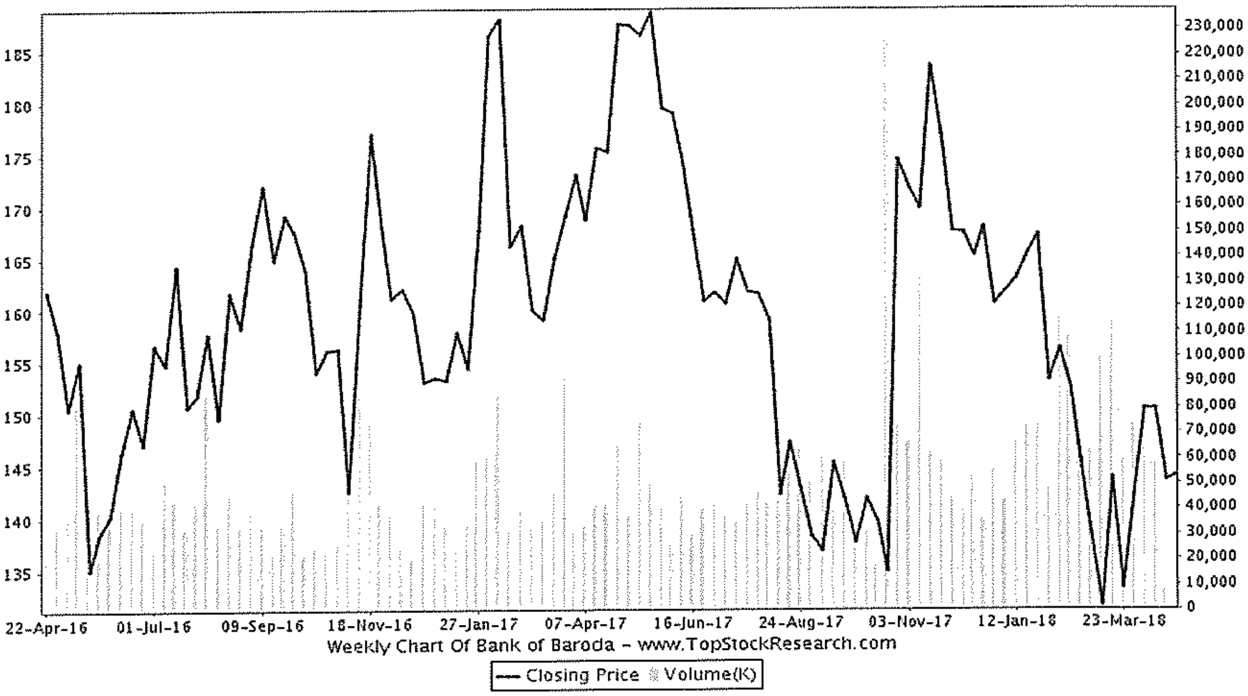
	number	Minimum	maximum	Mean	Std. Deviation
the time you give as grace time to your investors	35	1	5	3.80	1.123
Always loan is a pay back in the fixed time	36	1	5	3.50	1.134
CBs take lawful actions when credit is not repaid in time	35	1	5	3.86	1.879
Follow up measures is taken when a loan is invested	36	1	5	3.55	1.108
Are there penalties for investors defaulters	36	1	5	53.72	1.914
In your own opinion do you agree that interest rates affect the profitability of commercial banks	36	1	5	53.83	1.231

Table 7 Analysis of profitability aspects.

	N	Minimum	Maximum	Mean	Std. Deviation
Evaluation is done on credit worthiness of clients					
Clients are reminded to repay the amount invested due	36	1	5	3.47	1.134
Time limit is given when clients are to pay	36	1	5	3.81	1822
Firm undertakes legal action for clients who fails to repay.	36	1	5	3.58	1.025
Firm undertakes legal action for clients who fails to repay.	36	2	5	3.92	1.806
Indicate techniques of credit analysis used before granting credit services to the investment?	36	1	5	3.58	1.231
Nature and willingness to pay	36	1	5	3.58	1.339

4.2.1 Profitability of Bank of Baroda

Figure 6 Trend Analysis of weekly performance of bank of Baroda



As shown in Figure 1 above, bank of Baroda has positive return on assets implying that Bank of Baroda is profitable. The highest performance was recorded in year 2017 where it had a return on assets of 10.4%. The lowest performance was found to be in year 2009 where by the highest loss made by worst performing commercial bank was -17.47%.

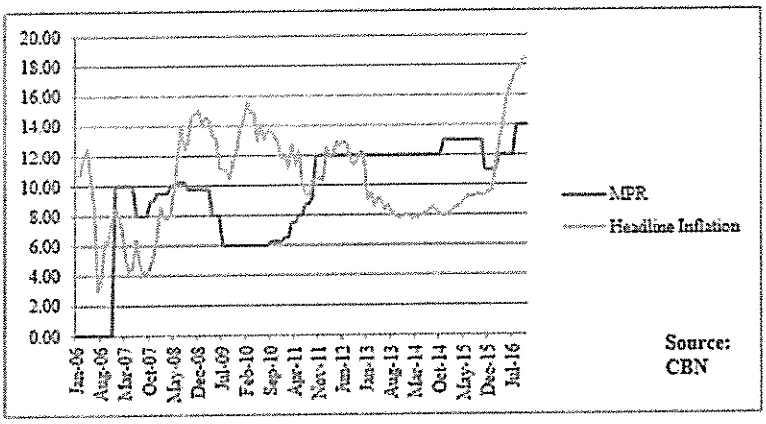
Table 8 Commercial Banks Profitability

Uganda's Most Profitable Banks

Industry Position (2016)	Bank	2015 (Shs Billions)	2016 (Shs Billions)	Change (Shs Billions)	%ge Change	Industry Market Share (%) 2016
1	Stanbic Bank	150.7	191.0	40.300	26.74	28.22
2	Standard Chartered	28.3	112.1	83.800	296.11	16.56
3	Centenary Bank	101.6	109.9	8.300	8.17	16.24
4	Barclays	55.2	55.03	-0.170	-0.31	8.13
5	Citibank Uganda	30.1	50.5	20.400	67.77	7.46
6	Bank of Baroda	41.1	49.2	8.100	19.71	7.27
7	Dfcu Bank	37	46.2	9.200	24.86	6.83
8	DTB Uganda	19.6	21.5	1.900	9.69	3.18
9	Housing Finance	14.68	18	3.320	22.62	2.66
10	Equity Bank	6.7	17	10.300	153.73	2.51
11	Bank of Africa	0.52	12	11.623	2248.16	1.79
12	Orient Bank	1.50	5.8	4.300	286.67	0.86
13	KCB Uganda	4.5	5.4	0.900	20.00	0.80
14	UBA Uganda	-4.20	2.6	6.800	-161.90	0.38
15	Bank of India	1.20	2.3	1.100	91.67	0.34
16	CIB Uganda	0.29	1.4	1.111	384.76	0.21
17	Finance Trust Bank	2.00	1	-1.000	-50.00	0.15
18	ABC	1.00	0.8	-0.181	-18.18	0.12
19	Ecobank	-0.76	0.8	1.577	-206.41	0.12
20	NC Bank	0.86	0.5	-0.301	-34.92	0.08
21	Guranty Trust Bank	-2.39	-0.9	1.462	-61.17	-0.14
22	Exim Bank	2.35	-4.1	-6.450	-274.47	-0.61
23	CBA	-4.10	-8.1	-4.000	97.56	-1.20
24	Tropical Bank	1.90	-13.4	-15.300	-805.26	-1.98
Total		**489.6**	**676.7**	**187.09**	**2145.6**	**100**

As shown in table 8 above, in year 2015, 42.86% of commercial banks had ROA of between 0% and 3%, 30.95% had ROA of between 3% and 5%, 19.05% had ROA of 6-10%, while 7.14% had a negative ROA.

Figure 7: Commercial Bank Profitability up to 2016



As shown in figure 2 above, commercial banks profitability improved between year 2009 to 2017 with the number of commercial banks having negative ROA reduce from11.9% to 9.5% to 4.76% in years 2009, 2010 and 2011 respectively. The performance deteriorated between year 2011 and 2012 with the number of commercial banks with negative ROA increasing from 4.76% in 2011 to 9.52% in 2012. However, the performance of commercial banks improved in year 2013 with the number of commercial banks with negative ROA reducing 7.14% from 9.52%. Almost 50% of commercial banks have ROA of 0% to 3% with around 30% of the banks having ROA of 3% to 5%.This implies that over 80% of Uganda commercial banks have ROA of 0% to 5%.The number of commercial banks with ROA of above 5% was found to move from11.9% in 2009, to 26.19% in 2010, to 14.29% in 2011, to 19.05% in 2012 and 19.05% n2013.This indicates the volatile market condition between year 2012 and 2013 2014 and2017.

Figure 8; central bank rates

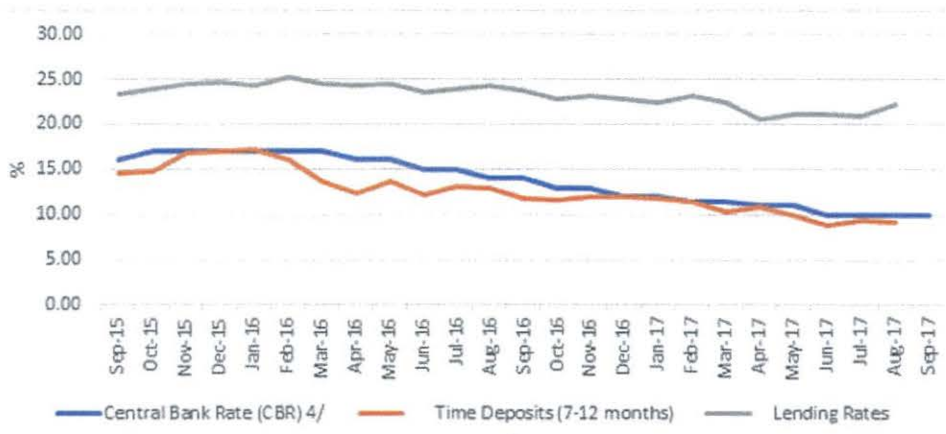
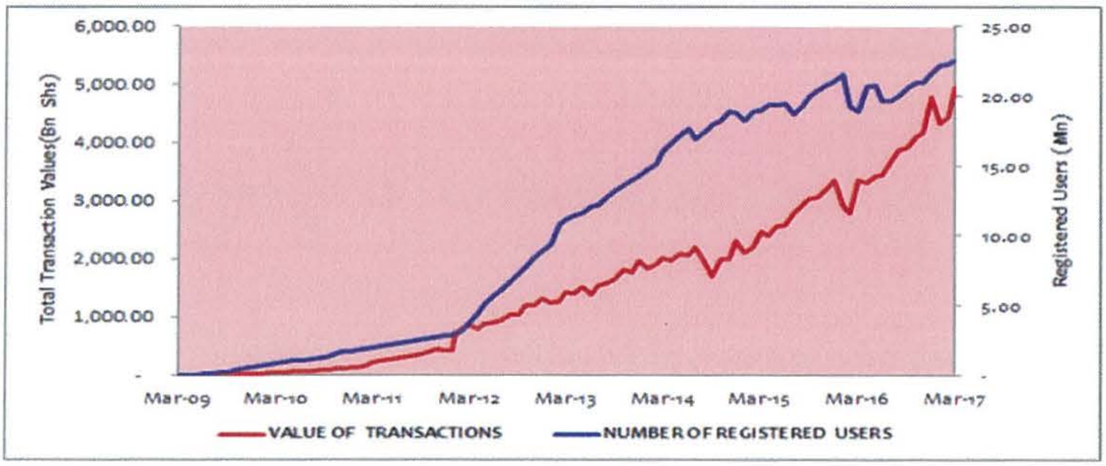


Figure 9; interest rates of bank of Baroda



As shown in figure 4 above, bank of Baroda interest rates in Uganda remained stable from January 2009 to October 2017 after which they significantly rose from 14.72% to20.12% in December 2011, a level that was maintained up to July 2012 after which interest rates declined to

17.97%. Thereafter, the interest rates have remained stable at 16% and 17%.

Figure 10 comparison between the central bank rates and commercial banks rates

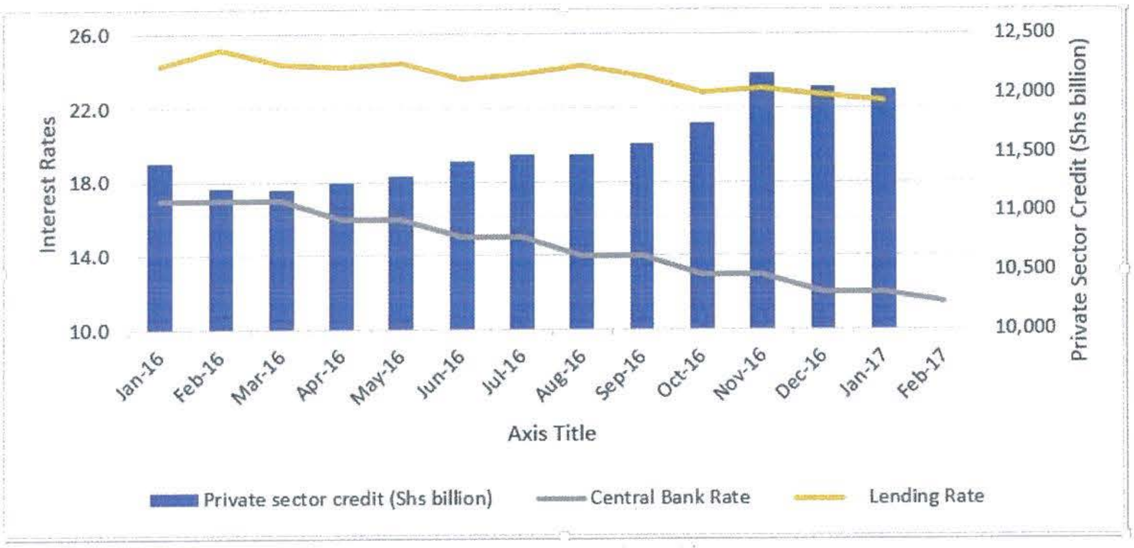
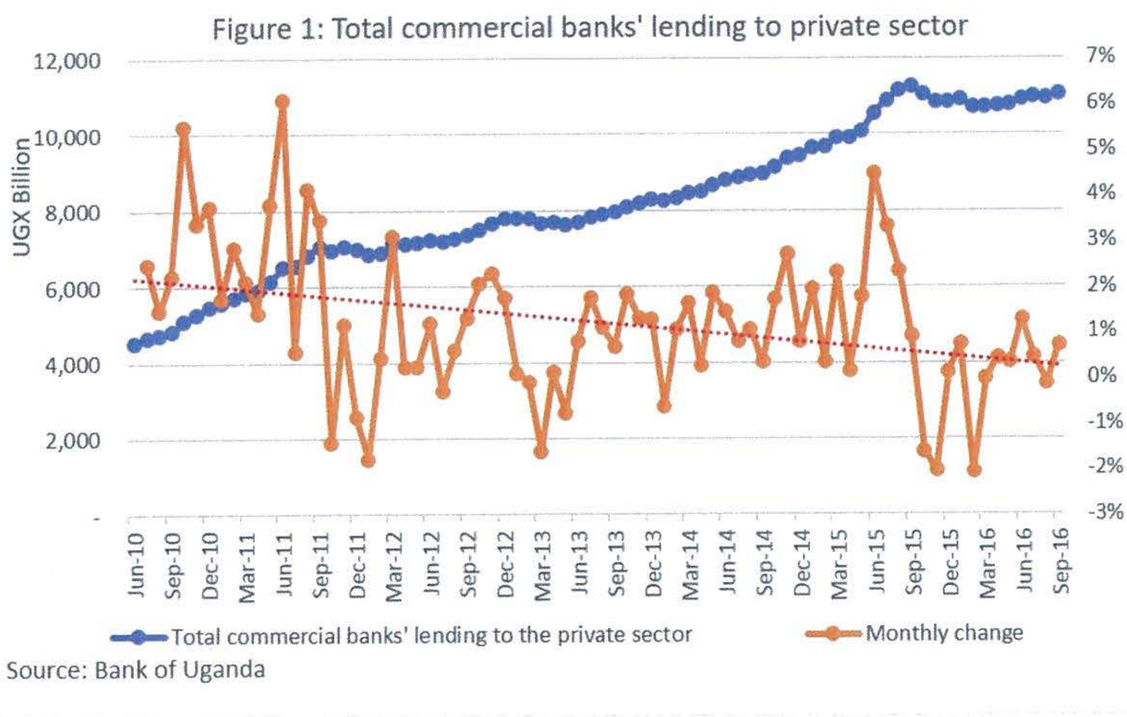
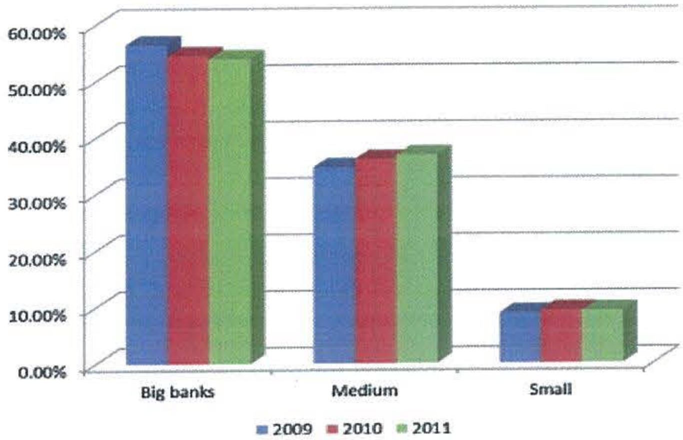


Figure 11: Graph showing commercial banks' lending to private sectors



Source: Bank of Uganda

Figure 12 showing difference in profitability basing on the size of the bank



4.3 Discussion

The study sought to determine the impact of interest rate on bank financial performance in Uganda. The study found that the relationship between interest rates and financial performance is positive with a coefficient of correlation of 0.57.The coefficient of determination of 0.32 implies that interest rates affects 32% of profitability. The ANOVA results show a value of 0.0084 which is less than 0.05. This implies that the relationships significant at 95%. The results agrees with that net interest margin had positive and significant impact on the profitability as measured by ROA and ROE. Locally, the findings concur with that higher interest rates offered lenders in an economy a higher return relative to other countries thus attracting foreign capital leading to increase profitability. Profitability of commercial banks is positively related to interest rates and bank size with coefficient of correlation of 0.8. The coefficient of determination of 0.65 implies that the model developed can explain up to 65% of changes in commercial bank profitability. The relationship is significant at 95% confidence level with a p value of 0.35. The model developed from by the study is $Y=0.0857+0.1983X1+0.0001X2$ where Y is profitability,X1 is the interest rates and X2 is the size of the bank as measured by value of assets. This implies that for every percentage change in interest rates, profitability will change by 0.1983 and for every change in shilling of assets, profitability will change by 0.0001%.The size of the bank was used as control variables. The findings on positive effect of size on profitability is in line with findings that size of bank affect profitability through control of cost differences and product and risk diversification. The industry profitability was found to have improved in 2010 from 1.64% in 2009 to3.02 in 2010, reduced to 2.96% in 2011, 2.54% in 2012, and 3.01% in 2013. This findings agrees with that commercial banks in Uganda are more profitable with an average Return on Assets (ROA) of 2 percent. This also implies that commercial banks industry in Uganda has positive returns exceeding the 2% globally taken to be appropriate for commercial banks except for year 2009. Commercial banks industry profitability has been stable irrespective of the volatility in interest rates measured by standard deviation

.

4.4 Summary

Most commercial banks were found to have positive return on assets implying that Ugandan commercial banks have high financial performance. The highest performance was recorded in year 2012 where the best performing commercial bank had a return on assets of 10.4%. The lowest performance was found to be in year 2009 whereby the highest loss made by worst performing commercial bank was -17.47%.

Financial performance of commercial banks improved between year 2009 to 2011 with the number of commercial banks having negative ROA reduce from 11.9% to 9.5% to 4.76% in years 2009, 2010 and 2011 respectively. The performance deteriorated between year 2011 and 2012 with the number of commercial banks with negative ROA increasing from 4.76% in 2011 to 9.52% in 2012. The number of commercial banks with ROA of above 5% was found to move from 11.9% in 2009, to 26.19% in 2010, to 14.29% in2011, to 19.05% in 2012 and 19.05% in 2013.This indicates the volatile market condition between year 2009 and 2010, 2010 and 2012. However, the performance of commercial banks improved in year 2013 with the number of commercial banks with negative ROA reducing to 7.14% from 9.52%. Almost 50% of commercial banks have ROA of 0% to3% with around 30% of the banks having ROA of 3% to 5%. This implies that over 80%of Ugandan commercial banks have ROA of 0% to 5%.Commercial bank lending interest rates in Uganda remained stable from January 2009 to October 2011 after which they significantly rose from 14.72% to 20.12% in December2011, a level that was maintained up to July 2012 after which interest rates declined to17.97%. Thereafter, the interest rates have remained stable at 16% and 17%. Interest rate volatility was measured by standard deviation. Interest rates volatility remained below0.5% but rose to 2.51%

in October 2012. From 2012, interest rates remained volatile reaching to 0.6%. Commercial banks' lending rates remained relatively stable in years2013, 2014 and 2015 but rose from 14.97% in 2015 to 19.75% in 2016, but declined to17.23%. The study found that the relationship between interest rates and financial performance is positive with a coefficient of correlation of 0.57.The coefficient of determination of 0.32 implies that interest rates affects 32% of banks profitability.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of findings, conclusions and recommendations derived from the findings of the study. The chapter also presents the limitations that were encountered in the study with suggestions for further research.

5.1 Summary of the Study

The study sought to establish the effect of interest rates on profitability of commercial banks in Uganda. The study used a descriptive research design to achieve the research objectives. Multiple regression analysis was used to determine the relationship between interest rates and financial performance measured by return on assets. The study used the profitability as the dependent variable while lending interest rates was the independent variable. The study found a significant positive relationship between interest rates and bank profitability with a coefficient of correlation of 0.57. Commercial bank profitability was also found to be positively related to interest rates and bank size with a coefficient of correlation of 0.8. Over 90% of commercial banks were found to have positive return on assets. The highest performance for the period of study was recorded and in 45years 2016 where the best performing commercial bank had a return on assets of 10.4%.The lowest performance was found to be in year 2009 whereby the highest loss made by worst performing commercial bank was -17.47%.Financial performance of commercial banks improved between year 2009 to 2017 with the number of commercial banks having negative ROA reduce from 11.9% to 9.5% to 4.76% in years 2009, 2010 and 2017 respectively. The performance deteriorated between year 2017 and 2012 with the number of commercial banks with negative ROA increasing from 4.76% in 2017 to 9.52% in 2012. Commercial bank lending interest rates in Uganda remained stable for the from January 2016 to October 20117after which they significantly rose from 14.72% to 20.12% in December 2017, a level that was maintained up to July 2016 after which interest rates declined to 17.97%. Interest rate volatility was measured by standard deviation and had positive effect on commercial bank profitability. Commercial banks' lending rates remained relatively stable in years 2009, 2010 and

2017 but rose from 14.97% in 2017 to 19.75% in 2012, but declined to 17.23%. The industry profitability was found to improve in 2010 from 1.64% in 2016 to 3.02 in 2018, reduced to 2.96% in 2017, 2.54% in 2012, and 3.01% in 2013. Commercial banks industry profitability was found to be higher than those of developed countries and remained stable irrespective of the volatility in interest rates.

5.2 Conclusion

The main objective of this study was to determine the effect of interest rates on bank profitability of commercial banks in Uganda focusing majorly on bank of Baroda Uganda. From the finding above, the study concludes that interest rates have significant positive effect on financial performance of commercial banks in Uganda at 95% confidence level. The relationship between interest rates on profitability was also found to be linear with increase in interest rates leading to higher profitability. The study also concludes that interest rate volatility has positive effect on profitability of commercial banks. The study further concludes that commercial banks in Uganda are profitable with over 90% of commercial banks having positive financial returns. This is shown by the positive ROA as well as the rising ROA over the period of analysis. The study also concludes that the size of commercial banks has effect on profitability of commercial banks where the big commercial banks have higher profitability. Finally, the study concludes that the model containing interest rates and size of commercial bank can explain 64% of the changes in commercial banks profitability.

5.3 Limitations of the Study

The study was faced by a number of limitations. First, this study made use of return on assets as measure of financial performance. There are other measures of bank profitability including return on equity (ROE), net interest margin (NIM), return on capital employed (ROCE) among others. Secondly, the study relied on secondary data which had already been compiled by the Central Bank of Uganda. Data was used just as obtained without any adjustments and the researcher had no means of verifying for the validity of the data which was assumed to be accurate for the purpose of this study. The study results are therefore subject to the validity of the data.

Thirdly, the study was specific to Uganda and therefore suffers from the limitations of country specific studies thus cannot be generalized to banks in other countries other than Uganda.

Fourthly, the study was based on five-year data on performance and also on interest rate. Thus the period covered may be recent but is not long enough to take care of the fluctuations in the variables as well as major events in the banking industry in Uganda.

5.4 Policy Recommendation

Based on the study findings, the study makes a number of recommendations to be considered for policy formulations.

First, commercial banks' lending rates have positive effect on commercial banks profitability. This is because higher lending rate implies more revenues to the commercial banks which may not be crowded out by reduced demand for loans. This implies that the demand for loans in Uganda is inelastic and hence insensitive to changes in price for money (interest rates). To cushion consumers from exploitation by commercial banks, the Central Bank need exercise their monitoring roles strictly and discipline any commercial banks that may be increasing the interest rates arbitrary.

Further, policies need to be put in place to shield bank lending rates and ensure monitoring the same. In addition, in times of poor performance of commercial banks and the need to boost their profitability may be necessary for their role in economy, Central Bank of Uganda should come up with monetary policy that will lead to rise in interest rates and hence improving banks profitability.

The management of commercial banks also need to develop polices and investment sources that diversify income since interest rates only explain 33% of the changes in profitability.

Diversifying the commercial banks source of profitability from the overreliance on the interest rates related sources and explore on other avenues of achieving high profitability will be vital. In addition, the management of small and medium sized banks need to develop ways of ensuring that their banks grow to large banks since increase in bank size positively affects profitability

5.5 Suggestions for Further Research

Based on the limitations of the study, findings and experience of the research over the research period, the study has numerous areas where further research can be done. First, while interest rate is the main determinant of commercial banks profitability since they trade in money. Further research can therefore be done incorporating other determinants of commercial banks profitability and not only interest.

Further research should be done in different country to enable generalization of the findings.

In addition, some study can be carried out using data from commercial banks as opposed to data availability from Central Bank of Uganda. This will improve the reliability of the financial information.

Further study can be done on other firms like microfinance institutions, pension funds and other financial institutions.

Lastly, the study recommends that there is need to do another study in the banking industry that makes use of other control variables in order to show the impact of interest rate on bank performance not only the size.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

The Respondent,

Dear Sir/Madam,

Re: Request for Research Data

I'm a student pursuing a Bachelors of business administration degree accounting and finance at Kampala International University. My research project topic The impact of interest rates on the profitability of Commercial Banks in Uganda". You have been selected to form part of those to provide the necessary data needed for this study. You are therefore kindly requested to assist by granting me an opportunity for the filling in of the attached questionnaire at your convenience when contacted for an appointment. The information you provide will be treated in strict confidence and is purely for academic purpose. In no way will your name appear in the final research report. Your assistance and cooperation will be highly appreciated.

Student

Katumba Alexander

Reg. No.1153-05014-03347

Kampala international university.

APPENDIX II: QUESTIONNAIRE

Dear Sir/Madam

You are invited to participate in the above mentioned research project. The survey should only take 10 – 15 minutes to complete. To ensure confidentiality of all responses, you are not obliged to provide your name. The information you give in response to this survey will be purely used for academic purpose.

1. Respondent's Highest Educational Qualification

i)Certificate/Diploma [ ]

ii) Undergraduate degree [ ]

iii) Master's degree [ ]

iv) Doctorate [ ]

v) PhD [ ]

2. Time spent in the bank

i) Less than 6 months [ ]

ii) 6 months-1 year [ ]

iii) 1-2 years [ ]

iv) 2-3 years [ ]

v) 3-4 years [ ]

vi) More than 4 years [ ]

3. How frequent does your bank review its interest rates?

1) After 5 years [ ]

ii) Annually [ ]

iii) Half-yearly [ ]

iv) When need arises [ ]

4. In your opinion, does your bank's system of interest rates sufficiently and effectively contribute to the profitability of your bank? How does your role support it?

Explain...

....

5. Are the systems of interest rates referred to in 4 above functioning as they are intended to?

a) Yes ( )

b) No ( )

6. How would you generally rate the interest rates system in your organization in relation to bank profitability?

a) Very ineffective ( )

b) Ineffective ( )

c) Uncertain ( )

d) Effective ( )

e) Very effective ( )

7. Please rank the following statements in each area of interest rates system on scale ranging from strongly disagree to strongly agree where: 1 = strongly disagree; 2 = disagree;3 = not sure; 4= agree; and 5= strongly agree.

Interest rates 1 2 3 4 5

Control Environment

Rank Control Environment statements on Liker scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5=strongly agree

1234

.i) Fraud detection, and fraudulent activities are inherently unpredictable difficult to detect and they affect the performance of the bank

ii) Measures that can enhance the efficacy of auditors are important for effective fraud detection

iii) There is honest and fair dealings with all stakeholders for the benefit of the organization

iv) Management is committed to the ethical values in the operation of the banking system

v) Standards for audits and audit-related services influence the performance of commercial banks

vi) Internal audit evaluate and contribute to the improvement of bank profitability, control and governance using a systematic and disciplined approach in the banking

99In your opinion, how can we improve in commercial banks?

Bank profitability Rank

Bank profitability statements on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

7) Management has defined appropriate objectives for the bank profitability
8) .ii) Management identifies risks that affect achievement of the bank objectives
9) .iii) Management has a criteria for identification of profits to the bank most critical.
10) iv) Management has put in place mechanisms for mitigation of critical risks that may lead to bank's loss due to failure to pay
11) .v) Management has a criteria for ascertainment of which risks to the bank are most

critical

12) .vi) There is frequent escalation and reporting of bank's departmental rates to the management to assist in quick access to loans

100enough before it develops to loss

.vii) All instructions received from bank clients are thoroughly scrutinized (e.g. signature verification) before execution to prevent processing fraudulent transactions.

Information and Communications System

Rank Information and Communication system statements on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

i) Management has identified individuals who are responsible for coordinating the various activities within the bank to ensure appropriate communication on interest rates

.ii) All employees understand the concept and importance of interest rates, including the division of responsibility

iii) Effective communication helps to evaluate how well guidelines and policies of the bank are working and being implemented

.iv) The reporting system on banking structures spells out all the responsibilities of each section/unit of the bank. Is there effective interest rates communication and proper flow of information down, across, and up within all the sections of the organization?

resolution of any non-compliance items noted in those audit reports

103v) Management control method is adequate to investigate unusual activities in the bank. Are there proper mechanisms put in place to monitor the quality of interest rates structure in commercial banks over time?

Bank of Uganda Prudential Regulation

These statements are on BOU Prudential Regulation, rank them on scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

1 2 3 4 5

v) The set regulations are strictly adhered to

vi) .ii) fraudulent activities are kept at minimal due to the regulations.

vii) iii) Stern measures are taken by BOU towards violation of any regulations

viii) .iv) Adherence to set regulations positively contributes to financial performance of the organization. Are BOU prudential regulations enough to curb all commercial banks' irregularities?

Thanking you for your participation