# THE EFFECT OF NON-PERFORMING LOANS THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

**BY:**

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## DECLARATION

I declare that this is my original work and has not been presented in any university for the award of masters.

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This project has been submitted for examination with my approval as the University Supervisor.

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# DEDICATION

To my husband Samuel Kamau, thank you for being a great source of support

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# LIST OF ABBREVIATIONS

| | |
|---|---|
| **CAMEL** | Capital & Reserves, Asset Quality, Management Earnings and Liquidity |
| **CBK** | Central Bank of Kenya |
| **CBR** | Central Bank Rate |
| **CRB** | Credit Reference Bureaus |
| **GDP** | Gross Domestic Product |
| **IMF** | International Monetary Fund |
| **KBRR** | Kenya Banks Reference rates |
| **NPLS** | Non-performing Loans |
| **ROA** | Return on assets |
| **ROE** | Return on equity |
| **SPSS** | statistical package for social science |
| **TARP** | Troubled Asset Relief Program |
| **TBTF** | Too big to fail |
| **USA** | United States of America |

# ABSTRACT

This study was carried out with objective of finding out whether the commercial banks in Kenya have had their profitability impacted significantly by non-performing loans. The findings were that although banks are impacted by non-performing loans (which form part of their expenses), the impact were not adverse enough to affect the growth of the return on assets negatively. What this simply meant was that in Kenya, as banks continued to increase their non-performing loans, it resulted in increase in the loan book. Simply put, it seemed that non-performing loans was an inevitable price to pay for increase in the loan book and the returns thereof. Commercial banks in Kenya should focus more on reducing the level of non-performing loans in their portfolio so as to reverse the current status quo where as non-performing loans seem to be moving in the same direction as the loan book.

The increase in the loan book for most banks and consequently the growth in profitability was attributed to the considerable economic growth noted in the African economy which has strengthened the development of many sectors in the economy mainly as a result of increased investor confidence on the future of the African market.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the study

In the past ten years, the banking sector has continued to grow and thrive and its prospect in the future show signs of continued expansion and prosperity especially in developing countries. In Kenya Banks continue to dominate the financial sector, consequently it is inevitable for Kenyans to rely on commercial banks for the intermediation process (Kamau, 2009). The Banking sector is a crucial part and plays the role of channeling finances to be used for growth in the economy through taking finances from those who have a surplus and getting it to those who require it (Mwengei, 2013). In addition, banks are more important in developing countries since the financial markets have much room for development.

A key ingredient to the successful exploitation of economic opportunities is availability of credit. Credit is indeed the lubricant of the engine of economic growth. Ongoing infrastructure investments currently being undertaken by the Government as well as other planned projects, both public and private, are expected to sustain growth in the demand for credit in the years to come ( banking supervision report, 2014). Kenya’s long term economic blueprint, Vision 2030, has therefore prominently outlined the aspiration for the financial services sector as being to promote a savings culture that will then provide the pool of funds that will meet the investment need for our country. Apart from being an intermediary, there is the outcome of bringing economic growth to countries. Shareholders are rewarded for their investment and encouraged to invest even more leading to more economic growth. (Ongore & Kusa 2013).

The regulator, Central Bank of Kenya (CBK) has put in place measures to ensure adequate provisions are made for loans that are not performing. In early 2014, CBK introduced a policy requiring banks to categorise as non-performing all loans of a borrower found to have defaulted on any single loan among their other loans. Loan defaults have been a hindrance to the growth of the banking sector because banks are required set apart amounts equal to loans that have not been paid for above six months referred to as doubtful loans. An increase in provisions forces the bank to male provisions that would cushion against possible loan defaults, which makes it have less ability to grow business.

The International Monetary Fund (IMF) asserts that even though banks in Kenya make profits and have adequate capital, failure to provision for non-performing loans contravenes the CBK prudential guidelines. Inadequate provisioning for such loan overstates the profits of banks and also exposes them to lack of financial stability which could lead to collapse in the event where they have many loanees defaulting in their loan repayments. True to their words, in the recent past we have had Banks in Kenya being declared to be under receivership. In 2015 there was Dubai Bank and Imperial Bank followed by Chase Bank in 2016. Chase Bank experienced a steep decline in the profits from 2.3 billion in 2014 to a loss of 1.4 Billion in 2015. National Bank's losses were also alarming with a 1.2 billion loss in 2015 compared to a profit of 1.3 billion in the previous year. Their loan impairment increased by 3.2 billion in 2015. In a nutshell, this could be a crisis that threatens to bring down the banking sector, a catastrophe that would have an effect on the Kenyan economy.

### 1.1.1 Non Performing Loans

Non-performing Loans (NPLs) are defined as principle, including interest that is 90 days or more overdue as per the International Monetary Fund (IMF) (IMF, 2006 p.46). Fofack, (2005) concurs with this definition saying that non-performing loans are those outstanding loans which for quite a duration of time do not generate income, this means that the principle including interest on these loans have been unpaid for about three months.

In Kenya banking problems have been experienced for decades dating back to 1980's and resulting in numerous bank failures (Kithinji and Waweru, 2007) this was as a consequence of insufficient capital adequacy, sky rocketing non-performing loans and weak in corporate governance oversight function. Many local failures of Kenyan banks, such as Trade Bank, Pan African Bank, and Continental Bank among others that failed in the 1990s involved extensive insider lending which was the case for the failure of Chase Bank.

Michael et al (2006) argued that NPLs in a loan book affect operations and would affect liquidity, profitability and going concern position of commercial banks. An NPL is said to be defaulted or nearly defaulted at the time a loan account is not being serviced, the possibility that the loan will be paid are considered to be much lower. If the loanee begins to make payments on such a loan it springs back to performing category even if they have not caught on all repayments. Effects of high interest regime in 2014/2015 and subdued economic activities witnessed in the period ended December 2015 had a negative impact on loans and advances quality which resulted in a non-performing loans (NPLs) increase. The ratio of total Non-performing loans to total loans increased from a percentage of 5.2 in December 2013 to a percentage of 5.6 per cent in December 2014, and rose to a percentage of 5.7 as at June 2015. Such a marginal increase in non-performing loans was mainly

attributable to adverse effects in Tourism, Agriculture, Building and Construction, Real Estate, Mining and Quarrying sectors arising from factors such as the threat of insecurity, delayed onset of long rains, uncertainties in the reforms in the mining sector and delay in payments to contractors. (Banking Sector Performance report Q2, 2015)

According to Central Bank of Kenya prudential guideline 2006 advances are classified into five categories. The first and most preferred is normal where they have advanced people finances and no weaknesses have been witnessed nor has any rescheduling been done. The second best is watch which consists of accounts which are normally categorised in the normal band above but have warranted management intermediation because of weaknesses identified.

The middle ground is sub-standard, which comprises facilities which although still operating involve some level of risk hence bringing the possibility of some foreseeable losses in the event that management supervision if not provided to save stabilize the repayments. For instance three months instalments in arrears. The second last category is doubtful debts, these are loans which exhibit serious weaknesses. Recovery period of the total loan amount outstanding may need to be added failure of which a loss is expected to be incurred. An example is an overdraft whose turnover has dried up. Lastly, there is the loss category these are loans with arrears outstanding that are deemed uncollectable and where in the event that the security is not worth much or has been sold, whose proceeds are not adequate to cover the total loan outstanding. Non- performing loans include substandard, doubtful and loss categories.

### 1.1.2 Performance of Commercial Banks

Economic resources availability is greatly affected by the role Commercial banks play in financial allocation. They distribute funds from savers to investors, which is a continuous cycle. This is

made possible when the banks make enough revenues to cover their day to day operational costs. Simply put, banks have to make profit to continue with their intermediation function. (Ongore & Kusa 2013).

Aburime (2008) observed that profit is a must for any bank that wants to be competitive by being a provider of cheap financing to the public. In the competitive environment they exist in, there is necessity to make profits. They not only aim to make profit but to maximize it in order to grow the business. Although this is their main aim, there are additional economic and social aspirations. In this study, the major focus is financial performance of commercial banks, the first objective.

The importance of stability of commercial banks in developing economies cannot be ignored because it impacts achievement of development goals (Rajaraman and Vasishtha, 2002). As is the case with others in the industry, the measure of success is the asset quality they have as well as their profitability. Although banks have to distribute their lending to other sectors and sometimes as a social objective, keeping the quality of their assets high and being profitable is necessary for longevity and growth. (Mwengei, 2013).

Commercial Bank's profitability improved as evidenced by total assets worth 3.6 trillion Kenya shillings, total loan assets valued at 2.17 trillion, against total deposits of 2.57 trillion and before tax profit valued at 76.91 billion Kenya shillings in the end of June 2015. The profitability of the sector recorded an increase by a percentage of 5.3 from prior year registered profits of KS. 37.61 billion registered in end of June 2014 and rose to 39.61 billion Kenya shillings for the month ended June 2015. There was improved performance with the total statement of financial position growing by 6.8% from 3.37 trillion in March 2015 to Ksh. 3.60 trillion in June 2015. The sector's total loans grew from Ksh. 2.04 trillion at end of March 2015 up to Ksh. 2.17 trillion at end of June

2015, which can be translated to a growth of 6.4%. The increase in loan assets was evidenced in all economic sectors except Financial Services and Quarry and Mining sector which reduced by 2.3% and 1.6% respectively. (Banking Sector Performance Report Q1 2015)

### 1.1.3 Commercial Banks in Kenya

By the end of 30th September 2015, the sector of banking consisted of the Central Bank of Kenya (CBK), the regulator of banks, 43 banks comprising of one mortgage finance and the others as commercial banks. 29 of the banks are owned locally, three are owned publicly while 27 have private ownership and the remaining 14 have their principle owners outside the country. Further, 10 of the 44 banking institutions are listed on the Nairobi Securities Exchange. (CBK Q3 Banking Sector performance report).

Key developments in the banking sector's relating to commercial banks in Kenya included the introduction of KBRR, enhancement of credit reference bureaus and granting power to CBK. The introduction of the KBRR; a transparent credit pricing framework was guided by the Banking circular number 4 of 2014 issued on 9$^{th}$ July 2014. Its primary purpose was enhance transparency of banks with regard to the interest rates and additional costs that they charge. This was facilitated by the KBRR framework that requires banks to plainly indicate for the loanees the base interest rate and any additional charges above the base KBRR rate. This premium, should be broken down to enable customers to understand its components. The importance is that the government through the CBK can make targeted policy interventions to lower the premium.

This base rate KBRR is calculated as an average of the treasury bill rate for two months, a moving average of the short term ninety-one days treasury bills plus and the Central Bank Rate. Treasury bills are considered to be risk free in that they will certainly be repaid by the government. The central bank rate on the other hand represents the monetary policy stance. The rate is reviewed and announced by the CBK through the monetary policy committee (MPC) press release after its meeting every six months from the effective date it is operationalized through banking circulars. At its inception on 8th July 2014, the central bank of Kenya had set the KBRR at 9.13 points. It was reviewed to 8.54 per cent on 14th January 2015 and later raised to 9.87 per cent on 7th July 2015, the same rate was retained in a meeting held on 20th January 2016 by the MPC.

For Credit Reference Bureaus (CRB's), when Credit Information Sharing (CIS) was launched in July 2010, the only products on offer were basic credit reports since institutions used to share negative information only. CRB regulations were enhanced in 2013 and implemented in February 2014 to permit all banks to have availability of financial information regarding their current and future customers. The main objective of full file reporting, that is sharing of both negative and positive information was to facilitate credit scoring mechanism, enhance information capital and introduction of other value added products such as decision models. Credit scoring was expected to enhance the usefulness of reports on credit information to lenders, in addition to improving their risk management. On the other hand it would help borrowers to know how risky their customers are and set the correct rate of pricing for loans (Bank Supervision report, 2014).

CBK was granted legal power to make regulations, a transfer made through the Finance Act, 2013. The regulator was given this powers as documented in the Banking Act when it was handed down from the National treasury Cabinet Secretary to the regulator of banking i.e. CBK in an effort to

improve the Central Bank's independence and more efficient operations as had been the aim as specified in 2010 Constitution of the Kenyan Republic. (Bank Supervision report, 2014).

### 1.1.4 The impact of non-performing Loans on performance of Commercial Banks

The USA experienced a series of failures of banks which was witnessed in the 1940s commonly known are the great depression and this awakened the attention of many on the performance of commercial banks. This attention has been growing since then (Heffernan, 2005) .Poor performance for commercial banks can result in their failure which can eventually become a crisis that will have a ripple effect on other sectors in the economy (Ongore & Kusa 2013). Lack of good asset quality and very low liquidity are the two main causes of failures experienced by banks. Exposure to certain risks determines how poor the asset quality will be. Such risk include, the trend non-performing have and how profitable the and creditworthy the loanees are (Baral, 2005).

Many Kenyan bank's failures were caused by weak asset qualities back in the 1980s. In that season, thirty-seven banks failed following the banking crisis. (Mwega, 2009). It is argued that many banks failed as a result of NPLs which were caused by substantial insider lending to politicians in most cases (Waweru and Kalani 2009). NPLs therefore threaten the future of banks and have to be closely monitored to in an effort to prevent failure of banks (Bexley and Nenninger, 2012).

In recent times, the lag effects of high interest regime in 2012/2013 and subdued economic activities witnessed in the period ended December 2014 impacted negatively on the quality of loans and advances. As a result NPLs grew by a percentage of 32.4 translated to a value of Ksh. 108.3 billion in the end of the year 2014 from a value of Ksh. 81.8 billion in December 2013.

## 1.2 Problem Statement

Banks in Kenya experience high levels of NPLs a trend that threatens their viability and sustainability and hinders achievement of their goals (Kagogo & Asienga 2009). Banks experience intense challenges in managing credit risk. (Mwengei, 2013) .Lack of proper management of credit risk is speculated to be a major cause for bank failures (Richard et al, 2008).

In the recent past we have had Banks in Kenya being declared to be under receivership. In 2015 there was Dubai Bank and Imperial Bank followed by Chase Bank in April 2016.The CBK governor Dr. Patrick Njoroge in a press release after the collapse of Chase bank expressed concern about the anxiety that hovered among Kenyans about how stable the finance sector was. Consequently, to halt the crisis, a liquidity support framework was introduced from 11th April 2016 whereby any banking institution which would experience liquidity pressures would be availed credit for as long as would be necessary to return its stability. Subsequently the former Directors of Chase Bank and National Bank were put to task in answering the questions of how their governance had led to the collapse of the former and the near ruin of the latter . They were grilled for questionable transactions which must have brought about such high level of non-performing loans.

Perro and Ruoff (2012), carried out a study on lending policies by commercial banks in Korea and found out that commercial banks in Korea had been substantially affected by poor lending policies, and that the subsequent profitability of financial institutions decline. Greta (2014), in a case study on banks that's were risk taking and that received funding from a programme called Troubled Asset Relief Program (TARP) observed a relationship where the risk of default would rise by 21 percent points after the helping hand they received in contrast to non-TARP banks. Ogweso

(2006), studied the relationship between interest rates and loan defaults and found a positive indication that when interest rates increased defaults increased. He concluded that commercial banks should put in place mechanisms to deal with loan defaults to minimize the adverse effects on bank performance. Muasya (2009), researched the impact of NPLs on the financial performance of Kenyan commercial Banks. In his study, the findings were that there was a negative impact of NPLs to both interest income and profitability though the effect was not adverse for 7 of the 13 banks analysed. Despite the negative impact, the asset quality of the banking sector had improved over 5 years till 2008 which was scope of his study.

With respect to the Kenyan Banking sector, little is known of how exactly NPLs can affect the financial results of the banks and the measures that can be taken up to reduce the effect. This study is motivated by the need to understand the extent to which the performance of banks is impacted by NPLs. This will enable banks to take corrective action in due time. When threats of NPLs can be predicted, anticipated and appropriate measures taken, this will ensure that Kenya remains top in the banking sector across the continent. The key question then becomes; do non-performing loans have a significant effect on the financial results of banks in Kenya?

## 1.3 Objective of this study

The object of this study is to determine the effects of NPLs on the financial results of Kenyan commercial banks.

## 1.4 Value of this study

This study will reinforce to bank managers the need to monitor and control non-performing loans, it will also uncover the causes of NPLs and effective ways of managing NPLs and resulting

defaults in an effort to reduce them. The study will unveil main banks controllable causes such as lack of aggressive debt collection policy and ways to mitigate commercial banks against such risks so as to maximise their profitability. Banks can then revise and ensure their credit policies are effective, conform to the prudential guidelines and are strictly followed.

Investors will be enlightened on the factors they must weigh in measuring their returns from investment in the banking sector. This is especially when they consider the impact of NPLs in a bank's books, since it directly affects the quality of assets.

Universities can use the insights from the study to enrich their curriculum. For instance due to the massive impact that NPLs have in the banking sector, they can be able to introduce management of NPLs as a unit or a major topic for finance students. The study will also stir up interest in the need to continuously conduct research so as to explore more on the topic which has not been widely researched into.

Scholars will also find this study useful as it will provide top notch and up to date information on NPLs in commercial banks and how they arise as well as better approaches that should be adopted to manage them. It will also be of significance to fellow researchers who will rely on it for more knowledge. The findings of the study will help to identify areas of further research.

The government and the CBK will be provided with more insight that may inspire more policies that will enable them to better regulate the banking sector to ensure stability.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

In this chapter diverse streams of theories and literature in accounting, economics and finance that have touched the performance and non-performing loans both locally and internationally will be brought forth. It will take into account the legal requirements of the regulation of commercial banks by central bank of Kenya and look into the likely factors which cause NPLs and consequently affect the performance of commercial banks. Finally we will look into the researches done that have a relationship with the current research topic with an aim to identify the gaps that this study seeks to fill.

## 2.2 Theoretical Framework

The theories selected for review in this study were based on relevance and applicability. Asymmetrical information is relevant in that the banks can never all the information on a borrower at any point in time. Banks have attempted to reduce this gaps for instance with the introduction of credit referencing bureaus. Agency theory explains the motives behind the actions of management which may not always be in the best interest of the shareholders. Lastly, pecking order theory explains why most corporates prefer debt to equity i.e. once they have exhausted their internal funding.

### 2.2.1 Asymmetrical information

Sharing of information can reduce adversity in selection credible applicants by creating a repository of information for banks to refer to (Pagano and Jappelli 1993). Auronen (2003) argued

that asymmetrical information theory propagates that difficulty can arise when it comes to choosing loanees who are credible and those who are not. This then brings the consequence of moral hazard and adverse selection. Auronen stated that borrowers have the upper hand in the loan application process and may not disclose all information needed for the bank to price the loan fairly. This would mean that the bank could be fortunate. (Gobbi 2003) argued that such decisions brought about loan loss provisions in banks.

Asymmetry of information exists where all information needed to make a decision is not disclosed to one of the people taking part in the transaction. What this simply means is that loanees may be tempted to default on repaying a loan i.e. assuming that they are aware of all the repercussions they would be subjected to and care about them. Banks are not in a position to fully assess the ability of borrower to repay the loan especially in the future which may be relatively unpredictable. As a precautionary measure banks hike their interest rates for all borrowers a decision that could breakdown the ability of people and institutions to borrow Alary and Goller (2001). Banks have almost curbed this problem through the introduction of credit reference bureaus which enable them to seek both positive and negative information about borrowers as well as a credit ratings. The main objective is sharing of both negative and positive information to facilitate credit scoring mechanism, enhance information capital and introduce other value adding products such as decision models. Credit scoring is expected to make reports to banks more in addition to improving their risk management. (Bank Supervision report, 2014).

Keeton and Morris (1987) discussed the theory of moral hazard, they argued lowly capitalised banks tend to be risk seekers which lead to increased risk of having inadequate securities for the loans they advance. Such risky lending can lead to increased loan provisioning in the future a

circumstance that was evident in such banks. Consequently their ratio of equity to assets would be very low. Similar arguments were made by Jimenez and Saurina (2005).

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### 2.2.2 Agency Theory

In this theory, the relationship between agents and principles is explained including the challenges that such a relationship presents. The aim of appointing an agent is to bring an intermediary between the owners for instance shareholders and the people employed by the owners. This theory tends to explain the challenges that come about when the desires of management and the shareholders are in conflict. In such a case, the two may differ in their approach of challenges and strategies that they take up in an aim to grow the business. For instance, management may become risk seeking and yet the shareholders prefer a risk averse strategy a situation that can breed conflicts. (Investopedia, 2016)

Paula (2007) argued that incentive compensation could be used to align the interests of management and owners and hence mitigating the tendency of management to incline towards being risk averse at the expense of the owners who may not get the full return expected. In her research paper on using two stage least square in the form of a regression and simultaneous equation model, she found that invested capital moved statistically and significantly in the opposite direction in relation to risk. On the other hand, rewarding was found to have a positive and statistically significant relationship with risk. She concluded that compensating management well had a more economic impact on risk than the level of capitalisation that a company had.

### 2.2.3 Pecking Order Theory

There are three main sources of finance i.e. equity, debt and retained earnings and companies have a preference when it comes to which form of financing they would go for first. They choose depending on how expensive financing is and the implications it would have on the one who makes the decisions in the company. It therefore means that retained earnings would come first, followed by debt and as a last resort equity financing. This theory propagates that companies follow this hierarchy. Once their internal resources are depleted they would rather borrow funds as the first preferred external source of funding. In the event that they would require more equity would then be issued although it comes with a greater consequence of having to surrender ownership (Myers and Majluf 1984). Most corporates prefer debt as a means of financing, hence the need for a stable financial sector which can meet these needs. For most entities, internal financing is not sufficient to meet the cash requirements hence as per the pecking order theory they resort to borrowing.

## 2.3 Determinants of performance of Commercial Bank

### 2.3.1 Interest rates

Expansion of private sector credit in Kenya is impeded by among other factors, the high cost of credit. Kenya's Financial Access (FinAcess) survey of 2013 established that only 29 per cent of Kenya's adult population had access to credit as compared to more than 64 per cent who had access to savings. The low level of access to credit in Kenya as evidenced by the low number of bank loan accounts at 4.4 million in December 2014 as compared to 28.4 million deposit accounts, demonstrates lack of economies of scale in the sector. The costs incurred by banks to mobilize deposits are spread over a smaller number of borrowers, which contributes to the higher cost of credit. The high cost of credit is an impediment towards a vibrant and globally competitive financial sector envisaged under Vision

2030. As a result in January 2014, a Committee on Private Sector Credit and Mortgage Finance, was constituted and headed by the Cabinet Secretary to the National Treasury. The main objective of this committee was to come up with ways of attracting private sector mortgage financing and also issuance of credit in Kenya.

A review of various studies and surveys on cost of credit in Kenya showed that the prevailing expensively priced loans was as a result of high cost of lending which was as a result of having some dominant banks in the industry which prevented effective competition and also increased operational costs e.g. salaries and infrastructure costs, and exorbitant costs involved in the creation, perfection and enforcement of collateral). There was also the case of not having a choice when it came to alternatives to bank loans which had the element of high profit margins imposed because of pressure from shareholders to increase return on investment. In this regard, the Committee came up with short, medium and long term recommendations to promote credit expansion. In the short term, the focus was to enhance transparency and efficiency in the banking sector. This led to the introduction of KBRR in July 2014. With the introduction of KBRR, banks are allowed to charge a premium K to cover risks associated with a particular loan. This has led to some banks taking advantage of this loophole to charge exorbitant rates to customers which eventually leads to default.

### 2.2.3 Asset Quality

The bank's asset is another variable that affects a bank's profitability. The assets on the statement of financial position are loans, current assets, non-current assets among others. (Athanasoglou et al., 2005). Most of the time the loan asset is the main source of income for the bank. It therefore follows that the better the quality of loans in the portfolio of a bank the more the chances that that bank will make better profits. The inverse is true whereby banks face a greater risk as a result of NPLs (Dang, 2011). NPLs are used as a measure of asset quality, the lower they are, the better the

asset quality of the bank and hence better chances of increasing the profitability. A ratio is computed to measure the asset quality by dividing the NPLs by the total loans in the bank. A lower ration indicates that the bank has a netter asset quality (Sangmi and Nazir, 2010).

### 2.2.4 Macro Economic Variables

Macroeconomic variables influence the capability of borrowers to pay loans. We have variables like interest rates, inflation, policy stability and balance of payments. An example is when there is growth in the economy through increased growth domestic product (GDP), borrowers have increased money in their hands and can therefore service their loans which improves the performance of commercial banks. (Athanasoglou et al., 2005). Loans are distributed to the economy in various sectors which include trade, personal, real estate, manufacturing, agriculture, tourism among others. When we look at tourism for example, the industry is highly competitive and once terrorism has struck it is both expensive and difficult to rebuild the reputation (Fletcher, 2008). During the times when there is increased instability in the coastal region, there were increased NPLs in the tourism sector since the expected revenue generating activities failed to bring the income used to pay the loans.

### 2.2.5 Lending policies

Central Bank of Kenya governor Patrick Njoroge while issuing a press statement on 6th April 2016 expressly stated that high levels of NPLs may have arisen as a result of lax policies in lending coupled with weak management decisions and conflicts of interest. He implored investors to question loan provisioning in future meetings with the management of commercial banks. A Central Bank's Prudential Guideline on Risk Classification of Assets and Provisioning is already in place. This guideline requires commercial banks to classify facilities extended to their customers based

on performance. The performance criteria is based on repayment capability of the borrower and the loans are classified by the benchmarks of loss, doubtful, substandard, watch and normal.

A good policy of lending credit can help increase monitoring of the quality of loans that a bank has, apply a globally acceptable standard for determining NLPs , classifying them and making provisions for them (Simonson et al 1986). They also argued that banks need a minimum standard of securitisation of loans, authorisation, risk assessment, pricing and maintenance of integrity and ethical behaviour when issuing loans. .

Poor risk management is the root cause of increased NPLs (Bindra, 1998). Banks are the cause of their own undoing because their staff do not keenly access the ability of the borrowers to repay the loans, they simply ignore basis principles of lending .Some of the misdeeds include increased lending to insiders, staff who are not well trained, lack of comprehensive follow-up on defaulters and lack of proper cash flow analysis for big projects. Bindra concluded that the lending function has to be has to be professionally managed to reduce loan losses Banks have to take time to appraise borrowers and their loan requests, perform continuous monitoring and follow up on defaulters at an early stage.

Anyanzwa (2004) argued that insider lending and fraudulent activities by directors of some Banks led to the problem of NPLs and final collapse of several commercial banks, collapse of Trade Bank served as a good example for his argument.

## 2.4 Empirical Review

We have made reference to three studies done internationally and five done in Kenya. The first example is a study done in In Taiwan by Hu, Li and Chu in 2004.The study was looked at how

bad loans are affected by ownership structure. They sound out that increased shareholding by the government resulted lobbying by politicians who could intervene if they saw anything was amiss. On the contrary, privately owned companies had loan defaults caused by corruption of the owners themselves. They found that the rate of defaulting decreased with increase in government ownership of bank. They also found that joint ownership of banks was the optimum arrangement that caused decrease in loan defaulting in Taiwan. Finally they argued that with increased size of banks, there was a lesser likelihood of the bank to be affected by increased NPLs...

Dellien and Schreiner (2005), did a research on credit scoring for commercial banks in Latin American countries and noted that the difficulty that commercial banks had in taking up credit scoring was that the business approach would not work. This was because it poor clients were intentionally excluded from taking up loans in such banks.

Perro and Ruoff (2012), carried out a study on lending policies by commercial banks in Korea and found out that commercial banks in Korea had been greatly affected by poor lending policies, and that the subsequent profitability of financial institutions decline. There is therefore more emphasis on the importance of improving existing lending policies as a precondition for successful financial liberalization. They indicated that lending framework needed the correlation of liquidity demand from depositors and borrowers would be low. The banks would then need to take measures to reduce deposit withdrawals and take measures to prevent sudden full repayments of loans.

Cheserek (2005), examined determinants of bank failures in Kenya using measures like capital adequacy, asset quality and earnings after tax are cited as major predictors of bank failure. Data from 21 commercial banks was obtained and analysed. Key ratios like capital adequacy, asset quality and return on assets did not have a consistent trend. The study also showed that bank failure

has no significant relationship with earnings after tax, total loans, total equity and return on assets. However, failure of banks was mostly affected by the quality of its assets and other variables like capital adequacy and total assets.

Ogweso (2006), looked at how loan defaults are affected by interest rates and found a positive indication that when interest rates increased defaults increased. He concluded that commercial banks should put in place mechanisms to deal with loan defaults to minimize the adverse effects on bank performance.

Muasya (2009), researched how performance of commercial banks in Kenya were impacted by NPLs. The study concluded that there was a negative impact of NPLs to both interest income and profitability though the effect was not adverse for 7 of the 13 banks analysed. Despite the negative impact, the asset quality of the banking sector had improved over 5 years till 2008 which was scope of his study.

Wanjira (2010) studied the relationship between loan default rates and the profitability of Kenyan Banks. She found that commercial banks needed to take up management efforts to manage NPLs. These practices include ensuring sufficient collaterals, limiting lending to various kinds of businesses, loan securitization, ensuring clear assessment framework of lending facilities and use of procedures in solving on problematic loans among others. The study further concluded that there was a positive correlation between profitability of Kenyan commercial banks and practises taken up top manage NPLs.

Kibera (2012), in a study of the efforts taken by National Bank after experiencing increased NPLs , noted that lack of adequate credit policy guidelines, poor credit risk management practices, use

of quantitative methods of loan assessment and poor monitoring and evaluation systems were sources of NPLs. He found that, their credit policy had not been revised and they had become lax in following the trend of loan repayments and these could have led to failure by the bank to notice the increasing default rate of the borrowers.

## 2.5 Conceptual framework

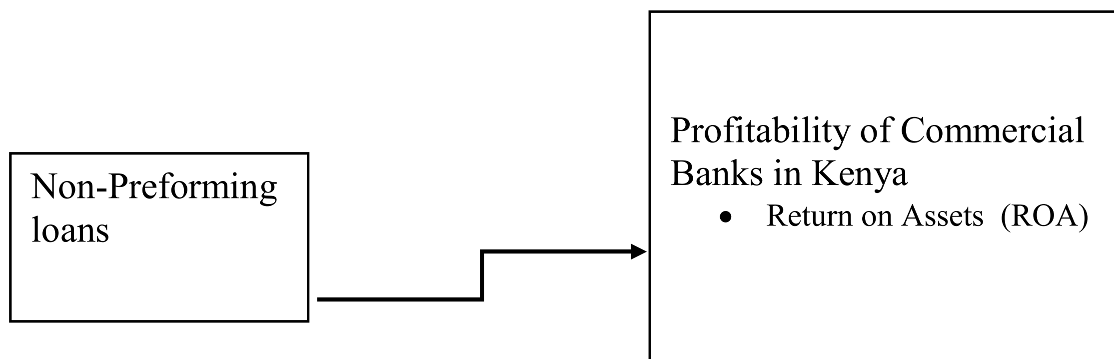


Figure 1: Conceptual framework

ROA is a ratio of bank profitability over the total bank assets. The ration derived helps measure the efficiency of management in generating profits from the assets portfolio.

## 2.6 Literature Review Summary

Theoretical framework has highlighted that in essence theories exist which attempt to explain what happens in reality. Although decisions are made in issuing of loans, there is a degree of uncertainty as to the ability of borrowers to meet their obligations. It is in the best interest of management to

make profits which is the consideration for risk taken. Again, risks taken might differ with the approach the shareholders would have taken which brings about the agency theory.

Regarding the determinants of performance of banks, managers are interested in finding out the degree to which each factor affects the performance. Once the determinants are clear they can then take appropriate measures and strategies that would result in increased profitability. As much as a lot of research has been done relating to how financial performance of commercial banks is affects by NPLs, many of the studies done locally have looked more on the methods of management of non-performing loans. These studies did not look into the correlation between profitability and NPLs. With growth and advancement in the banking sector, more regulation, increased scrutiny by CBK among other factors, there is need to evaluate further the possible extent of the effect.

# CHAPTER THREE: RESEARCH METHODOLOGY

## 3.1 Introduction

Herein we find description of population which was all commercial banks in Kenya, sampling basis, the methods that were used in analysis of data and most importantly the regression equation.

## 3.2 Research Design

The design of research is the strategy of investigating with an aim to derive responses to research questions. The design outlines a blueprint used to come up with responses to problems of research. It gives the methodology of how the task of answering the questions will be undertaken (Mugenda and Mugenda 1999). Survey design was used for this study, which was appropriate because the object was to find out how the financial performance of Kenyan commercial banks is affected by NPLs for the period between 2013 and 2015.

## 3.3 Population of Study

The population of the study has to have similar characteristic e.g. elements, operating environments, regulatory authority, products and services offered (Ngechu, 2004). In simple terms homogeneity should be evident in the population selected for a study. The study population comprised a sample of 43 commercial banks representing 100% of Kenyan commercial banks for a duration of three years 2013 to 2015. However, for banks that collapsed the study covered the same period until the eventual failure of that particular bank.

## 3.4 Collection of Data

Secondary data was used for instance, reports periodically released by the central bank of Kenya, statistical documents, banking surveys of various years; Kenya national bureau of statistics publications, annual published accounts from financial statements from the selected commercial banks.

We obtained data on the total loans, interest income, interest expense and NPLs from the financial statements of commercial banks.

## 3.5 Data Analysis

Data analysis is defined as holistic evaluation done after data has been gathered up to the point of results interpretation. Data collected was analysed using statistical package for social science (SPSS) and content analysis was used in summarising the findings.

A regression was done on one equation approach to analyse the impact of NPLs to commercial banks profitability

The equation is $Y=B_{x1}+B_{x2}+Bo$

Where

Y a ratio, is the dependent variable which is ROA which will measure the banking sector performance.

B refers to coefficient of regression

Bo is simply the constant

$X_1$ measured as a ratio was the independent variable NPLs over total loans which was measured as the total loans in each bank categorised as doubtful and sub-standard.

$X_2$ measured as a ratio was the independent variable interest expense as a fraction of total loans which was measured as the expense incurred by the bank for using depositor's funds to lend loans

.

# CHAPTER FOUR: DATA ANALYSIS

## 4.1 Introduction

Information that was processed as a result of data that was collected on the study will be displayed in this chapter. This chapter comprises of the following sub-section; descriptive statistic, inferential statistics and interpretation of the findings on each sub-heading.

## 4.2 Descriptive Statistics

This section focus on the general description of the study variables characteristics which included the standard deviation (Std. Dev) minimum (Min), Mean, maximum (Max), Skewness and Kurtosis

Table 4. 1: Descriptive Statistics

| | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis |
|---|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic |
| ROA | 0.00239 | 0.17806 | 0.07574 | 0.03831 | 0.47581 | 0.00337 | -0.10906 |
| Non performing loan | 0.00577 | 0.44962 | 0.08099 | 0.07038 | 2.55598 | 0.00620 | 8.28133 |
| Interest expense | 0.01005 | 0.20820 | 0.09653 | 0.04271 | 0.33817 | .213 | -0.19522 |

The results in Table 4.1 showed that return on assets had a mean of 0.07574, non-performing loans 0.08099 and interest expense had a mean of 0.09653.Analysis of skewness shows that return on assets, non-performing loans and interest expense are asymmetrical to the right around their mean.

## 4.3 Inferential Statistics

The study did Pearson correlation analysis and multiple regression analysis to establish the relationship between the study variables.

### 4.3.1 Correlation Analysis

Pearson's correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed.

Table 4. 2: Correlation Matrix

| Pearson Correlation | ROA | Non-performing loan | Interest expense |
|---|---|---|---|
| ROA | 1 | | |
| Non-performing loan | .69 | 1 | |
| Interest expense | 0.34 | 0.21 | 1 |

The table above indicates the correlation matrix between interest expense, non-performing loans and the return on assets (ROA). As per the table, a positive relationship is shown which implies a correlation between return on assets non-performing loans and interest expense to the tune of 0.69 and 0.34 respectively.

### 4.3.2 Regression Analysis

Coefficient of determination shows the degree of change in the variable that is dependent is elucidated by alteration in the variables that are independent or the degree to which the variation in the dependent variable return on assets which is expounded by the two variables that are independent (interest expense and non-performing loans).

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 7.67 | 0.589 | -0.989 | 3.85 |

a. Predictors: (Constant), interest expense and non-performing loans

b. Dependent Variable: Return on assets

The two variables which are independent that were studied explain 58.9% of the return on assets as symbolised by the $R^2$. This implies that all the variables combined contribute 58.9% of return on assets and other variables not studied contribute 41.1% of return on assets. Thus, additional studies should be done to find out which other (41.1%) variables influence return on assets.

### 4.3.3 ANOVA

ANOVA statistics were also computed to find the fitness of the model in predicting the relationship between the study variables

Table 4. 3: ANOVA results

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 0.00110565 | 2 | 0.000552825 | 0.373 | 0.000 |
| | Residual | 0.186728897 | 126 | 0.001481975 | | |
| | Total | 0.187834547 | 128 | | | |

a. Predictors: (Constant), interest expense and non-performing loans

b. Dependent Variable: Return on assets

From the ANOVA statistics in the above table 4.4, the data which comprises the population parameters, had a level of significance of 0.000 which simply confirms that the data used is suitable for concluding on the population's parameter. The F calculated at 5% Level of significance was 0.373, this shows that the overall model was significant i.e. there is a significant impact of interest expense and non-performing loans on the return of assets.

#### 4.3.4 Regression Coefficient

Table 4. 4: Regression Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | |
|---|---|---|---|---|---|
| | | B | Std. Error | T Stat | P Value |
| 1 | (Constant) | 0.699 | 0.09 | 7.59 | 0.0033 |
| | Non-performing loans | 0.373 | 0.48 | 0.77 | 0.0025 |
| | Interest expense | 0.295 | 0.80 | 0.37 | 0.0022 |

a. Dependent Variable: Return on assets

Regression coefficient in table 4.4 above was utilised to come up with the model as shown below:

Y = 0.699+0.373 NPL+0.295 IE.

Where IE is the interest expense and NPL is non-performing loans. From the model, taking all factors (interest expense and non-performing loans) constant at zero, return on assets was 0.699. In addition, the findings also demonstrates that taking all other variables that are independent at zero, a growth in the interest expense by one unit will result in a 0.295 upsurge in return on assets; an increase in non-perfoming loans by one unit will result in a 0.373 increase in growth of return on assets . According to the model, all the variables were vital as their P- value was less than 0.05.

# CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

In this chapter we have the summary, conclusion and recommendations of the main outcomes on how Kenyan commercial banks can be impacted by the non-performing loans. This chapter puts forward the summary of the findings, recommendations of the study, limitation of the study and suggestions for further studies.

## 5.2 Summary and conclusions

From the findings in the previous chapter there is a positive relationship which implies a relationship between return on bank assets and loans that are not performing to the tune of 0.000. The two independent variables that were studied interest expense and non-performing loans explained 58.9% of the return on assets as represented by the $R^{2.}$. As per the statistics on ANOVA in table 4.4, the data, which comprises the parameters of the population, resulted in a level of significance of 0.689 proving that the data was ideal for concluding on the parameters of the population. Lastly from the regression (table 4.5), with all other factors held constant a unit increase in non-perfoming loans would translate to a 0.373 growth in return on assets. What this simply means is that in Kenya, as banks continued to increase their non-performing loans, it resulted in increase in the loan book. Simply put, it seemed that non-performing loans was an inevitable price to pay for increase in the loan book and the returns thereof.

Muasya (2009), researched the degree to which non-performing loans have an impact on the

Kenyan banking sector performance. The study concluded there was an impact of NPLs to both interest income and profitability though the effect was not adverse for 7 of the 13 banks analysed. Despite the negative impact, the asset quality of the banking sector had improved over 5 years till 2008 which was scope of his study. This therefore implies that despite increased non-performing loans, banks continue to grow, a trend that was also noted in this study covering three years from 2013 and 2015

## 5.3 Recommendations

In practise, Commercial Banks in Kenya cannot avoid to have non-performing loans as part of their portfolio. However, they should minimise the impact as much as possible. Developments in the banking sector have created avenues for credit reference bureaus which can assist banks in knowing the credit history of their current and future customers  This can be used as a channel not only to for negative but also for positive information.

Banks should also review their credit policies and ensure best practise is documented and adhered to during loan issuance process. They have to strictly follow the know your customer procedures in order to retrieve as much information as they can on the ability of customers to pay. In addition they should be more aggressive in the loan collection procedures and engage debt collectors to try and salvage the fate of the loss loans that they have.

Moreover, the Central Bank should perform detailed audits to ensure that banks are complacent with the prudential guidelines regarding provisioning for bad and doubtful loans. Although the guidelines are very explicit about the criteria that should be followed in loan classification, banks might be using their judgement in assessment of bad loans which leads to the risk of understatement of their non-performing loans.

## 5.5 Limitations of the Study

Data collection was a challenge when it came to obtaining the financial statements of Commercial banks which are foreign owned, this was the case for 10 banks out of 43 banks that were chosen for the study. The study was also conducted in a period when the Kenyan economy was growing at a rate of 5%, a season when Africa as a continent is experiencing the highest levels of growth. 2013 was also an election year, and peaceful elections contributed to investor confidence which resulted in more investment in our economy. As would be the expected result, increased level of investment and growth would result in lower levels of non-performing loans hence decreasing the overall impact they would have on the return on assets. The year 2015 was also very productive with visit of the pope and Barack Obama (president of United States of America) being the epitome, the latter brought with him many investors which meant influence on the overall international approval and increased investment in Kenya. This must have greatly influenced economic performance and consequently the financial performance of Banks in Kenya

## 5.6 Suggestions for further studies

To expand this research further, a trend analysis can be done on a bank on bank basis to see the individual impact that NPLs have on individual banks. Further research can be done in future on impact of regularisation of banks rates of charging interest on the profitability of banks since the finance bill was passed in August 2016 by the president fixing interest rates for loans and deposits to a percentage of the central bank rate. Credit reference bureaus are also of interest and could be useful in researching their impact on their impact on reduction of losses in banks i.e. levels of non-performing loans.

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# APPENDIX I

**List of commercial banks in Kenya as at 31 December 2015 as per Central Bank of Kenya**

1 African Banking Corporation Ltd.

2 Bank of Africa Kenya Ltd.

3 Bank of Baroda (K) Ltd.

4 Bank of India

5 Barclays Bank

6 CFC Stanbic Bank Ltd.

7 Charterhouse Bank Ltd

8 Chase Bank (K) Ltd.

9 Citibank N.A Kenya

10 City Finance Bank Ltd.

11 Commercial Bank of Africa Ltd.

12 Consolidated Bank of Kenya Ltd.

13 Co-operative Bank of Kenya Ltd.

14 Credit Bank Ltd.

15 Development Bank of Kenya Ltd.

16 Diamond Trust Bank (K) Ltd.

17 Dubai Bank Kenya Ltd.

18 Ecobank Kenya Ltd

19 Equity Bank Ltd

20 Equatorial Commercial Bank Ltd.

21 Family Bank Ltd

22 Fidelity Commercial Bank Ltd

23 Fina Bank Ltd

24 First community Bank Limited 25

25 Giro Commercial Bank Ltd

26 Guardian Bank Ltd

27 Gulf African Bank Limited 28

28 Habib Bank A.G Zurich

29 Habib Bank Ltd

30 Imperial Bank Ltd

31 Investment & Mortgages Bank Ltd

32 Kenya Commercial Bank Ltd

33 K-Rep Bank Ltd

34 Middle East Bank (K) Ltd

35 National Bank of Kenya Ltd

36 NIC Bank

37 Oriental Commercial Bank Ltd

38 Paramount Universal Bank Ltd

39 Prime Bank Ltd

40 Southern Credit Banking Corporation Ltd.

41 Standard Chartered Bank (K) Ltd

42 Trans-National Bank Ltd

43 Victoria Commercial Bank Ltd