

Effect of Liberalized Financial Policy on Commercial Banks Performance in Kenya

Wangari Makena¹, Philip Ngare², Kizito Mulindwa¹ and Mary Wairia¹

¹The Catholic University of Eastern Africa

² University of Nairobi

Corresponding Author: Philip Ngare

Abstract

The objective of this study is to examine the effect of liberalized financial policy on commercial banks performance in Kenya. This study moves away from popular scholarly discussion focused on the impact financial controls have on commercial banks performance and focus on how banks perform in a liberalized economy. Ordinary least-squares regression was used to study the impact of financial growth, average customer deposit, level of intermediation and financial liberalization on bank performance. A model for predictability of financial performance was developed. Regression analysis is undertaken to empirically investigate the determinants of financial policies by employing annual data for the commercial banks for the period 2008 to 2015. The research model developed illustrates the relationship between financial growth, average customer deposit, level of intermediation and financial liberalization and governmental financial policy. The study provided a model in which governmental agencies and other financial institutions can utilize to aid them develop sound financial policy that will be beneficial to both commercial banks and customers as well. This paper provides critical insight to the proper development of sustainable financial policies designed for financial institutions in Kenya that will have a positive impact on economic growth and on investor's wealth. From the study, it is evident that financial liberalization affects commercial banks performance. Commercial banks profitability is impacted negatively in an era of financial regulation.

Keywords: financial growth, financial liberalization, average customer deposit, financial regulation and financial performance

INTRODUCTION

Kaminsky & Schmukler (2003) defined financial liberalisation as the deregulation of the foreign sector capital account, the domestic financial sector and the stock market sector account viewed separately from the domestic financial sector. The liberalisation of the capital account is captured by the regulations on off shore borrowing by financial institutions and by non-financial corporations, on multiple exchange rate market and on capital outflow controls. In a fully liberalised capital account regime, banks and corporation are allowed to borrow abroad freely.

A fully liberalised domestic financial system is characterised by lack of controls on lending and borrowing interest rates and certainly by lack of credit controls. Also, deposits in foreign currencies are permitted in fully liberalised stock market, foreign investors are allowed to hold domestic equity without restrictions and capital dividends and interests can be repatriated freely within two years of the initial investments.

Mc Kinnon and Shaw (1973) define financial liberalisation to mean the establishment of higher interest rates will lead to increased savings and financial intermediation as well as to improvements in the efficiency of using savings. Higher real interest rates increase the extent of financial intermediation raises the rate of economic growth in developing countries. Evidence is provided on the effects of interest rates on investment efficiency and on economic growth. However, excessively high interest rates will have unfavourable economic effects. Such a situation can be avoided if the liberalisation of the banking system takes place under appropriate conditions. The policies that caused financial repression includes interest rates ceilings, liquidity ratio requirements, capital controls, restrictions on market entry, into the financial sector, credit ceiling or restrictions on directions of credit allocations and government ownership or domination of banks. Flexible interest rates promote genuine competition, with savers and borrowers getting the best returns. They allow more diversity in interest rate structures where restrictions are able to consider lending

proposals involving higher risk since they are able to charge higher rates reflecting risk component.

Financial Liberalization in Kenya

A country's financial policies play a great part in determining its economic development. This in turn has a tremendous effect on its financial system. The Government of Kenya has over the years put various regulations and controls on financial institutions. The financial policies are wide spread from capping of bank interest rates, capital base, foreign exchange rates and taxation among others. The purpose of financial policies is to ensure sound financial practices are being carried out that protect the interests of various stakeholders and enhance good corporate governance.

Banking regulation originates from microeconomic concerns over the ability of bank creditors (depositors) to monitor the risks originating on the lending side and from micro and macroeconomic concerns over the stability of the banking system in the case of a bank crisis (Biggar & Heimler, 2005).

Policy should be used to rectify a specific market failure and without truly understanding the market failures, our policies might just be a case of shooting from the hip. (Suri & Bhattacharya, 2016). The Kenyan financial sector is characterized by anti-trust activities and lack of transparency. This situation is further compounded by limited customer information.

As part of its financial-sector reform, Kenya liberalized interest rates between January 1988 and July 1991. Subsequently, market interest rates skyrocketed, while inflation rose even further (World Bank, 1992). Inflation levels reached a peak in 1992-93, forcing the government to intervene and place controls through restrictive monetary policy. Rising domestic interest rates may lead to large capital inflows that in turn cause inflation if not sterilized. High real interest rates also reduce borrower net worth, which has a negative impact on investment and financial intermediation, leading to rising non-performing assets and bank failures (Isaksson, 2001). The banking sector in Kenya like many other developing countries following the policy of low interest rates, adjusting for the inflation maintain positive real rates World Bank (1992). The main aim of this policy was to keep the cost of funds low, with a belief that cheap credit promoted development through increased investment. The use of interest rates to manage monetary conditions of mobilize and allocate financial resources in an efficient manner was neglected. Interest rates have remained under the administration of the government through a regime of fixing minimum savings for all deposit takings

institutions and maximum lending rates for commercial banks and building societies.

A study carried out by IMF (1998) on financial liberalisation and financial fragility on the fifty-three countries (53) for the period (1980- 1995) using bank level data established that Financial liberalisation is positively correlated to banking crises. Financial liberalisation has been attributed by IMF as a significant factor leading to banking sector fragility as a result of removal of interest rates ceilings and an increase in moral hazard problem. The study also argues that banking crises affect financial development negatively. Were & Tiriongo (1992) in the study on the experiences with financial sector reforms and trade liberalisation in Kenya using documentary analysis and analytical narratives to understand why the reform was undertaken, what kind of reform was appropriate and how well the reform performed established that the government was reluctant in implementing the reforms and some of the measures the government implemented as reforms were not appropriate for that particular situations. Thus, the financial liberalisation in Kenya may not have achieved the intended purpose of sparking growth and thus increasing commercial banks financial performance.

A study by Boaz and Donatilla (2013) to examine the profit efficiency of commercial banks in Kenya after the financial sector reforms were undertaken in the early 1990s by utilising the stochastic frontier approach to estimate the annual profit efficiency scores for seventeen (17) commercial banks for the period 1995-2004 found out that there was an average of 65.6% profit efficiency over the study period. However, the mean profit efficiency declined from 67.9% in 1995 to 62.9% in 2000, there after it consistently increased to 68% in 2003. The study concluded that financial liberalisation improved profit efficiency of the banks in the long run and non-performing loans negatively affect banks profit efficiency.

Odhiambo (2009) in his study of the impact of interest rate reforms on financial development in South Africa using co-integration and error-correlation models, found strong positive correlation models between interest rate reforms and financial development. The study also established that financial development, which results from interest rate reforms, was not a casual factor of investment and economic growth. Thus financial liberalisation is a causal factor of financial development since the study found no direct causal relationship from investment to growth. In other words financial liberalisation is positively correlated to financial performance of commercial banks.

In August of 2016, the government of Kenya signed into law, an amendment to the 2015 Banking Bill which capped lending interest rates. The law caps the maximum lending interest rate at 4% above the base rate set by the Central Bank of Kenya (World Bank, 2016). The effects of the rate regulation remains to be seen and could vary from the intended affordable loans to the low income households and small businesses, to reduced profitability for the banking sector and increased charges on commercial bank products (World Bank, 2016). Inadequate financial policies on financial institutions have gross impact on sustainable financial growth in the banking industries and economic growth. Poor articulation of the bill has caused confusion on the implementation of the bill.

The main purpose of this study is to investigate the effect of financial liberalization have on commercial banks performance. A model for determining commercial banks financial profitability given a liberalized economy is proposed. An investigation on the effect governmental financial policies have on customer deposits and loan uptake from Kenyan Commercial banks is also made.

Statement of the Problem

Inadequate financial policies on financial institutions have gross impact on sustainable financial growth in the banking industries and economic growth. In the previous months, the Kenyan banking sector has undergone a radicalization as the government capped bank interest's rates. Poor articulation of the bill has caused confusion on the implementation of the bill. This has also affected other supplementary bank services such as mobile banking, seeing some banks stop lending money through mobile phones. This financial controls have also seen many banks opting to reduce the number staff to ensure sustainable profits.

Sound financial policies are important for sustainable growth in the financial sector thus contributing to economic growth. Financial policies are likely put in place in countries characterized by lower incomes, large governments and Central Banks that have little independence. Considerably, the financial policies have significant impact on the shareholders: commercial industry, micro finance institutions, investors and customers and the economic growth of the country. However, the banking sector has been subject to various informal controls that are based on governmental discretion with little objective financial backing.

LITERATURE REVIEW

Financial Development

An efficient and vibrant Commercial Banking and financial system is foremost indicator to an Economy to perform in a Country. Hence, Commercial Banking operations primarily depend on their ability to attract savings from various deposit products and convert them into lending capacity (Khawja 2002). The difference between the rates at which banks lend money to borrowers and the rate they pay to depositors is generally known as Interest Rate Spread (IRS), which usually indicate as the commercial tiers retail interest rate.

An early work on price rigidities in the Banking Industry could be found in Hanan and Berger (1999). They focused on the setting of the interest rate by Banks and addressed the issue of asymmetry between upward and down word price changes using a multinomial log it estimation procedure. IRS is also defined as the difference between average interest rate earned on interest earning assets (loans) and average interest rate paid on deposits (Jayaraman and Sharma 2003)

Lower interest rate of return discourage savings but encourage borrowing. At this point new borrowers entering the market are likely to be of lesser quantity and are more likely to default on between good and bad borrowers, they may refuse to make loans or they may at least restrict the quantity of loans made their loans. Banks may react to the combined effect of lower real returns on their loans and the influx of riskier borrowers by rationing credit (CBSL Annual Report, 2010)

Statutory Reserve Ratio (SSR) is the proportion of the deposit liabilities that that Commercial Banks are required to keep as cash deposits with Central Bank, also has been widely used to influence money supply in the past. However the reliance on SSR as a day today monetary management measure has been gradually reduced with a view of enhancing market orientation of monetary policy and also reducing the implicit cost of funds which the SSR would entail on commercial banks (W. M. Hemachandra-CBSL, 2010)

A growing body of evidence suggests that financial institutions, such as banks and insurance companies and financial markets like stock markets, bonds markets and derivatives market exert a powerful influence on Economic Development, poverty alleviation and identify economic stability, Levin (2005)

When financial institutions create complex financial instruments, and sell them to unsophisticated Investors, this might boost the bonuses of the financial engineers

and executives associated with marketing the new – fangled instruments while simultaneously distorting the allocation of resources of society’s savings and impeding Economic Prosperity, Barth, Caprio and Levine (2006, 2012).

There has been considerable debate among economists on the role of Financial Development in Economic Growth and poverty reduction, but the balance of theoretical reasoning and empirical evidence suggests that finance has a central role in Social- Economic Development, Levine (1997, 2005).

Economies with higher levels of financial development grow faster and experience faster reduction in poverty levels. Economists have long debated the role of financial sector in economic growth. Lucas (1988), for example, dismissed finance as an over-stresses determinant of economic growth. Robinson (1952) equipped that where “enterprise leads,” finance follows. From this perspective finance responds to demands from the non- financial sector; it does not cause economic growth.

At the other extreme, Miller (1988) argued that that the idea that financial markets contribute to economic growth “is a proposition too obvious for serious discussion.” Bagehot (1873) and others rejected the idea that the finance- growth nexus can be safely ignored without substantially limiting the understanding of economic growth.

Recent literature review, such as Levine (2005) and Demirguc- Kunt and Levine (2008) concluded that the preponderance of evidence suggests a positive, first – order relationship between Financial Development and Economic Growth. In other words, well-functioning financial systems play an independent role in promoting long–run economic growth: economies with better – developed financial systems tend to grow faster over a long period of time, and a large body of evidence suggests that this effect is casual.

In summary studies researching the relationship between factors such as cost of fund, economic condition and market condition affect the average prime lending rate of Commercial Banks. However, they do not clearly indicate which dimension under each category of factors is most significant in determining the average prime lending rate.

Financial Liberalization

Financial Controls have been the subject of intense reform pressure. Beginning in the 1990s many governments liberalized capital markets towards liberal

market economies (Culpepper, 2010) in some cases reform was radical and far reaching while in others reform steps were less radical and incremental.

The theory of economic growth is concerned with the steady- state rates of growth. If economic liberalization shifts the economy onto a higher but parallel growth path, actual growth rate exceed the steady-rate while the change occurs. Given that policy reforms are typically phased in over several years and that their effects can take decades to occur, it is difficult to tell such transitional rates from changes in steady-state rates empirically (Brock and Durlauf, 2001).

Strictly it is hard to measure the impact of Economic liberalization and its changes in an economic system by policy because of its complex, however, outcome measures are often used instead (Pritchett and Harrison 1996)

According to Romer (1994) the principal impact of trade restrictions is to reduce the supply of intermediate goods to an economy. Recognizing that this can have infra-marginal effects on productivity, he argues that overlooking this effects leads to a several – fold under-estimates of the production penalty of protection. Romer’s effect will show up in the data as a positive relationship between liberalization and productivity or growth.

The desirability of a sophisticated and liberalized financial system is not questioned among most economists. Financial markets contribute to an efficient allocation of capital and foster efficiency and economic growth. Nonetheless, very different policy recommendations for developing countries and post-social economies have emerged with respect to the sequence of financial market reforms. The appropriate exchange rate regime during a liberalization program remain controversial. The existing pros and cons of alternative exchange rate regimes can also be classified according to more technocratic arguments, political economy arguments and credibility aspects (Schmieding, 1991)

Repressed financial markets in developing countries are typically the consequences of high budget deficits. Financial market liberalization is only sustainable when the fiscal deficit is under control or the necessary the necessary measure to regain fiscal control. Financial market liberalization requires the abolition of interest ceilings on deposits and loans as well as a reduction in non- interest bearing reserve requirements that reduce the spread between deposits and lending rates (McKinnon and Mathieson, 1981).

From the political economy point of view, policy makers are inherently interventionist and seem to favor gradualism with some believe of low risk strategy, because short run adjustment process seem to be under control. However, this strategy is not sustainable, because the administrative capacity to successfully handle a gradual process is often lacking, continued over-regulations induces private invading activities that result, for example, in increased black market activities, currency substitution and spontaneous privatization among others (Schmieding, (1992)

Financial Regulation

A growing body of evidence suggests that financial institutions, such as banks and insurance companies and financial markets like stock markets, bonds markets and derivatives market exert a powerful influence on Economic Development, poverty alleviation and identify economic stability, Levin (2005). Stock markets and banks are clearly substitute sources for corporate finance since when a firm issues new equity its borrowing needs from the banking system decline (Demetriades & Luintel , 1996). However, the role banks play in an economy cannot be underestimated, as they are conduits for money that helps a country's populations grow business through borrowing. Changes in interest rates affect a bank's underlying economic value. This arises from long term interest rate gaps. A change in rates affects the value of a bank's assets, liabilities, and interest-rate-related off balance sheet contracts because the present value of future cash flows is changed (Triantis, 1999).

Recent literature review, such as Levine (2005) and Demircug- Kunt and Levine (2008) concluded that the preponderance of evidence suggests a positive, first – order relationship between Financial Development and Economic Growth. In other words, well-functioning financial systems play an independent role in promoting long–run economic growth: economies with better – developed financial systems tend to grow faster over a long period of time, and a large body of evidence suggests that this effect is casual.

Regulation's purpose to manage the risks of noncompliance as well as the risks that a public at large assumes due to financial systemic risks, cannot and ought not choke financial institutional risks since without them there are no exchanges and therefore no liquidity. In this sense, while regulation is needed, there are also regulation risks that manifests itself when the regulation is both "overarching" and "complete" (Tapiero, 2014).

Kenya's economic growth since independence has come under scrutiny of both domestic and international economists. In order to sustain economic growth, an economy needs to be rebalanced on a continued basis. Economic imbalances such as high levels of investment and saving and low levels of consumption, external imbalances, high and increasing levels of inequality, and increasing environmental problems need to be addressed for sustained economic growth (Johansson, Financial Repression and China's Economic Imbalance, 2012). Without regulation, financial intermediaries lacking ethical consciousness can result to profit maximization through consumer exploitation, this regulation however has to be imbedded comprehensive economic reforms to address economic imbalances.

The McKinnon–Shaw school of thought proposes that governmental intervention on a country's financial system hinders economic growth particularly to developing economies. The McKinnon–Shaw repression paradigm proposes that growth can only be achieved through abolishing interest rate ceilings, abandoning directed credit programs, eliminating reserve tax requirements and ensuring financial systems operate competitively in a free market. McKinnon/Shaw School views any form of control as reducing the volume of deposits and loans (Demetriades & Luintel , 1996). This indicates that financial repression should be abandoned in preference to free market forces.

CONCEPTUAL FRAMEWORK

The conceptual framework is developed from the review of literature discussed above and presented in the following diagram (figure 1). It shows the relationship between the dependent (ROE) and explanatory (bank specific) variables.

Bank Performance Indicator

Profit is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective (Ongore & Kusa, 2013). Murthy and Sree (2003) proposed Return on Equity as an important measures of commercial banks profitability.

❖ Return on Equity

ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment (Ongore & Kusa, 2013). Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital.

Determinants of Bank Performance

❖ **Average Customer Deposits**

Average customer deposits are expressed as a percentage of financial sector GDP.

❖ **Financial Growth**

This are often referred to as net assets are labeled equity or net worth. Romer (1986) stated that a range of economic policies can have a vast effect on a countries growth rate over a prolonged period.

❖ **Levels of Intermediation**

This is the dealt with in regards to the loans given out as a percentage of the financial sector GDP. Great

significance on the role financial intermediation played a countries economic development (King & Levine, 1993).

❖ **Financial Liberalization**

This paper evaluated financial liberalization as Commercial bank assets as a percentage of financial sector GDP. Andries and Capraru (2013) higher level of liberalization and openness are able to increase cost efficiency and eventually to offer cheaper services to clients. This results in increase productivity for a country.

CONCEPTUAL FRAMEWORK

Independent Variable

Dependent Variable

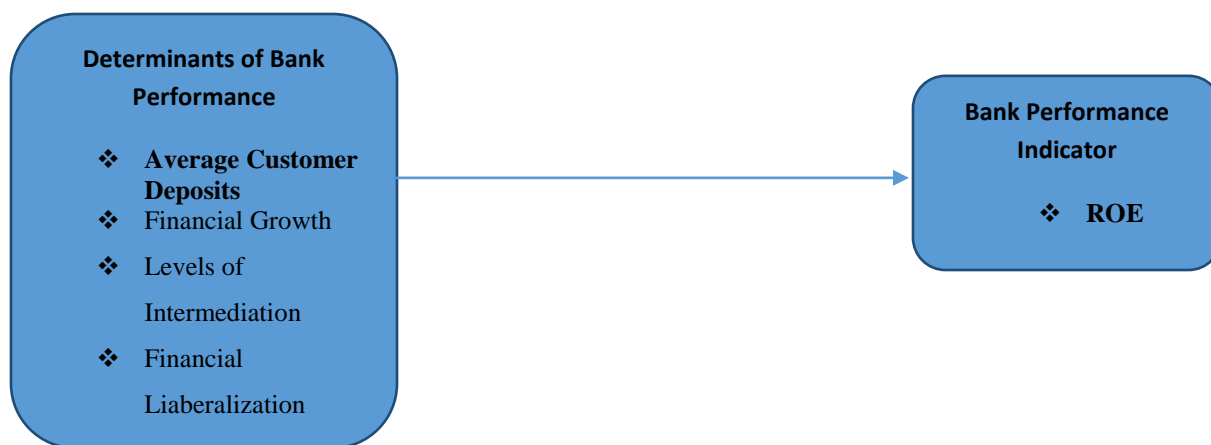


Figure 1: Diagram showing the relationship between variables

RESEARCH METHODOLOGY

This explanatory study is based on secondary data obtained from published statements of accounts of selected commercial banks in Kenya, CBK, and Kenya Bureau of Statistics publications for 8 years from 2008 to 2015.

Both descriptive and regression analyses are undertaken. The former is used to show trends and comparative analysis of interest rate spreads and other variables of interest. Ordinary Least Squares analysis is undertaken to empirically investigate the determinants of financial regulation on commercial banks financial performance using annual data for the period 2008 to 2015.

On limitation of the study is that moving averages were used to extrapolate figures that were missing from certain years of the selected banks financials statements. This may have affected the models predictability. The studies time frame, from 2008 to 2015, may not be sufficient to produce a comprehensive analysis of the impact financial

regulations have on commercial banks performance, whose impact may be experienced well after the study period.

Ordinary least-squares (OLS) regression is a generalized linear modelling technique that may be used to model a single response variable which has been recorded on at least an interval scale. At a very basic level, the relationship between a continuous response variable (Y) and a continuous explanatory variable (X) may be represented using a line of best-fit, where Y is predicted, at least to some extent, by X. (Hutcheson, 2011)The research model developed illustrates the relationship between the independent variables and the dependent variable (Financial Performance). ANOVA is then used to test the appropriateness of the model towards determining financial profitability. T- statistic were used to determine the relative importance (sensitivity) of each explanatory variable in affecting the performance of banks.

The study employed a purely quantitative approach in which secondary data was collected using longitudinal data analysis collected from the statements of the selected banks from 2013 to 2016. The study reviewed relevant documentations such as the banks' internal policy guidelines, lending channels, performance charters, agency agreements, strategic plans, press articles, performance appraisals, audited reports which contained information concerning lending rates, profitability and liquidity. The Central Bank of Kenya lists banks into three Tiers, Tier 1, Tier 2 and Tier 3. Tier 1 comprise of the old banks, accumulating assets worth hundreds of billions of cash and millions of customers, therefore, their possibility of falling into a financial crisis would be near impossible. There are six banks in this category; Equity Bank, Barclays Bank, Kenya Commercial Bank, co-operative, Standard Chartered bank and Commercial Bank of Africa. Tier 2 lenders are medium-sized banks. The banks in this category include Diamond Trust Bank, CFC Stanbic, NIC, Chase Bank, I&M, Bank of Africa, Eco bank, Family Bank and Housing Finance. The third tier is made up of 21 small banks that

control 8.4% of the Kenyan market. Purposive Sampling was used to select one bank in each Tier. The banks selected for from each Tier include Equity Bank (Tier1), NIC Bank (Tier 2) and lastly Consolidated Bank (Tier 3).

The major dependent performance indicators used were Return on Equity (ROE), while the determinants for Average Customer Deposits, Financial Growth, Levels of Intermediation and Financial Liberalization.

$$y = a + bx_1 + bx_2 + bx_3 + bx_4 + e$$

- Where,
- Y= Return on Equity
- x_1 = Average customer deposits
- x_2 = Financial growth
- x_3 =Level of intermediation
- x_4 = Financial Liberalization
- a =constant
- b = coefficient of related variable
- e =other unspecified factors not specified by model

Operationalization of the Study Variables

Variable	Measurement
ROE	Net profit after tax/ total capital
Customer Deposits	Average customer deposits for a year as a percentage of financial industry GDP
Financial Growth	Net assets
Levels of Intermediation	Loans as a percentage of financial sector GDP
Financial Liberalization	Commercial bank assets as a percentage of financial sector GDP

FINDINGS AND DISCUSSION

Descriptive Statistics

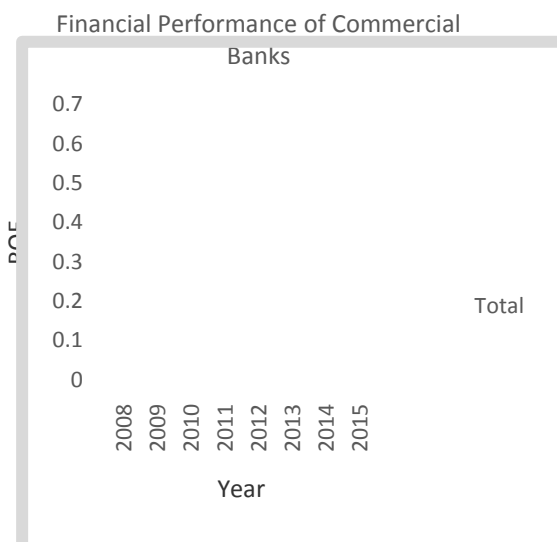


Figure 2: Trend of financial performance of Kenyan Commercial Banks

Trends in the financial performance of banks has shown erratic behavior. There was a sharp increase from 2008 to 2009 followed by a gradual decline. T Performance declined in 2009 may be because of the effect of global economic crisis and its effect on the domestic one. Again performance declined slightly in 2010 after the recovery. Nevertheless, on average the performance of commercial banks in the country has been declining gradually. Reaching an all-time low of 0.2 in 2015.

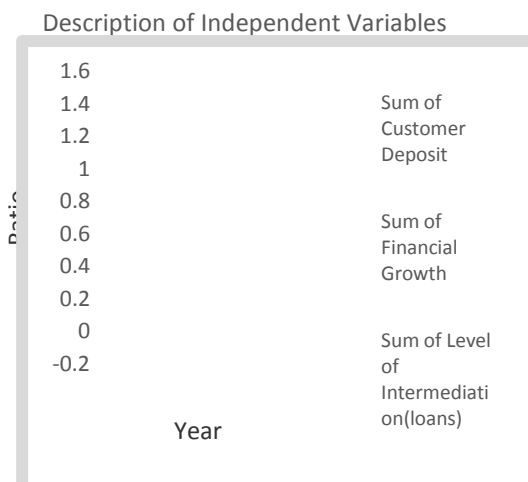


Figure 3: Description of Independent Variables per Year

In reference to Figure 2 the Customer Deposit there was an increase in the year 2008 and 2012, however in the year 2009-2011 and 2013 there was a decrease in the deposit. There was an increased trend for the level of intermediation (loans) in the progressive years. On the financial liberalization there was an increase in the year 2008, and a decrease in the year 2009. 2010 to 2012

showed an increase in, whereas the year 2013 showed a decrease and subsequently progressive increase.

Table 1: Mean

	Mean
ROE	.318
Customer Deposit	.2663
Financial Growth	.2275
Level of Intermediation(loans)	.8075
Financial Liberalization	1.3850

Financial Liberalization has the highest mean of 1.3850 whereas the ROE has the least mean of 0.318. Customer deposit and financial growth are closer to each other in terms of the mean.

Analysis of Financial Performance of Commercial Banks

This section presents the trend of the financial performance of commercial banks in Kenya from 2001 to 2015. Moving average of order 3 was utilized in order to obtain subsequent data for a period of 3 years.

Table 2: Correlations

		ROE	Customer Deposit	Financial Growth	Level of Intermediation(loans)	Financial Liberalization
Pearson Correlation	ROE	1.000	.772	.485	-.290	.070
	Customer Deposit	.772	1.000	.215	-.279	-.097
	Financial Growth	.485	.215	1.000	.258	.736
	Level of Intermediation(loans)	-.290	-.279	.258	1.000	-.039
	Financial Liberalization	.070	-.097	.736	-.039	1.000
Sig. (1-tailed)	ROE	.	.012	.112	.243	.434
	Customer Deposit	.012	.	.304	.252	.410
	Financial Growth	.112	.304	.	.269	.019
	Level of Intermediation(loans)	.243	.252	.269	.	.464
	Financial Liberalization	.434	.410	.019	.464	.
N	ROE	8	8	8	8	8
	Customer Deposit	8	8	8	8	8
	Financial Growth	8	8	8	8	8
	Level of Intermediation(loans)	8	8	8	8	8
	Financial Liberalization	8	8	8	8	8

The following Table 2 shows the Pearson Correlation of the study which is with the various degree of association of the commercial banks' financial performance for 8 years as expressed by ROE, Average Customer Deposit, financial Growth, Level of Intermediation and Financial

Liberalization. Financial Liberalization is exposed to more risks. Commercial Assets are highly exposed to risk as compared to customer deposit are less exposed to risk and level of intermediation is very low.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.929 ^a	.862	.679	.0840	.862	4.702	4	3	.117

a. Predictors: (Constant), Financial Liberalization , Level of Intermediation(loans), Customer Deposit , Financial Growth

The Adjusted R Square obtained of .679 mean that the Independent Variables (IVs) in the model can predict 67.9% of the Variance in the Dependent Variable (DV). The research used moving average of order 3 to

extrapolate data in order to widen the scope for the four IVs therefore it could have affected the model predictability.

Table 4: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	.861	.698		1.234	.305	-1.360	3.082		
Customer Deposit	.214	.175	.353	1.225	.308	-.343	.771	.553	1.809
Financial Growth	6.396	2.795	1.025	2.289	.106	-2.498	15.290	.229	4.376
Level of Intermediation(loans)	-.672	.400	-.481	-1.680	.192	-1.945	.601	.558	1.792
Financial Liberalization	-1.093	.677	-.669	-1.613	.205	-3.248	1.063	.267	3.747

a. Dependent Variable: ROE

Table 4 gives the regression coefficients and their significance. The Regression coefficients can be used to construct an Ordinary Least Square (OLS) equation and test the hypotheses on each of the IVs. Using the regression coefficients for IVs and the constant term given under column B, we can construct the OLS equation for predicting commercial bank performance as:

$$\text{Performance} = 0.861 + 0.214x + 6.396x - 0.672x - 1.093x + e$$

The research chose an α value of 0.05. We can state that the P value for Customer deposit = 0.308 to $\alpha=0.05$ and reject if the P value is $\leq \alpha$. We therefore reject the null hypothesis customer deposits don't significantly impact on the commercial bank performance in favor of the alternative hypothesis that customer deposit does affect commercial bank performance.

The research chose an α value of 0.05. We can state that the P value for Financial Growth = 0.106 to $\alpha=0.05$ and reject if the P value is $\leq \alpha$. We accept the null hypothesis that financial growth does not have significant impact on commercial bank performance and reject the alternative hypothesis that financial growth does significantly impact on the bank performance.

The research chose an α value of 0.05. We can state that the P value for Level of Intermediation = 0.192 to $\alpha=0.05$ and reject if the P value is $\leq \alpha$. We reject the null hypothesis that level of intermediation (loans) don't

have significant impact on commercial bank performance and accept the alternative hypothesis that level of intermediation(loans) do significantly impact on the bank performance.

The research chose an α value of 0.05. We can state that the P value for Financial Liberalization = 0.205 to $\alpha=0.05$ and reject if the P value is $\leq \alpha$. We reject null hypothesis that financial liberalization doesn't have significant impact on commercial bank performance and accept the alternative hypothesis that that financial liberalization does significantly impact on the bank performance.

Furthermore, VIF above 10 shows the existence of multicollinearity (Guajarati, 2007.) According to Guajarati (2007), as a rule of thumb, if the VIF of a variable exceeds 10, which will happen if R^2 exceeds 0.90, that variable is said to be highly collinear. As can be seen from the following Table 3 that presented the VIF of the variables, none of them is above 10. This shows that there is no multicollinearity of the variables.

CONCLUSION AND RECOMMENDATION

The overall objective of this study was to examine the effects effect of liberalized financial policy on commercial banks performance in Kenya. To achieve these objectives fiveyears' annual data and moving average for three years for 3 commercial banks was analyzed using linear multiple regression model. To be able to see the effects over years and across banks annual data was used. In this study the effect of determinants on the financial performance of banks as

expressed by Average Customer Deposit, Financial Growth, Level of Intermediation (loans) and Financial Liberalization. From the research, it is evident that financial liberalization affects commercial banks performance. Commercial banks profitability is impacted negatively in an era of financial regulation. Since financial regulation affects banks performance, the paper recommends that commercial banks look into other areas of profitability. Operational re-structuring and managerial efficiency should be adopted to avoid unnecessary operations that can impact an organizations profits. Financial regulations have often been formulated through an arbitrary process. This study recommends further research in order to get the optimal interest rate caps as well as other financial control ceilings and floors, given different case scenarios that would be beneficial to the customers as well as financial institutions.

REFERENCES

Biggar, D., & Heimler, A. (2005). *An Increasing Role For Competition In The Regulation Of Banks*. Australia: International Competition Network Antitrust Enforcement In Regulated Sectors Subgroup 1.

Boaz B. Donatilla J. M (2013) *Profit Efficiency of Commercial Banks in Kenya after the financial sector reform were under taken in 1990s*. KIPPRA discussion paper No. 12- Kenya Institute of Public Policy Research.

Brock, W. A. and Durlauf, S. N. (2001). 'Growth empirics and reality.' *The World Bank Economic Review*, vol. 15, no. 2, pp. 229-272.

Central Bank (2011) Central bank of Sri lank annual report 2011, retrieved February 20 2012.

Demetriades, P. O., & Luintel, K. B. (1996). Financial Development, Economic Growth And Banking Sector Controls: Evidence From India. *The Economic Journal*, 359-374 .

Demirguc-Kunt, A., Lavine, L., & Levine, R., 2003. The Impact of Bank Regulations, Concentration and Institutions on Bank Margins. *Mimeo*, 34-56.

Hemachandra, W.M., (2005), "Financial Deepening and its Implications for the Sri Lanka Economy", Central Bank of Sri Lanka

Hutcheson, G. D. (2011). Ordinary Least-Squares Regression. *The SAGE Dictionary of Quantitative Management Research*, Pages 224-228.

IMF (1998) interest rate liberalization, financial deepening and economic growth in Africa. Occasional paper No. 190 international monetary fund, Washington D.C.

Isaksson, A. (2001). *Financial Liberalisation and Price Stability in Kenya*. Sweden: Elsevier Science Inc.

Hannan, T., and A. Berger, (1991). The rigidity of prices: Evidence from the banking industry, *American Economic Review*, Vol. 81, No. 4, pp. 938-945.

Harrison, A. (1996). 'Openness and growth: a time-series, cross-country analysis for developing countries.' *Journal of Development Economics*, vol. 48, no. 2 (March 1996), pp. 419-47

Jayaraman T & Sharma R (2003). *Determinants of Interest Rate spread in the Pacific Island Countries Some Evidence Fiji*. USPEC. Working Paper, 1(1), 75-104.

Johansson, A. C. (2012). Financial Repression and China's Economic Imbalance. In H. McKay, L. Song, *Rebalancing and Sustaining Growth in China* (pp. 45-64). Australia: ANUE Press.

Kaminsky, L, and Schmukler (2003). Short Run Pain, Long Run Gain, Brookings Institution.

Kawja (2002). The relationship between interest rate and cost of funds India: person publication

King, R. G., & Levine, R. (1993). Finance and Growth: Schumpeter Might be Right. *The Quarterly Journal of Economics*, 717-737.

Khrawish, H.A. (2011) Determinants of Commercial Banks Performance: Evidence from Jordan. *International Research Journal of Finance and Economics*. Zarqa University, (5), 19-45.

Lucas Jr., R. E., (1988). On the Mechanics of Economic Development. *Journal of Monetary Economics* 22, 3-42.

Murthy, Y., Sree, R. (2003) *A Study on Financial Ratios of major Commercial Banks*. Research Studies, College of Banking & Financial Studies, Sultanate of Oman

McKinnon, R. I., and Mathieson, D. (1981), "How to Manage a Repressed Economy", *Essays in International Finance* (Princeton University).

- McKinnon, R. and Shaw E. (1973) *The order of Economic Liberalisation, Financial Control in The transition to a market economy.* Baltimore, Johns Hopkins university press.
- New York World Economic Forum. (2011). *The mobile financial services development report 2011.*
- Odhiambo, N. (2009). Interest Rate Reforms, Financial Deepening and Economic Growth in Kenya: An Empirical Investigation.' *Journal of Developing Areas*, vol. 43 no.1 pp 295-313
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, pp.237-252.
- Pritchett, L. (1996). 'Measuring outward orientation in developing countries: can it be done?' *Journal of Development Economics*, vol. 49 (2), pp. 307-335.
- Romer, P. (1994). 'New goods, old theory and the welfare cost of trade restrictions.' *Journal of Development Economics*, vol. 43, no. 1, pp. 5-38.
- Romer P., (1994) Increasing returns and Long Term Growth. *Journal of Political Economy*. Pp 1002-37.
- Schmieding, Holger, *Lending Stability to Europe's Emerging Market Economies: On the Importance of the EC and the ECU for East-Central Europe.* The Kiel Institute of World Economics, Working Papers, No. 481, Kiel, July 1991.
- Suri, T., & Bhattacharya, K. (2016, September 4). Dilemma of capping bank interest rates in Kenya. *Business Daily*.
- Tapiero, C. S. (2014). Financial Regulation, non - compliance risk and controls: A Statistical Approach. *Risk and Decision Analysis*, 113-127.
- Triantis, A.J., (1999), *Real Options and Corporate Risk Management in Corporate Risk; Strategies and Management*, edited by Gregory W. Brown and Donald Chew. Great Britain, Risk Books.
- Were, M. & Tiriongo, S. (2012). Central Bank's Response to Economic Crises from a Developing African Economy Perspective: Lessons from Kenya's Experience. Unpublished manuscript, Central Bank of Kenya, Nairobi.
- World Bank. (1992). *Project Completion Report, Kenya: Financial Sector Adjustment Project.* Washington: The World Bank Group.
- World Bank. (2016). *Kenya: Overview.* Washington: World Bank Group. Retrieved October 12, 2016, from <http://www.worldbank.org>