THE IMPACT OF CENTRAL BANK OF KENYA RATES ON MARKET INTEREST RATES OF COMMERCIAL BANKS IN KENYA

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DECLARATION

I Muchiri Edith Nyambura hereby declare that this project is my own work and effort and that it has not been submitted anywhere for any award.

Sign _____ Date 7 NOV 2012

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DEDICATION

To my wonderful son who has been very interested in my education and my parents and friends who have continuously encouraged me to read more.

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ABSTRACT

Financial liberalization and deepening entails a variety of measures such as liberalization of interest rates, establishing freedom of entry into and procedures for orderly exit from the banking industry, reducing reserves and liquidity requirements, eliminating or minimizing credit allocation directives, eliminating preferential credit at concessional interest rates, and removing controls on the capital account of the balance of payments.

The objective of this study was to investigate the impact of Central Bank of Kenya rates on market interest rates of commercial banks in Kenya. The research design adopted in this study was descriptive research design. In addition the researcher carried out a correlation study. The study was to determine whether or not Central Bank Rates and market interest rates of Commercial Banks in Kenya are correlated. Further, the researcher sought to determine which variable mainly determined the market interest rate of commercial banks.

The population of study consisted of all the 43 commercial banks that were fully registered with Central Bank of Kenya by December 2011. Both primary and secondary data were collected for the study. Primary data was collected through the use of a structured questionnaire. Secondary data was derived from various sources which include the annual financial statement and data from the CBK. Data analysis was done using SPSS to generate quantitative reports which were presented in the form of tabulations, percentages, mean and standard deviation.

The results of the survey were presented using tables. The study further correlated the variables using the Pearson correlation moment product. From the findings it was indicated that there was improvement in the allocation of credits in the banks; the commercial banks developed a healthy money market and that the banks used indirect framework that allow the Central Bank to influence the general level of interest rates through open markets opinions. The study concludes that there was a positive significant relation between market interest rate and market power and competition ($p=0.042$), effect of foreign ownership ($p=0.031$) and inflation rates ($p=0.091$). The findings conclude that Central Bank of Kenya rates influenced interest rates of Commercial Banks in Kenya.

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ABBREVIATIONS

CBK	Central Bank of Kenya
REPO Rate	Repurchase rate
CBR	Central Bank Rate
MPC	Monetary Policy Committee
MFC	Mortgage Finance Companies
AERC	African Economic Research Consortium
IMF	International Monetary Fund
e- money	Electronic Money
Fed	Federal Reserve Bank
IS	Investment - Saving

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Interest rate elasticity reflects market power. The lower the elasticity, the greater the monopolistic power and the wider the spread. The effect is greater with an undiversified asset basket and with an underdeveloped money market. Elkayam (1996), assuming market power in both the deposit and the loan markets, concludes that interest spread depends on the elasticity's of demand for credit and deposit. The higher the elasticity, the more competitive the market and the narrower the spread. Sometimes monetary policy actions might have only a very limited impact on the economy. Saunders (2001) shows that in 1991 as the Fed interest rates declined, banks were reluctant to increase their lending. The underlying reason was that many banks had bad loans at the end of the 1980's. Effectively if banks do not lend to firms, then an important part of transmission mechanism between the open market purchase operations and an increase in aggregate demand is put out of action

Interest rates are the "fees" associated with loans, whether to consumers or between commercial banks. According to Darryl (1969), interest rates are a price for the use of funds and if rapid monetary expansion contributes to excessive demand and inflation, it also contributes to rising interest rates. Central Bank's role under the interest rate instrument is to set a short-term official rate of interest, which indicates the price at which it will make liquidity available to the banking system as a lender of last resort. In Kenya, this rate is called the Central Bank Rate. This rate is reflected in the CBK overdraft rates. Inflation stabilization can be implemented through a 'Taylor rule' in which interest rates are adjusted in response to output and inflation.

In using interest rates, first the Central Bank sets a target inflation rate and then interest rates are steered to move inflation to its intended levels. In this case, interest rates are increased when the inflation rate is above the target rate, and reduced when inflation is below the target rate. A reduction in the official rate for instance, encourages the commercial banks to borrow money from the Central Bank, thereby increasing money supply in the economy. This increases

consumption and output towards the desired output target. However, this action increases the inflation rates. This introduces the paradox of monetary policy that is; excessively low interest rates now will only lead to much higher interest rates latter (Gichuki et al; 2012).

In most economies, a central bank or government agency is responsible for watching over the money supply and interest rate and adjusting policies as necessary. Macroeconomic theory is the study of various economic factors that include information on aggregated indicators. These factors commonly include a government's fiscal or monetary policy, which can include information on the money supply and interest rate that drives a market's liquidity (Jhingan, 1998). Most countries have some form of Central Bank serving as the principle authority for the nation's financial matters. Primary duties for a Central Bank include: implement a monetary policy that provides consistent growth and employment; promote the stability of the country's financial system; manage the production and distribution of the nation's currency and; inform the public of the overall state of the economy by publishing economic statistics (Edward & Khan, 1995).

1.1.1 Central Bank of Kenya

The banking sector in Kenya has at its apex the Central Bank of Kenya (CBK), which is the monetary authority with the main responsibility of ensuring the creation of a financial sector that, meets the developmental goals of the economy. The Bank also has the responsibility to manage interest rates through its monetary policy operations. In a liberalized market, interest rates are managed using indirect monetary policy tools; the tools of monetary policy depend on the level of development of the market. Among the tools used for management of interest rates include discount rate, overnight lending rate, REPO rate and the bank rate (interbank rate). Depending on the monetary policy rule adopted, central banks across various economies exercise different liquidity management styles (CBK, 2000).

The Central Bank's principal object is formulation and implementation of monetary policy directed to achieving and maintaining stability in the general level of prices. The aim is to achieve stable prices – that is low inflation - and to sustain the value of the Kenya shilling. The level of the CBR is reviewed and announced by the Monetary Policy Committee (MPC) at least

every two months and its movements, both in direction and magnitude, signals the monetary policy stance. The CBR has been constant in the year 2012. The CBR is the base for all monetary policy operations in order to enhance clarity and certainty in monetary policy implementation.

Whenever the Central Bank is injecting liquidity through a Reverse Repo, the CBR is the lowest acceptable rate. Likewise whenever the Bank wishes to withdraw liquidity through a Vertical Repo, the CBR is the highest rate that the CBK will pay on any bid received. Movements in the CBR are reflected in changes in short-term interest rates. A reduction of the CBR signals an easing of monetary policy and a desire for market interest rates to move downwards. Lower interest rates encourage economic activities and thus growth. When interest rates decline, the quantity of credit demanded should increase. The CBR operates through the market for repo securities. Efficiency of the repo and interbank markets is crucial for the transmission of monetary policy decisions. By fixing the tenor for bills sold in the repo market, the MPC aims to sharpen the signaling process. CBK monitors but does not intervene in the overnight interbank money market which is conducted by the banking industry.

Maintaining price stability is crucial for a proper functioning of a market-based economy. It encourages long-term investments and stability in the economy. Low and stable inflation refers to a price level that does not adversely affect the decisions of consumers and producers. Price stability is a precondition for achieving a wider economic goal of sustainable growth and employment. High rates of inflation lead to inefficiency in a market economy and, in the medium to longer term, to a lower rate of economic growth. Movements in the general price level are influenced by the amount of money in circulation, and productivity of the various economic sectors, the Central Bank of Kenya regulates the growth of the total money stock to a level that is consistent with a predetermined economic growth target as specified by the Government and outlined in its Monetary Policy Statement. The Monetary Policy Committee (MPC) of the Bank sets the rate of interest at which the Central Bank charges on loans to commercial banks. This rate referred to as the Central Bank Rate (CBR). The rate signals the monetary policy stance of the Bank (CBK website, 2012).

1.1.2. Commercial Banks in Kenya

In Kenya, the Banking Sector is composed of the Central Bank of Kenya, as the regulatory authority and the regulated; Commercial Banks, Non-Bank Financial Institutions and Forex Bureaus. Currently there are 43 licensed commercial banks and one mortgage finance company registered with the CBK. Commercial banks and mortgage finance companies are licensed and regulated under the Banking Act, Cap 488 and Prudential Regulations issued there under. Foreign Exchange Bureaus are licensed and regulated under the Central Bank of Kenya (CBK) Act, Cap 491. Out of the 44 institutions, 31 are locally owned and 13 are foreign owned. The locally owned financial institutions comprised 3 banks with significant government shareholding, 28 privately owned commercial banks and 2 mortgage finance companies (MFCs). Of the 42 private banking institutions in the sector, 71% are locally owned and the remaining 29% are foreign owned. Performance of the banking sector is rated strong as institutions achieve satisfactory financial conditions and improved operations results despite high market competition as each of these institutions scramble for a significant market share. New products have been introduced in the market as a result of rising competition. The system remained well capitalized. Shareholders' funds, deposits and assets increased by 35.2 percent, 27.7 percent and 31.9, respectively (CBK, 2009).

The relationship between the signaling rate and the commercial banks interest rates is defined by the efficiency of the transmission mechanism and competitiveness of the banking sector. In managing their liquidity, banks have the option to mobilize deposits, use the rediscounting window, overnight lending facility, and the interbank market. The choice between the various options depends on the accessibility to the facility, availability of liquidity, and the interest rate charged. A positive relationship is expected between the discount rate and the inter-bank rate. Further, since banks pay an interest rate when they borrow at the inter-bank market, this should see an increase in the lending rate charged to the non-financial sector. Depending on the sensitivity of loans to interest rates, banks shift a proportion of the liquidity management costs to investors and depositors as banks maintain the profit margin. Therefore, a direct relationship is expected between the inter-bank rate and banking institutions interest rates.

Treasury bills form part of the financial asset portfolio for investors; therefore, a direct relationship is expected between deposits and Treasury bill rate. A rise in Treasury bill rate

would exert pressure on commercial banks to compete for deposits from the non-financial sector resulting to an increase in deposit rate. And given that the deposit rate forms part of the lending rate then lending rates, will also be pushed upwards.

1.2 Statement of the Problem

Financial liberalization and deepening entails a variety of measures such as liberalization of interest rates, establishing freedom of entry into and procedures for orderly exit from the banking industry, reducing reserves and liquidity requirements, eliminating or minimizing credit allocation directives, eliminating preferential credit at concessional interest rates, and removing controls on the capital account of the balance of payments (Montiel 1995). Despite the assumed benefits of financial liberalization (McKinnon 2003), financial sectors in most developing countries are characterized by fragility, volatile interest rates, high-risk investment and inefficiencies in the intermediation process. These threaten stability of the financial sector as the system experiences banking crises, misallocation of resources, high levels of non-performing loans and high costs of intermediation. This situation is explained by: weak institutions with weak prudential regulations, inadequate supervision and poor enforcement of contracts and regulations; increased risk exposure, including interest-rate, credit, legal and foreign-exchange risk; failure to meet the prerequisites for successful liberalization, including macroeconomic and financial stability and fiscal discipline; macroeconomic instability which increases the risk premium on loan rates, and increases the default risk with a poor business environment; an uncompetitive market microstructure with a few banks being in control, and non-diversified financial assets. Widening interest rate spread is an indicator of the underlying weak institutional and policy set-up of the financial sector.

While Gordon (1999) finds that interest rates were the superior instrument for monetary policy, Sergeant and Wallace (1995) prefer reserve money as the instrument. This shows that there is a cost to pay when the Central Bank tries to simultaneously set both the interest rates and monetary aggregate to achieve its inflation and economic growth targets. This further has an impact on the banks market interest rates. Niemann et al (2010) concludes that the welfare maximizing choice of instruments depends on the economic environment under consideration. Poole (1997), Woglom (1997), Benavie and Froyen (2003), Butter (2003) and Phongthiengtham (undated) on

the other hand argue that monetary authorities can have an optimal combination instrument which lies between the interests rate and monetary instruments.

Further, Dornbusch and Fischer (1990), and Turnovsky, (1975) find that the two instruments cannot be used simultaneously and therefore CBK has to choose between the instruments, literature is divided on which of the instruments would be superior. At best, literature suggests that it all depends on the economic environment. It is therefore interesting to find out which one is optimal in the Kenyan economic environment.

Kenya has experienced changes in financial sector policies which eventually led to the liberalization of interest rates. Kenya's post reform period has been characterized by the interest rate spread widened by high implicit costs and a tight monetary policy achieved through increased reserve and cash ratios. Macroeconomic and financial instability, a sluggish capital market, high treasury bill rates and lack of appropriate legal reforms are other markers of the period (Ngugi, 2009). Despite these scenarios, there is little research on commercial banks market rate interest rates and more specifically in establishing the relationship between of central bank of Kenya rates and market interest rates of commercial banks. Olweny (2011) conducted a study on Modeling Volatility of Short-term Interest Rates in Kenya, Ngugi and Kabubo, (1998) conducted a study on Financial sector reforms and interest rate liberalization while Kimura, (1997) also conducted a study on Interest rates in Kenya; none of the researchers has conducted a study on the effect of central bank rates on market interest rates of commercial banks in Kenya; hence the researcher seeks to conduct this study.

Though the three studies were on interest rates, the studies mainly dwelt on volatility and policies/reforms on interest rates; none of the study sought to investigate how CBK rates impacted on market interest rates of commercial banks in Kenya. It is this research gap that the researcher seeks to fill by conducting a study on the impact of central bank of Kenya rates on market interest rates of commercial banks in Kenya.

1.3 Objectives of the Study

The objective of this study was to investigate the impact of Central Bank of Kenya rates on market interest rates of commercial banks in Kenya.

1.4 Significance of the Study

This study was important to various stakeholders. It was specifically important to the following stakeholders for the following reasons:

To Commercial Banks

The study was important not only to CBK managers but also to other managers in other banking Sector. It helped them understand the impact of rates to market interest rates and how it helps achieve financial stability and the effect on the economy. The study also helped other Managers evaluate the methods used in interest rate implementation and consequent effects of their which would help them, improve their interest rate styles.

To Researchers

The study would be a source of reference material for future researchers on other related topics: it would also help other academicians who undertake the same topic in their studies.

The study would also highlight other important relationships that require further research; this may be in the areas of relationships between interest rate and monetary policy

To Academicians

The results of this study would add knowledge in the research area. It would add literature on the field and give insight on the reasons as to why market interest rates vary and fluctuate in commercial banks in Kenya. The study would also indentify and suggest to future researcher areas that need further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The main aim of this Chapter was to review available literature to the topic of study. The said literatures include; books, past research dissertations and thesis, reports and articles. The researcher first discussed the theories, and then looked at the various impact of central bank of Kenya rates to market interest rates of commercial banks in Kenya. These include; financial innovation, System-wide measures of market structure, monetary policy. The researcher w also looked at the empirical review and lastly conclusion.

2.2 Theoretical Review

2.2.1 The Classical Monetary Theory

The classical economists argue that interest rates forces do not change real variables such as output and employment. Accordingly, money acts only as a medium of exchange and it facilities transactions, i.e. neglects money as a store of value. Mankiw (2003), revealed that in an expanding economy, the credit system can stimulate the economy depending on the demand pattern of the economy; he also advocated monetarist to pursue a credit management system through the use of monetary instruments of interest rate to control any excessive credit expansion, which can lead to boom and then to slump. Indirect link between money supply and prices was found through the rate of interest, in that, the rate of interest affects money supply, which in turn affects the price level. This linkage between prices, money and interest rate was the basis for Keynes's later works on the general theory of employment, interest and money (Mankiw and Gregory, 2003).

Irving Fischer developed the 'exchange or transaction equation' of earliest quantity theory of interest rate. The money was simply a medium of exchange such was held only to facilitate exchanges. For the aggregate economy, at equilibrium, PT=MV where T is demand for money (trade volume) and also is determined independently of the other variables in the identity, P is average price of commodity and factor, M is average quantity of money and is determined independently of any of the three other variables, V is average velocity of money and MV is

supply of money is assumed to be passive and dependent where V is stable. This consideration permits the identity to be transformed in to a version of the 'quantity theory of interest rate. The demand for money (it depends on real factors of production) is taken as stable and outside the influence of monetary factors. Money supply (MV) and trade volume (T) determines the level of P and there is proportional relationship between general price and money supply (Branson and William, 1989).

Marshall and Pigou gave another version of the quantity theory of interest rate to be called Cambridge equation. According to cash balance approach, individuals desire to hold money because it provides certain services such that security, purchasing power, buying on favorable term, opportunity arise, convenient asset to have and the like. For the aggregate economy, at equilibrium, M=KYP where M is average money supply in a period, Y is real income, P is average general price, K is a fraction of cash balance out of real income and KY is demand for real cash balances. Here K is assumed to be constant in a fully employed economy and real income change only very slowly. When M increases P will continue to rise until the demand for money equates the supply of money (Mankiw and Gregory 2003). Therefore in the short run money is not neutral to the economy, but in the long run equilibrium, because of prices rise with the same proportion to equate actual and desired real money balances; money is neutral. Even though the classical dichotomy has been subjected to many debates, classicalist divided the economy in to the real and the monetary sectors. In the real sector, which is associated with the short-run monetary theory, real wages, output and employment are influenced and money is not neutral to the economy. While in the monetary sectors, which is associated with long run theory, the interest rate plays no role and money is neutral to real variables but affects nominal variables.

2.2.2 Keynesian Monetary Theory

According to the theory, the changes in money supply may be transmitted to real output and employment through interest rate and investment. Money is demanded for three motives: transactions, precautionary and speculative motives. Unlike classical, the Keynesian argument incorporates both the medium of exchange and store of value as basic functions of money. Keynesian's view of the economy can be presented in a very simplified form. Suppose that for some reason each household and firms in the economy decides that it would like to hold a little

more cash. Keynes argued this happens when businessmen lose confidence and start to think of potential investments as risky, leading them to hesitate and accumulate cash instead: An individual can increase cash holding by spending less. So what happens when everyone tries to accumulate cash simultaneously? The answer is that income falls along with spending. For Keynes, the first and most thing to do is to make it possible for the people to satisfy their demand for more cash without cutting their spending, preventing the downward spiral of shrinking spending and shrinking income. The way to do is simply to print money and somewhat get in to circulation. So the usual and basic Keynesian answer to recessions is a monetary expansion; but he worried that sometimes it's not be enough if a recession become a true depression. Once the economy is deeply depressed during the depression year, as happened in the 1930s, households and especially firms may be unwilling to increase spending no matter how much cash they have; they may simply add any monetary expansion to their hoarding. Such a situation, in which monetary policy has become ineffective, has come to be known as a liquidity trap. In such a case, the government has to do what the private sector will not: spend. When monetary expansion is ineffective, fiscal expansion must take its place. Such a fiscal expansion can break the vicious circle of low spending and incomes and getting the economy moving again. Therefore there were re-establish stability by drawing into use idle resources, capital and labour. However after some time unemployment, which was expected to move inversely with prices increase, began to move in a similar direction

The speculative motive is a key element of his liquidity theory and distinguishes Keynes from the classical school of thought. In classical, there is no distinction between motives, and takes money as neutral to the economy in the long run (Branson and William, 1989; Mankiw and Gregory, 1997). Keynes considered investment in financial assets as an alternative investment if money rose, and are replaced for money because money has nil return. The return of financial assets is the sum of the capital gain and the interest yield of the assets. So the owner makes a decision based on this return on whether to buy or to hold speculative (idle balance). If at higher interest rate the wealth owner holds less; idle balances is changed to bonds up on the anticipation of the rate of interest and the capital gain. Contrasting this with the quantity theorist, a rise in money supply does not result in a direct proportionate increase in prices since part of it is held as idle balances because of different motives principle. For Keynes the general price level is

determined by labour costs. But in classical theory, money supply determines the level of prices, wage, and employments. For Keynes those variables are determined through the rate of interest. Keynesians also differ from the classical monetary school in their view of transaction mechanism in the monetary sectors (Branson, William, 1989).

The classical school does not state a thing about the source of extra money in an economy, while Keynes identified sources such as open market operation, increased exports and deficit expenditure. Unlike classicists who believed in wage cuts to diminish unemployment, Keynes recommended an increase in prices, which he believed that it would shrink the real wage rate and increase the demand for labour (Branson, William, 1989).

2.2.3 Monetary Policy Theory

Monetary policy theory argues in favor of the classical theory with slight deviations. They agree that money may affect real variables in the short run but only nominal variables or magnitudes changes in the long run. Friedman has studied the demand for money and suggested not only income and interest rate; total wealth also affects the desire to hold real money balances. Monetarism, as advocates of free market, started challenging Keynes's theory in the 1970s. Milton Friedman, the founder of monetarism, attacked Keynes idea of smoothing business cycle on the ground that such active policy is not only unnecessary but actually harmful, worsening the very economic instability that is supposed to correct, and should be replaced by simple, mechanical monetary rules. This is the doctrine that came to be known as monetarism (Friedman: 1970). Friedman began with a factual claim; most recessions, including the huge slump that initiated the great Depression, did not follow Keynes's script. I.e. they did not arise because the private sector was trying to increase its holding of a fixed amount of money. Rather, they occurred because of a fall in the quantity of money in circulation (Branson, William 1989 and Mankiw, Gregory 2003).

The policy rule under Monetarism is that if economic slumps begin when people spontaneously decide to increase their money holdings, then the monetary authority must monitor the economy and pump money in when it finds a slump is imminent. If such slumps are always created by a fall in the in the quantity of money, then the monetary authority need not monitor the economy;

it need only make sure that the quantity of money doesn't slump. In other words, a straightforward rule to keep the money supply steady is good enough, so that there is no need for a discretionary policy of the form, pump money in when your economic advisers think a recession is imminent. Money supply, which has been given a limited direct role in an economy, received a prominence position; their theoretical formulation is based on the old quantity, Cambridge cash balance, and the Keynesian liquidity preference theories. Similar to old quantity theorists, the monetarists believe that money plays a significant role in an economy and influence the periodic movement economic activity and particularly income and price levels. While the old quantity theorist, an increase in money supply result in a direct level determines the purchasing power or real money balance commodity holds. If prices rise, a commodity's demand for real balances increase, since more money is required now to purchase commodities.

The monetarist model is fundamentally a model for the demand of money and not a money supply model. Unlike Keynesian model, their model does not deal with changes in output, employment, money income or the price level. They consider money as assets (wealth) with implicit yields such as convenience and safety and treated it like production factors or commodities. The demand for money depends on total wealth, the prices and yields of money assets in terms of other alternative assets, tastes and preferences. They regarded money as any other commodity in which tastes and preferences play a significant role in the decision to buy or not to buy. For this reason, their model follows the general macroeconomic demand for goods equation where the quantity of a commodity is depending on its prices, prices of other commodities and on test and preferences (Friedman: 1968).

In general monetarism postulates that variation in money supply brings disturbances to prices and hence influences resource allocation. Growth in prices occurs only as an expansion in money supply, which implies that rigid monetary policy result in a stable environment for the performance of an economy. Friedman assigns three roles for monetary policy. Namely; to restrain money itself from being a central cause of economic disorder; to present a stable background for the working of the economy; to counterbalance major instabilities from other sources. The monetarist alleged monetary policy to provide a universal remedy to all business-cycle evils, and monetary policy was primarily to be directed to encouraging the banking system in to satisfying the monetary demands of the business commodity.

According to Keynesian argument. if monetary authority undertakes open market operation to increase money supply it will lead to increased bond prices and interest rate. Even if there is no direct relation between money and with real assets. money can affects it through bond markets where the demand and price of the bond interaction directly affect the given money supply and then the real assets of the household (Harris. 1985 and Branson, 1989). According to Tobin approach. money stands at one end of continuous spectrum of assets with real assets at the other. An increase in money supply will result in portfolio adjustment and higher expenditure in real capital asset. For instance an increase in money supply leads to excess reserves by commercial banks, and they adjust their portfolio by either more loan or by engaging in secondary government market. He strongly considers, not only bond, many financial assets in equity market with a ripple effect that transmitted monetary impact in to real assets. i.e. the effect of a change in money supply is seen as a ripple passing along the range of financial assets but diminishing in magnitude and unpredictability as it proceeds further away from their initial distribution. The ripple effect will eventually reach the demand for equity pushing up their prices and pressing their yield until this demand for real physical assets will result in high investment spending and their output and employment (Branson. 1989).

On the other hand. monetarism does not endorse the indirect relation. and the ripple effect as recommended by the aforementioned schools. Rather they believed that money could easily and directly affect the real sectors through the portfolios balance approach. Besides that money is like any other assets and the term interest rate refers not only to the rate of return of the final assets but also to the rate return that the flow of services from any real assets represents the cost of assets. However the rates of return are implicit and unobservable. Thus the monetarist money is a substitute for not only financial assets but for all assets that comprise wealth portfolio (Friedman: 1970). On top of these intermediate variables, textbook expositions of the monetary transmission mechanism typically assume a financial structure in which banks coexist with well-developed and liquid markets for securities in the form bonds and equities. However the development of financial markets and macrocconomic policy in Sub-Saharan Africa characterized by weak security markets and bank dominated structure.

2.3 Empirical Review

System-wide measures of market structure highlight those attributes that define the industry and which cause interest rates to change over time. These factors include the level of bank concentration, market power and competition, as well as the effect of foreign ownership and state ownership. In the late nineties, the relationship between market structure and interest rate margins was re-visited, as the push for financial liberalization among several countries in the 1990s failed to bring about the convergence of spreads between developing and industrial economies. Cross-national and regional studies were able to establish that the structure of the financial markets can affect variations in spreads (Demirguc-Kunt and Huizinga, 1999).

Martin (2010) noted that inefficient and uncompetitive financial intermediation processes partially contributed to Belize's high cost of financing. Similarly, Mendoza (1997) identifies the low level of competition in the Belizean banking system as a primary reason for interest rate spreads being higher than in Barbados, a Caribbean country with a similar exchange rate regime and higher reserve requirements. Mendoza identified that Barbados" financial system was of a larger size and had a variety of non-bank financial institutions which facilitated lower spreads when compared to Belize. Demirguc-Kunt and Huizinga (1999) noted that in relatively poor countries foreign ownership of banks is associated with higher interest spreads as foreign banks were frequently exempted from unfavourable domestic regulations and their application of superior banking techniques would allow them to earn higher margins than domestic owned banks. In contrast, Martinez and Mody"s (2004) study on Latin America concluded that foreign banks were able to charge lower spreads relative to domestic banks and indirectly influence intermediation through lowering costs of operation.

Martinez and Mody (2004) also established a positive correlation between bank concentration and interest rate spreads: as industries with a high market concentration had less pressure to reduce intermediation costs. On the other hand, Crowley (2007) provided evidence of a negative relationship between concentration and spreads suggesting that a country with a small number of powerful banks are able to restrict the level of competition by keeping spreads artificially low.

Chirwa and Mlachila (2002) found that interest rate spreads in Malawi increased significantly after implementing financial liberalization reforms due partially to high monopoly power within the industry coupled with the high incidence of interlocking ownership and directorship in the Malawian banking system which effectively stifled competition. Their study strongly concluded that high interest rate spreads in developing countries will persist if financial sector reforms do not alter the structure within which banks operate.

According to Ignazio (2007), financial innovation has not only opened up new opportunities for the sector participants, but also increased new market players arising from new products in the financial market. These developments have increased the range of financing and investment opportunities available to economic agents besides changing the role of banks with expanded diversification choices in terms of portfolio and sources of financing. Such developments affect the speed and strength of the channels of monetary policy transmission mechanism in the economy. In this case, as financial markets become more liquid and complete, changes in official interest rates are more readily transmitted to the whole term structure and more generally to financial asset prices. This in turn affects the whole economy through the cost of investment financing and return on saving. In addition, the increasing weight of financial and non-financial assets in firms and households' balance sheets implies that the effects of monetary policy through changes in asset prices and related wealth effects are likely becoming larger while weakening the bank lending channel (Martin, 2007). This is partly explained by the fact that a wider range of borrowers are now able to shift to financial markets as a substitute for banking sources of financing. Consequently, the relevance of the bank lending channel is affected negatively by the emergence of non-bank lenders. In pursuit of price stability therefore, monetary authorities need to monitor more closely developments in asset prices that can eventually have an impact on inflation and growth.

Resina (2004) concurs with this argument by contending that financial innovation tends to make existing relations between monetary and non-monetary variables much more unstable and unpredictable. This is because the broader range of financial assets available and their increased substitutability have made monetary aggregates more difficult to interpret. Thus there has been a trend towards downgrading quantitative targets and focusing instead on key prices such as the level of interest rate and the level of exchange rates. Consequently, in a changing financial

environment, it is inappropriate to use any one monetary variable as the sole guide for monetary policy.

Ho (2006) focused on the linkages between financial innovation, growth and monetary policy transmission mechanisms. The monetary policy targeted at certain macroeconomic variables is essentially a financial process, with the financial system as the interface linking central bank policies and the real economy through the monetary policy transmission mechanism. Hence, any innovation development that affects the structures and conditions of financial markets will have the potential to exert effect on the transmission mechanism. The author identified the interest rate channel, exchange rate channel and asset channel as the three main channels through which financial innovation can affect monetary policy. Ho further argued that financial innovation can work against policy effects of transmission. For instance, new financial instruments such as futures and options significantly increase the ability of economic agents to lock in current interest rates for future funding needs, countering fluctuations in the cost of finance and improving the inter temporal substitution of income streams. In this case, current income is no longer the major determinant of current expenditure, while the net worth would gradually replace cash flows as the primary factor of investment expenditure. Hence, the inter temporal substitution effect of the monetary transmission mechanism will be contained due to the increased insurance possibility induced by financial innovation.

In addition, Ho (2006) points out that evolution of electronic means of payment (e-money) which is basically an alternative form of money has the potential to substitute for traditional form of money. Electronic payments to the extreme, could replace bank demand deposits and other types of highly liquid deposits, undermining the functioning of monetary transmission mechanism, as the link between change in bank deposits and change in real sector activities is weakened. The implication is that the reduced demand for traditional form of money could lead to a reduction in the amount of reserves held by financial institutions with central bank. Moreover, technological advances in payment systems which allow for a more efficient settlement of interbank transactions and reduce the necessity of holding excess reserves with central bank for precautionary motives. The usage of credit cards and electronic banking is one such innovation that contributed to what was previously observed as stable medium to long-run relation between

the stock of money and aggregate nominal income. This instability between the money stock and nominal income eventually led countries to abandon monetary targeting (Iris and Grimes 2003).

According to Noyer (2007), financial innovation fosters faster dissemination of information and its more rapid incorporation into financial market prices. This is true for monetary policy decisions and can therefore increase the effectiveness of monetary policy, particularly via the interest rate channel. In addition, financial innovation contributes to an increased holding of financial assets by lowering transaction costs and facilitating arbitrage, hedging, funding and investment strategies. Financial innovation also gives firms broader access to securities markets, which may reduce information asymmetries at the source of the credit channel and thus weaken it. Financial market development leads to faster and larger interest rate pass through. While some aspects of financial market development strengthen the interest rate channel, advancement of payment technology which enables consumption smoothening weakens the importance of the interest rate channel.

Arturo (2001) examined the effects of securitization on the transmission mechanisms of monetary policy using an estimated structural IS equation. The author found that the sensitivity of both real output and housing investment to the real federal funds rate declined significantly as the degree of asset securitization increased in the 1980s and 1990s. This implies that securitization largely affected channels not directly related to interest rates such as bank lending or credit channels. Aoki et al. (2004) assessed the impact of monetary policy on the real economy through its effect on housing prices and finds that the recent financial innovations such as flexible refinancing terms and increased consumer access to unsecured credit may have changed the transmission mechanism through housing prices.

Ooi Sang (2005) argues that the effectiveness of monetary transmission mechanism hinges on changing forms and character of financial diversity and depth of financial markets. In this context, the author contends that with an increasing role of the capital market, investors have greater options to diversify their financing away from banks through the issue of bonds and equities. Accordingly, such changes in the financial system impact on the effectiveness of monetary policy by increasing or decreasing lags from changes in the Central Bank policy rate to the cost of funds to business and households, as well as relative returns of different asset classes

for savers and investors. For instance, greater reliance on alternative sources of financing by business and corporations may delay speed and magnitude of transmission of policy rates to the actual cost of financing. This is especially important if alternative sources of financing have significantly different funding structures not directly influenced by Central Bank's policy rate.

Financial innovation creates new products and systems of financial services delivery that monetary authorities cannot ignore in their conduct of monetary policy yet it is not clear how best to incorporate some of these developments. This has the danger of impairing monetary policy effectiveness. It is therefore important that effects of financial innovation are well understood and considered in the formulation of monetary policy.

2.4 Summary

In the analysis of the interest structure, it is important to note that interest rates are composed of various components including the credit/default risk premium, the interest risk premium, inflation risk premium, implicit and explicit taxes, liquidity risk premium and the interest costs. The macroeconomic environment, the monetary policy operations and the banks operations define these components; they are important in understanding the link between the various interest rates.

As central banks bear an increasing share of responsibility for short-term macroeconomic management, effects on the monetary transmission mechanism and on conduct of monetary policy are particularly important. The transmission mechanism is strongly influenced by the state of domestic financial development, and financial structure may also constrain the ways in which monetary policy is conducted (AERC: 2003).

The monetary authority can make use of a wide array of policy instruments, but the influence of these instruments on aggregate demand and real sectors is likely to be extremely complex and to be influenced by a variety of factors that can be expected to vary across time and place. While in a liberalized bank-only environment, monetary policy instruments consist of reserve requirements and central bank lending to commercial banks, transmission is through the credit channel (the cost or availability of bank credit) and the asset channel (the market price of durable goods, which exerts wealth effects on aggregate demand). The relative importance of the availability versus the cost of credits, as well as the strength of the asset channel, is likely to vary with financial development.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was used in this study and provided a general framework for this research. It further dealt with the methods the researcher used in carrying out the study. It was organized along the following sub sections: research design, target population and sample, research instruments, data collection procedure's, data analysis and ethical issues that were considered in the study.

3.2 Research Design

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research (Robson, 2002). According to Cooper and Schinder (2003), there are many definitions of research design but no one definition impacts the full range of important aspects.

The research design adopted in this study was descriptive research design. A descriptive research design is the one which describes the state of affairs as they exist at present. It included survey and fact finding enquiries. The researcher used this research design to find out the respondents attitude and opinion about interest rates.

In addition the researcher carried out a correlation study. A correlation study determines whether and to what degree a relationship exists between two or more quantifiable variables; this means to study whether an increase or decrease in one variable corresponds to an increase or decrease in the other variable. The study was to determine whether or not CBR and market interest rates of commercial banks in Kenya are correlated. Further, the researcher sought to determine which variable mainly determined the market interest rate of commercial banks.

3.3 Target Population and Sample

Target population in statistics is the specific population about which information is desired. According to Kothari (2004), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. This definition ensures that

population of interest is homogeneous. And by population the researcher means complete census of the sampling frames. The population of study consisted of all the 43 commercial banks that were fully registered with Central Bank of Kenya by December 2011.

3.4 Data Collection

Both primary and secondary data were collected for the study. Primary data was collected through the use of a structured questionnaire. Secondary data was derived from various sources like the annual financial statement of companies listed in the Regional Cross-Border East Africa Stock Exchange in Kenya; data from the CBK was also used. The data was collected for five years: from years 2008 to 2012.

3.5 Data Analysis Procedure

Data analysis was done using SPSS to generate quantitative reports which were presented in the form of tabulations, percentages, mean and standard deviation. The results of the survey were presented using tables, charts and graphs. The study further correlated the variables using the Pearson correlation moment product while the regression equation took the following form:

$$Y = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \beta_5 \chi_5 + \beta_6 \chi_6 + \epsilon$$

Where: Y = Market Interest rate

X_1 = Central Bank rate

X_2 = Level of Bank concentration

X3 = Market power and competition

X4 = Effect of foreign ownership

X5 = Effects of state ownership

X6 = Inflation rates

β_0 = the constant

β_{1-5} = the regression coefficient or change included in Y by each χ

ϵ = error term

3.5.1 Operational Definition of Variables

The operationalization of variables is as shown in table 3.1

Table 3.1: Operationalization of Variables

Objective	Variable	Indicators	Scale	Tools of analysis	Type of analysis
To investigate the impact of Central Bank of Kenya rates on market interest rates of commercial banks in Kenya	Market Interest rate	-Central Bank rate -Level of Bank concentration -Market power and competition -Effect of foreign ownership -Effects of state ownership -Inflation rates	Nominal Ordinal	Frequency distribution tables & percentages	Descriptive

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents analysis and findings of the study based on data collected from the field. The analysis was focused on answering the research questions. The results were presented on the impact of Central Bank of Kenya rates on market interest rates of commercial banks in Kenya. The data was gathered exclusively from questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study.

4.2 Data Presentation

4.2.1 Response Rate

The study targeted to sample 43 commercial banks in collecting data with regard to the impact of Central Bank of Kenya rates on market interest rates of Commercial Banks in Kenya. From the study, 32 out of 43 sampled respondents filled in and returned the questionnaire contributing to 74%. This commendable response rate was made a reality after the researcher made personal visits to remind the respondent to fill-in and return the questionnaires.

Table 4:1: Response Rate

Response	Frequency	Percentage
Responded	32	74
Not responded	11	26
Total	43	100

Source: Survey Data, 2012

4.2.2 Average Interest Rates on Loans for the Last Five Years

The study sought to know banks average interest rates on loans in the last five years according to the findings; the highest interest rates in 2008 was 18.2% and the lowest was 14.0%, in 2009 the highest interest rate was 18.3% while the lowest was 14.0%, in 2010 the highest interest rate was

17.0% while the lowest was 14.0%, in 2011 the highest interest rate was 24.0% while the lowest was 16.6% and in 2012 the highest interest rate was 28% while the lowest was 18.0%.

4.2.3 Effect of CBK Rates on Market Interest Rates

Table 4.2: CBK Rates affecting Market Interest Rates

Attributes	Mean	Std Dev.
Level of bank concentration	2.6393	1.43797
Market power and competition	3.7705	1.60177
Effect of foreign ownership	2.7541	1.51279
Effect of state ownership	2.5902	1.41865
Inflation rates	2.3607	1.27845
CBK lending rates	2.7049	1.28250
Total	**16.8197**	**8.53213**
Average	**2.8033**	**1.422022**

Source: Survey Data, 2012

The respondents were requested to indicate the extent to which various aspects of technological changes affect the growth of enterprises. Majority of the respondents indicated that inflation rates affect the market interest rates of commercial banks as shown by a mean score of 2.3607, effect of state of ownership affect the market interest rates of commercial banks as shown by a mean score of 2.5902, level of bank concentration affect the market interest rates of commercial banks as shown by a mean score of 2.6393, effect of foreign ownership affect the market interest rates of commercial as shown by a mean score of 2.7541, CBK lending rates affect the market interest rates of commercial banks as shown by a mean score of 2.7049, while market power and competition affect the market interest rates of Commercial Banks as shown by a mean score of 3.7705.

4.2.4 Market Structure Influence on Market Interest Rates

Table 4.3: Market Structure Influence on Market Interest Rates

Statements	Mean	Std dev
Inefficient and uncompetitive financial intermediation processes contributed to high cost of financing	2.0820	1.58425
Banks with high market concentration have less pressure to reduce intermediation costs	2.4262	1.64782
Powerful banks are able to restrict the level of competition by keeping interest rate spreads artificially low.	2.0656	1.50409
Financial liberalization reforms has led to increased interest rates	2.2131	1.29248
High interest rate spreads persist if financial sector reforms do not alter the structure within which banks operates	2.3279	1.35057
Total	**11.1148**	**7.37921**
Average	**2.2230**	**1.47584**

Source: Survey Data, 2012

The study further sought to establish the extent of agreement with statements related to market structure. From the study, respondents were in agreement that powerful banks are able to restrict the level of competition by keeping interest rate spreads artificially low as shown by a mean score of 2.0656, inefficient and uncompetitive financial intermediation processes contributed to high cost of financing as shown by a mean score of 2.0820, financial liberalization reforms has led to increased interest rates as shown by a mean score of 2.2131, high interest rate spreads persist if financial sector reforms do not alter the structure within which banks operates as shown by a mean score of 2.3279 and banks with high market concentration have less pressure to reduce intermediation costs as shown by a mean score of 2.4262.

4.2.5 Impact of Central Bank Rates on the Market Interest Rates of Commercial Banks

The study sought to investigate the how the Central Bank Interest rates affects the market interest rates of commercial banks. From the respondents it was found out that in relatively poor countries foreign ownership of banks is associated with higher interest spreads as foreign banks are frequently exempted from unfavorable domestic regulations and their application of superior

banking techniques would allow them to earn higher margins than domestic owned banks. The study also found out that high interest rate spreads in developing countries persists if financial sector reforms do not alter the structure within which banks operate.

4.2.6 Measures That the CBK Employs To Manage Interest Rates in the Liberalized Market

The study sought to find out some of the measures that the CBK is employing to manage interest rates in the liberalized market. From the findings it was indicated that there was improvement in the allocation of credits in the banks; the commercial banks developed a healthy money market and that the banks used indirect framework that allow the Central Bank to influence the general level of interest rates through open markets opinions.

4.2.7 Regression Analysis

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.706(a)	0.499	0.454	0.59519

a Predictors: (Constant), Central Bank rate, level of bank concentration, market power and competition, effect of foreign ownership, effects of state ownership, inflation rates.

Adjusted R^2 is called the coefficient of determination and tells us how Market Interest rate varied with Central Bank rate, level of bank concentration, market power and competition, effect of foreign ownership and inflation rates. From the table above, the value of adjusted R^2 is 0.454. This implies that, there was a variation of 45.4% of Market Interest rate with independent variables (Central Bank rate, level of bank concentration, market power and competition, effect of foreign ownership, effects of state ownership and inflation rates).

Table 4.5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.680	5	3.936	11.111	.000(a)
	Residual	23.734	67	0.354		
	Total	47.414	72			

a Predictors: (Constant), Central Bank rate, level of bank concentration, market power and competition, effect of foreign ownership, effects of state ownership, inflation rates

b Dependent Variable: Market Interest rate

The study used ANOVA to establish the significance of the regression model from which an f-significance value of $p<0.001$ was established. This shows that the regression model has a less than 0.001 likelihood (probability) of giving a wrong prediction.

Table 4.6: Coefficients Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.275	.364		0.755	0.453
	Central Bank rate	0.322	.206	.166	1.565	0.022
	level of bank concentration	0.147	.126	.110	1.163	0.039
	market power and competition	0.277	.134	.240	2.068	0.042
	Effect of foreign ownership	0.182	.161	.217	1.321	0.031
	Effects of state ownership	0.132	.112	.109	1.013	0.041
	Inflation rates	0.211	.128	.218	2.004	0.091

A Dependent Variable: Market Interest rate

The following regression analysis was obtained:

$$Y = 0.275 + 0.322X_1 + 0.147X_2 + 0.277X_3 + 0.182X_4 + 0.132X_5 + 0.211X_6$$

Whereby Y is: Market Interest rate, X_1 is Central Bank rate, X_2 is level of bank concentration, X_3 is market power and competition, X_4 is Effect of foreign ownership and X_5 is effects of state ownership and X_6 is Inflation rates. The model illustrates that when all variables are held at zero

(constant), the value of Market Interest rate would be 0.275. However, holding other factors constant, a unit increase in Central Bank rate would lead to a 0.322 increase in market interest rate, a unit increase in level of bank concentration would lead to a 0.147 increase in market interest rate, a unit increase in market power and competition would lead to a 0.277 increase in market interest rate, a unit increase in effect of foreign ownership would lead to a 0.182 increase in market interest rate, and a unit increase in inflation rates would lead to a 0.132 increase in market interest rate, a unit increase in inflation rates would lead to a 0.211 increase in market interest rate.

There was a positive significant relation between market interest rate level of bank concentration (p=0.039), market power and competition (p=0.042), effect of foreign ownership (p=0.031), effects of state ownership (p=0.041) and Inflation rates (p=0.091)

4.2.8 Correlation Analysis

The study sought to test the hypothesis using correlation analysis presented in the table below. This was tested using Pearson Product Moment Correlation Coefficients.

Table 4.7: Pearson Correlation

		Market Interest rate	Central Bank rate	Level of Bank concentration	Market power and competition	Effect of foreign ownership	Effects of state ownership
ntral Bank ate	Pearson Correlation	0.231**	1				
	Sig. (2-tailed)	0.000					
vel of nk ncentration	Pearson Correlation	0.016	0.186	1			
	Sig. (2-tailed)	0.032	0.002	.			
larket wer and mpetition	Pearson Correlation	0.022	0.032	0.635	1		
	Sig. (2-tailed)	0.027	0.027	0.000	.		
ffect of reign wnership	Pearson Correlation	0.065	0.047	0.539	0.070	1	

	Sig. (2-tailed)	0.076	0.432	0.000	0.000		
ffects of ate wnership	Pearson Correlation	0.017	0.032	0.021	0.033	0.012	1
	Sig. (2-tailed)	0.011	0.019	0.021	0.000	0.000	
nflation tes	Pearson Correlation	0.045	0.031	0.527	0.054	0.046	0.031
	Sig. (2-tailed)	0.031	0.421	0.012	0.011	0.000	0.000

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

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

On Central Bank rate, a correlation coefficient of 0.231 was established depicting a low but significant relationship ($p<0.001$) while on Level of Bank concentration the relationship with market interest rate there was high significant of 0.016, Market power and competition the significance level was high as shown by 0.022 on Effect of foreign ownership the significance was also high significant with 0.065, effects of state ownership had a high significance with 0.017 as well as Effect of foreign ownership the significance was also high significant with 0.045.

4.3 Summary and Interpretation of Findings

The study found that inflation rates affect the market interest rates of commercial banks to a great extent, effect of state of ownership affect the market interest rates of commercial banks to a moderate extent, level of bank concentration affect the market interest rates of commercial banks to a moderate extent, effect of foreign ownership affect the market interest rates of commercial banks to a moderate extent, CBK lending rates affect the market interest rates of commercial banks to a moderate extent, while market power and competition affect the market interest rates of commercial banks to a low extent. From the findings Effect of CBK rates on market interest rates of commercial banks in Kenya are to a moderate extent as shown by a mean score of 2.8033.

The study found that powerful banks are able to restrict the level of competition by keeping interest rate spreads artificially to a great extent, inefficient and uncompetitive financial intermediation processes contributed to high cost of financing to a great extent, financial

liberalization reforms have led to increased interest rates to a great extent, high interest rate spreads will persist if financial sector reforms do not alter the structure within which banks operates to a great extent and banks with high market concentration have less pressure to reduce intermediation was to a great extent. Market Structure Influence on Market Interest Rates of Commercial Banks in Kenya was strong and to a great extent as shown by a mean score of 2.6131.

On investigating how the Central Bank Interest rates the study found that CBK rate affects the market interest rates of commercial banks. From the respondents it was found out that in relatively poor countries foreign ownership of banks is associated with higher interest spreads as foreign banks are frequently exempted from unfavorable domestic regulations and their application of superior banking techniques would allow them to earn higher margins than domestic owned banks. The study also found out that high interest rate spreads in developing countries persists if financial sector reforms do not alter the structure within which banks operate.

The study found that some of the measures that the CBK is employing to manage interest rates in the liberalized market. From the findings it was indicated that there was improvement in the allocation of credits in the banks; the commercial banks developed a healthy money market and that the banks used indirect framework that allow the Central Bank to influence the general level of interest rates through open markets opinions.

From the findings the effect of CBK rates on market interest rates of commercial banks in Kenya were to a moderate extent indicating that the rate are not constant. This was found to be similar with Demirguc-Kunt and Huizinga (1999) study on that System-wide measures of market structure highlight those attributes that define the industry and which cause interest rates to change over time. These factors include the level of bank concentration, market power and competition, as well as the effect of foreign ownership and state ownership.

From the study findings market structure influence on market interest rates of Commercial Banks in Kenya was strong and to a great extent this was in line with Martin (2010) study who noted that inefficient and uncompetitive financial intermediation processes partially contributed to Belize's high cost of financing. Similarly, Mendoza (1997) identifies the low level of

competition in the Belizean banking system as a primary reason for interest rate spreads being higher than in Barbados, a Caribbean country with a similar exchange rate regime and higher reserve requirements. Mendoza identified that Barbados" financial system was of a larger size and had a variety of non-bank financial institutions which facilitated lower spreads when compared to Belize.

On the Central Bank interest rates the study found that CBR on the market interest rates of commercial banks was relatively poor countries foreign ownership of banks is associated with higher interest spreads as foreign banks are frequently exempted from unfavorable domestic regulations and their application of superior banking techniques would allow them to earn higher margins than domestic owned banks.

In the regression findings the study found that there was a positive significant relation between market interest rate level of bank concentration, market power and competition, effect of foreign ownership, effects of state ownership and inflation rates this was in line with Martinez and Mody (2004) who also established a positive correlation between bank concentration and interest rate spreads; as industries with a high market concentration had less pressure to reduce intermediation costs. The findings of the Pearson correlation moment product findings and those of Martinez and Mody (2004) were also similar; on Central Bank rate there was a low but significant relationship while on Level of Bank concentration the relationship with market interest rate there was high significant, Market power and competition the significance level was high on effect of foreign ownership the significance was also high, effects of state ownership had a high significance as well as the effect of foreign ownership the significance was also high significant.

CHAPTER FIVE

SUMMARY OF FINDINGS CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The background information about impact of CBR rates on market interest rates of commercial banks is given in the beginning of this report. It also outlines statement of the problem the research objective and concludes in showing the relevance of the study.

The Literature Review provides a critical analysis of the rates on market interest rates of commercial banks as presented in current literature. It also includes the Classical monetary theory, Keynesian monetary theory and monetary policy theory which were used in establishing the theoretical framework of the study. Literature review also discusses current rates on market interest rates literature that was used to establish the framework for analyzing the market interest rates of commercial banks where the study objective is discussed at length.

The study Methodology, describes the research design of the study, target population and sample that were used, data collection and data analysis procedure used. The chapter also discusses the model in use which is a regression model and a test of the strength of the relationship using Pearson's moment coefficient.

The Results and Analysis; documents the results of rates on market interest rates of commercial banks as were captured by the researcher and shows the case on the ground. It also highlights any gaps and/or overlap in that process as compared to the theoretical model. It also reports the newly developed proposed and the analysis of them as they compare to those done by other researchers on the area of interest rates in banks. Finally, the Recommendations and Conclusions, provides the conclusions gleaned from this research and recommendations to the rates on market interest rates of commercial banks.

5.2 Conclusion

The study aim was to investigate the impact of Central Bank of Kenya rates on market interest rates of commercial banks in Kenya, the study concludes that Central Bank rate had a low but significant relationship, while on Level of Bank concentration the relationship with market interest rate there was high significant. Market power and competition the significance level was high on effect of foreign ownership the significance was also high significant as well as effect of foreign ownership the significance was also high significant.

The study concludes that when all variables are held at zero (constant), the value of Market Interest rate would be 0.275. However, holding other factors constant, a unit increase in Central Bank rate would lead to an increase in market interest rate, a unit increase in level of bank concentration would lead to an increase in market interest rate, a unit increase in market power and competition would lead to an increase in market interest rate, a unit increase in effect of foreign ownership would lead to a an increase in market interest rate and a unit increase in inflation rates would lead to an increase in market interest rate.

The monetary authority can make use of a wide array of policy instruments, but the influence of these instruments on aggregate demand and real sectors is likely to be extremely complex and to be influenced by a variety of factors that can be expected to vary across time and place. While in a liberalized bank-only environment, monetary policy instruments consist of reserve requirements and Central Bank lending to Commercial Banks, transmission is through the credit channel and the asset channel. The recommendation here is that the Central Bank needs to use the reserve requirements only sometimes to check the impact it has on the state of the economy without restricting on interest rates as interest rates are a resultant of the state of the economy.

The study therefore concludes that there was a positive significant relation between market interest rate and market power and competition, effect of foreign ownership and inflation rates which means that there are other factors which need to be considered when setting the CBR besides inflation target as the Commercial banks interest rates depend on a wider array of factors.

5.3 Policy Recommendations

Commercial Banks in Kenya should work on a dynamic path of expected inflation. This is a policy recommendation whereby the monetary authorities try to influence the expected rate of inflation by changing monetary policy style such as announcing an inflation target. In this argument, any measures to raise the inflation rate can be utilized as long as they influence market expectations. Hence, this argument is usually combined with the previous four arguments. Needless to say, the time horizon for influencing expectations is of consequence. In Kenya, there is an argument supporting reflationary policy which holds that only inflation can resolve the accumulation of government debt stemming from successive stimulus packages and heightening corporate debt.

The monetary authority has to make investigation and pursue policies that enable Commercial Banks to utilize their over-liquid assets and need credit from Central Bank, In effect the discount window faculty will be activated.

Central Bank of Kenya has to continue to pursue policies of reducing budget deficits monetization to control inflation rate where there is market interest rates implication of inflation. Also, the econometric outcome of estimating such a function be rationalized not only from the point of economic analysis, but we also have to consider it in the view of institutional strength. So policies that improve financial infrastructure should be drawn. For instance deepening the financial sector liberalization to enhance competition in the banking sector, and financial sector allow transparency and public confidence in the financial system, strengthening supervision of the financial institutions, widening the geographic coverage monetization, and maintain the autonomy of the bank.

The policy rule under Monetarism which is recommended for Central Bank is that if economic slumps begin then people spontaneously decide to increase their money holdings, then the monetary authority must monitor the economy and pump money in when it finds a slump is imminent. If such slumps are always created by a fall in the quantity of money, then the monetary authority need not monitor the economy; it need only make sure that the quantity of money doesn't slump. In other words, a straightforward rule to keep the money supply steady is

good enough, so that there is no need for a discretionary policy of the form; pump money in when your economic advisers think a recession is imminent.

5.4 Limitations of the Study

The research was limited to Commercial Banks in Kenya. Other financial institutions were not surveyed. Other lending financial institutions were not considered in this study and hence the findings in the survey are only in relation to operations of Commercial banks in Kenya.

There was reluctance of some respondents to complete the questionnaires promptly and others even failed to complete them at all. This thus limited the number of respondents involved in the study although the researcher geared up efforts and approaches to them explaining the potential benefits of the study.

There was limited literature and data on rates on market interest rates of Commercial Banks in Kenya. Hence the study relied much on literature and data relating to rates on market interest rates of Commercial Banks in other parts of the world especially the Western Countries. This factor thus limits the depth of discussions in the area of contributions rates on market interest rates of Commercial Banks in Kenya.

The study was dependent on the accuracy of the response given by the financial managers of the Commercial Banks in Kenya and not other managers or staffs.

5.5 Suggestions for Further Studies

The study has explored the impact of Central Bank of Kenya rates on market interest rates of Commercial Banks in Kenya. The banking industry in Kenya however is comprised of various other banks located in other areas in Kenya which differ in their way of management and have different settings all together. This warrants the need for another study which would ensure generalization of the study findings for all the banks in Kenya and hence pave way for new policies.

The study recommends another study be done with an aim to investigate the factors influencing market interest rates of Commercial Banks in Kenya sectionalized by the bank tiers categories.

From the study and related conclusions, the researcher recommends further research in the area of the influence of stakeholders' involvement on market interest rates of Commercial Banks.

Further studies should be done on the factors influencing performance in other sectors in relation to market interest rates of Commercial Banks. The study researcher also recommends that a study in the same area can be done on the various categories of banks.

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APPENDICES

Appendix I: Questionnaire

Instructions: Kindly answer the questions by ticking or writing in the spaces provided.

Section A: Background Information

1. What has been your market average interest rate on loans for the last 5 years?

Year	2008	2009	2010	2011	2012
Highest Interest Rate					

Year	2008	2009	2010	2011	2012
Lowest Interest Rate					

2. What would you attribute to the fluctuation of interest rates in the last 5 years? .....

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Section B: Effect of CBK rates on Market Interest Rates of Commercial Banks

3. To what extent do the following attributes define the banking industry and influence the fluctuation of interest rates in Kenya.

Use a scale of 1-5 where: 1- To a very great extent, 2- Great Extent, 3- Moderate extent, 4- Small extent, 5- No extent.

Attributes	1	2	3	4	5
Level of bank concentration					
Market power and competition					
Effect of foreign ownership					
Effect of state ownership					
Inflation rates					
CBK lending Base					

Others (Specify).....

4. To what extent do you agree with the following statements on the market structure influence on market interest rates of commercial banks in Kenya?

Use a scale of 1-5 where 1 is strongly agree, 2 is Agree, 3 is Neutral, 4 is Disagree, 5 is strongly Disagree.

	1	2	3	4	5
Inefficient and uncompetitive financial intermediation processes contributed to high cost of financing					
Banks with high market concentration have less pressure to reduce intermediation costs					
Powerful banks are able to restrict the level of competition by keeping interest rate spreads artificially low.					
Financial liberalization reforms has led to increased interest rates					

High interest rate spreads persist if financial sector reforms do not alter the structure within which banks operate					

5. How do Central Bank interest rates impact on the market interest rates of commercial banks? Explain.....

.....

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6. What measures is CBK employing to manage interest rates in this liberalized market.....

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Thank You