

# Assessing the Factors Contributing to Non –Performance Loans in Kenyan Banks

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## Abstract

The Banking sector is an indispensable financial service sector supporting development plans through channelizing funds for productive purpose, intermediating flow of funds from surplus to deficit units and supporting financial and economic policies of government. This paper will look at the factors contributing high rates of NPLs in Kenya despite the introduction of CBR. The other objectives are to determine the effects of Non-performing Loans in Kenyan commercial banks, to establish the trend of bad loans, before and after the introduction of CRB in Kenyan commercial banks and to determine the efforts taken to reduce the risks due to NPLs. The research covers all commercial banks in Kenya for the last ten years. The paper used secondary data and to analyse and draw conclusions and recommendations. This paper will provide an insight to the authorities manning the institutions and the government such that they find it in order to reduce the NPLs also it will provide a basis for further research.

**Key words:** Non-Performing Loans, Kenya, Commercial banks, Credit Reference Bureaus

## 1.0 Introduction

A strong financial system is very important for a country to flourish. The economic progress of a nation and development of banking is invariably interrelated. The Banking sector is an indispensable financial service sector supporting development plans through channelizing funds for productive purpose, intermediating flow of funds from surplus to deficit units and supporting financial and economic policies of government. The importance of bank's stability in a developing economy is noteworthy as any distress affects the development plans (Rajaraman and Vasishtha, 2002) thereby the economic progress (Thiagarajan, et al, 2011).

The stability of banking hence is a pre-requisite for economic development and resilience against financial crisis. Like any other business, success of banking is assessed based on profit and quality of asset it possesses. Even though bank serves social objective through its priority sector lending, mass branch networks and employment generation, maintaining asset quality and profitability is critical for banks survival and growth. A major threat to banking sector is prevalence of Non-Performing Loans (NPLs). NPL represents bad loans, the borrowers of which failed to satisfy their repayment obligations. Michael et al (2006) emphasized that NPA in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks. Batra, S (2003) noted that in addition to the influence on profitability, liquidity and competitive functioning, NPL also affect the psychology of bankers in respect of their disposition of funds towards credit delivery and credit expansion. Non-performing loan generate a vicious effect on banking survival and growth, and if not managed properly leads to banking failures. The world financial crisis has put the financial sector again at the center of policy makers' attention across the developed and developing world. While in recent years, the financial sector debate across the African continent has been dominated by policies to increase access to financial services, minimizing the impact of the crisis currently tops the agenda.

Kenya has in the recent times expanded its financial sectors in the country and in the Eastern region. By African standards and in comparison the other East African economies, Kenya's banking sector has for many years been credited for its size and diversification. Private Credit to GDP – a standard indicator of financial development, was 23.7% in 2008, compared to a median of 12.3% for Sub-Saharan Africa (Table 1). Unlike most other countries in the region, Kenya has a variety of financial institutions and markets – banks, insurance companies, and stock and bond markets - that provide an array of financial products.

During the period ended June 30, 2012, the Kenyan banking sector comprised 43 commercial banks, 1 mortgage finance company, 6 deposit taking microfinance institutions, 2 credit reference bureaus, 5 representative offices and 115 foreign exchange bureaus (CBK 2012)

**Table 1: Kenya's financial system in regional comparison**

	Private Credit to GDP	Liquid Liabilities to GDP	Net interest margin
Kenya	23.7%	36.0%	6.6%
Tanzania	12.3%	26.3%	6.6%
Uganda	7.2%	20.7%	11.7%
Sub-Saharan Africa (median)	12.3%	23.0%	6.6%

Source: Beck, Demircug-Kunt and Levine (2009)

## **Definition**

A Non-performing Loan/ Asset is a credit facility in respect of which the interest and or principal amount has remained past due for a specific period of time. According to Alton and Hazen (2001) non-performing loans are those loans which are ninety days or more past due or no longer accruing interest. Hennie (2003) agrees arguing that non-performing loans are those loans which are not generating income. This is further supported by Caprio and Klingebiel (1996), cited in Fofack (2005), who define non-performing loans as those loans which for a relatively long period of time do not generate income that is, the principal and or interest on these loans have been left unpaid for at least ninety days.

Non-performing loans are also commonly described as loans in arrears for at least ninety days (Guy, 2011). Michael et al (2006) emphasized that NPL in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks. Batra, S (2003) noted that in addition to the influence on profitability, liquidity and competitive functioning, NPL also affect the psychology of bankers in respect of their disposition of funds towards credit delivery and credit expansion. NPL generate a vicious effect on banking survival and growth, and if not managed properly leads to banking failures. According to this paper, non-performing Assets/ loans are loans that are ninety or more days delinquent in payments of interest and/or principal (Bexley and Nenninger, 2012).

## **Statement of the problem**

The stability of banking is a pre-requisite for economic development and resilience against financial crisis.

Like any other business, success of banking is assessed based on profit and quality of asset it possesses. Even though bank serves social objective through its priority sector lending, mass branch networks and employment generation, maintaining asset quality and profitability is critical for banks survival and growth. A major threat to banking sector is prevalence of Non-Performing Loans (NPLs). Non-performing Loans represent bad loans, the borrowers of which failed to satisfy their repayment obligations.

In Kenya the high level of non-performing loans in the banking industry has been a hindrance to economic stability. According to (CBK April 2012), the stock of NPLs reduced by 1.4% to Ksh 57.5 billion by march 31st, 2012 from Ksh 58.3 billion in 2011. In the year 2010, the NPLs were Kshs. 61.5 billion (CBK Annual Report 2010). Despite reduction in NPLs in Kenya this ratio is high compared the deposits.

The banking sector gross loans and advances increased from Ksh 1.08 trillion in June 2011 to Ksh 1.29 trillion in June 2012 translating to a growth of 19.0 percent CBK Annual Report 2012. The deposit base increased by 15.9 percent from Ksh 1,219.5 billion in June 2010 to Ksh 1,412.8 billion in June 2011 mainly due to branch expansion, remittances inflows and receipts from exports (CBK Annual Report 2010).

When these loans and advances become non-performing, banks liquidity and its earnings are adversely affected. It is at against this information this paper seeks to find out the impact of Non-performing Assets/loans on Kenyan financial institutions.

## **Research Objectives**

The general objective of the research is to assess the factors of contributing to Non-performing Loans in Kenya Commercial Banks. The research had the following specific research objectives;

1. To identify the factors that account for bad loans in Kenya commercial banks
2. To establish the effects of Non-performing Loans in Kenyan commercial banks.
3. To establish the trend of bad loans, before and after the introduction of CRB in Kenyan commercial banks.
4. To determine the efforts taken to reduce the risks due to NPLs.

## **Research Questions**

The research has the following research questions;

1. What factors account for Non-performing Loans in Kenya Commercial Banks?
2. What are the effects of Non-Performing Loans in Kenyan banks?
3. What is the trend of nonperforming loans before the introduction of CRB?
4. What are efforts are being taken to reduce the risk due to NPAs in this sector in Kenya?

## **Significance of the study**

This study is significant for because first, it explains NPL, which is important on the management of the banking sector as it will provide the policy makers and authorities with significant information, of which they can use to manage this important financial sector. Lastly for scholars it will enrich the knowledge and provide a basis for further studies.

## **Literature review**

### **Theoretical Framework**

#### **Adverse Selection Theory**

Pagano and Jappelli (1993) show that information sharing reduces adverse selection by improving banks information on credit applicants. The theory of asymmetric information tells us that it may be difficult to distinguish good from bad borrowers (Auronen, 2003) in Richard (2011), which may result into adverse

selection and moral hazards problems. The theory explains that in the market, the party that possesses more information on a specific item to be transacted (in this case the borrower) is in a position to negotiate optimal terms for the transaction than the other party (in this case, the lender) (Auronen, 2003) in Richard (2011). The party that knows less about the same specific item to be transacted is therefore in a position of making either right or wrong decision concerning the transaction. Adverse selection and moral hazards have led to significant accumulation of non-performing loans in banks (Bester, 1994; Bofondi and Gobbi, 2003).

### **Moral Hazard Theory**

The moral hazard problem implies that a borrower has the incentive to default unless there are consequences for his future applications for credit. This result from the difficulty lenders have in assessing the level of wealth borrowers will have accumulated by the date on which the debt must be repaid, and not at the moment of application. If lenders cannot assess the borrowers' wealth, the latter will be tempted to default on the borrowing. Forestalling this, lenders will increase rates, leading eventually to the breakdown of the market Alary and Goller (2001)

### **Conceptual framework**

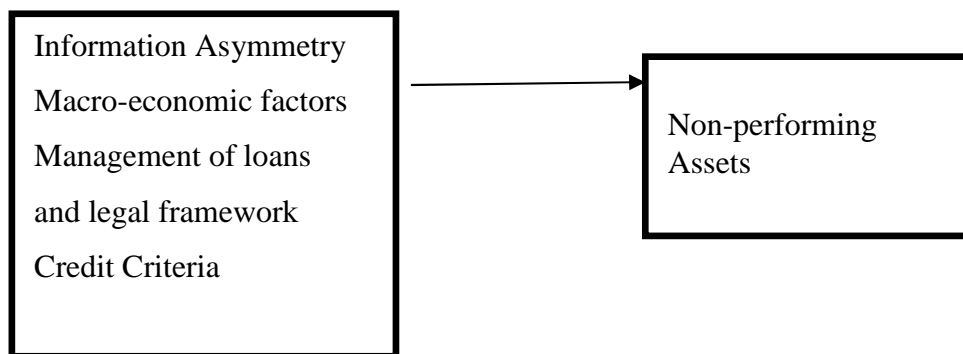


Figure: Conceptual Framework (Source: Author, 2013)

### **Information asymmetry**

Information asymmetry refers to a situation where business owners or managers know more about the scenario, for and risk facing, their business than do lenders. Information asymmetry describes the condition in which relevant information is not known to all parties involved in an undertaking (Ekumah and Essel, 2003). It has been used extensively to explain a diversity of concept, including those in different market condition (Misukin, 1991). According to Prof. Njuguna Ndung'u, governor Central Bank of Kenya during annual address in year 2008, noted that the realization of credit information sharing in the banking sector will not only bring good news to the banks and the banking sector but also to the borrowers and the economy as a whole. This national success stands to significantly benefit the economy and is bound to stir changes in the way credit is managed in the industry in the sense that lenders will be in a position to access comprehensive credit data and will be able to price risk accordingly for both good and bad borrowers hence reducing their bad debt portfolios.

### **Macro-economic factors**

GDP growth, inflation and interest rates are common macro-economic factors, while size and lending policy are micro-economic variables (Greenidge and Grosvenor, 2010). These variables are by no means exhaustive, but they provide a useful framework for monitoring the development of non-performing loans (Guy, 2011). More recent researches started studying this problem but with particular reference to both developing countries and emergent economies (Haunerand and Peiris, 2005; Mathewes et al., 2007), as cited by (Maggi and Guida, 2009). Furthermore, Jimenez and Saurina (2005) examine the Spanish banking sector from 1984 to 2003; they provide evidence that non-performing loans are determined by GDP growth, high real interest rates and lenient credit terms. This study attributes the latter to disaster myopia, herd behaviour and agency problems that may entice bank managers to lend excessively during boom periods.

Interest rate is the price a borrower pays for the use of money they borrow from a lender/financial institutions or fee paid on borrowed assets, Crowley (2007). Interest can be thought of as "rent of money". Interest rates are fundamental to a 'capitalist society' and are normally expressed as a percentage rate over one year. Interest rate as a price of money indicates market information concerning probable change in the purchasing power of money or future inflation (Ngugi, 2001). Financial institutions facilitate mobilization of savings, diversification and pooling of risks and allocation of resources (Collins NJ, et al, 2011). However, since the receipts for deposits and loans are not harmonized, intermediaries like banks incur certain costs (Ngugi, 2001). Collins, NJ and Wanjau, K (2011) explained a direct relationship between interest rate and NPA. The study noted that interest rate spread affect performing assets in banks as it increases the cost of loans charged on the borrowers, regulations on interest rates have far reaching effects on assets nonperformance, for such regulations determine the interest rate spread in banks and also help mitigate moral hazards incidental to NPAs. When there is high intermediation cost,

reflected in the high interest rate spread; the borrower may be unable to repay his/her loan owing to the cost of such borrowings. This leads to a high risk of loan default hence non-performance (Chand, 2002). Causes and treatment of non-performing loans were studied in detail by Bloem and Gorter (2001). They agreed that “bad loans” may considerably rise due to abrupt changes in interest rates. They discussed various international standards and practices on recognizing, valuing and subsequent treatment of non-performing loans to address the issue from view point of controlling, management and reduction measures. A study conducted by Espinoza and Prasad (2010) focused on macroeconomic and bank specific factors influencing non-performing loans and their effects in GCC Banking System. After a comprehensive analysis, they found that higher interest rates increase non-performing loans but the relationship was not statistically significant. Salas and Saurina (2002) estimate a significant negative contemporaneous effect of GDP growth on non-performing loans and infer the quick transmission of macroeconomic developments to the ability of economic agents to service their loans (Bangia et al., 2002; Carey, 2002). Nkusu (2011) investigating the macroeconomic determinants of loan defaults through panel regressions and panel vector autoregressive models. The author suggests that hike in interest rates result in deterioration of borrower’s repayment capacity and hence, cause of increase in non-performing loans.

#### **Management of loans and legal framework**

Ranjan and Dhal (2003) opined that horizon of development of credit, better credit culture, positive macroeconomic and business conditions lead to lowering of NPAs. Reddy, PK (2002) also was of the opinion that the problem of NPA is not mainly because of lack of strict prudential norms, but due to legal impediments, postponement of the problem by the banks to show higher returns and manipulation by the debtors using political influence. In its annual report (2010) CBK noted that management of NPA by banks remains an area of concern, particularly, due to the likelihood of worsening of the quality of restructured loans. The nonperforming loans of banks are an important criterion to assess the financial health of banking sector. It reflects the asset worth, credit risk and competence in the allocation of resources to the productive sectors. Ahmed (2010) noted that since the reform regime there has been various initiatives to contain growth of NPA to improve the asset quality of the banking sector. Commercial banks have envisaged the greatest renovation in their operation with the introduction of new concepts like prudential accounting norms, income recognition and capital adequacy ratio which have placed them in new platform. The growing competition from internal and external constituents and sluggish growth in economy coupled with poor credit-deposit ratio, the large volume of NPAs in the balance sheet and lack of automation and professionalization in the operation have been affecting the banking situation in the country. Borbora, RR (2007) emphasized that the essential components of sound NPA management are i) quick identification of NPAs, ii) their containment at a minimum level and iii) ensuring minimum impact of NPAs on the financials. Panta, R (2007) noted that all kinds of lending involves three stages where discretion needs to be exercised (a) Evaluation and assessment of the proposal (b) Timely monitoring and evaluation and (c) Proper assessment of exit decision and modality.

#### **Credit criteria**

Credit criteria are factors used to determine a credit seeker’s creditworthiness or ability to repay debt. The factors include income, amount of existing personal debt, number of accounts from other credit sources and credit history. Swaren (1990) suggested that the most pervasive area of risk is an overly aggressive lending exercise. It is a hazardous practice to extend lending term beyond the useful life of the corresponding collateral. Besides that, giving out loans to borrowers who are already overloaded with debt or possess unfavourable credit history can expose banks to unnecessary default and credit risk. In order to decrease these risks, banks need to take into consideration several common applicants’ particulars such as debt to income ratio, business and credit history and performance record and for individual loan applicants their time on the job or length of time.

Credit risk management is a process, a comprehensive system. The process that begins with identifying the lending markets, often referred to as “target markets” and proceeds through a series of stages to loan repayment. Banking institutions face intense challenges in managing credit risk. Government controls, internal and external political interferences and pressures, production difficulties, financial limitations, market disruptions, delays in production schedules and frequent instability in the business environment undermine the financial condition of borrowers. Furthermore, financial information is frequently unreliable and legal framework does not always support debt recovery; (Mueller, 1988). Some writers also hold the view that bad loans can be caused by problem accounts. Rouse (1989) indicated in his work that problem loans can emanate from overdrawn account where there is no overdraft limit overdraft taken on an account which has not been actively operated for some time and overdraft taken in excess of reasonable functioning limits. Also he identified lack of technical good skills and judgment on the part of the lender is a possible cause of bad loans.

Given the critical role of banks for a modern market economy, the opacity of banks’ balance sheets, the dispersion of banks’ creditors – typically many small depositors – and the maturity transformation banks perform converting short-term deposits into medium- to long-term assets there are limitations to market discipline and additional sources of fragility, compared to non-financial corporations. Banking has therefore historically been one of the most regulated sectors, with regulation ranging from licensing requirements to on-going supervision to a bank-specific failure regime and deposit insurance.

### Impact of NPAs

The most important business implication of the NPAs is that it leads to the credit risk management assuming priority over other aspects of bank's functioning Batra, S (2003). The bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business. RBI, through various circulars, stipulated guidelines to manage NPA. This view was supported by Yadav, MS (2011) and stated that higher NPA engage banking staff on NPA recovery measures that includes filing suits to recover loan amount instead of devoting time for planning to mobilization of funds. Thus NPA impact the performance and profitability of banks. The most notable impact of NPA is change in banker's sentiments which may hinder credit expansion to productive purpose. Banks may incline towards more risk-free investments to avoid and reduce riskiness, which is not conducive for the growth of economy.

Sethi, J and Bhatia, N (2007), clarified on implications of NPA accounts that Banks cannot credit income to their profit and loss account to the debit of loan account unless recovery thereof takes place. Interest or other charges already debited but not recovered have to be provided for and provision on the amount of gross NPAs also to be made. All the loan accounts of the borrower would be treated as NPA, if one account is NPA. Many authors emphasized the straddling impact of NPA and stressed its impact on loan growth. A higher NPA force banks to invest in risk-free investments, thus directly affect the flow of funds for productive purpose. (Tracey and Leon, 2011; Heid and Kruger, 2011 and O'Brien, 1992)

Bloem et al (2001) remarked that issues relating to NPA affect all sectors (in particular if parallel issues with defaulting trade credit is also considered). The most serious impact, however, is on the financial institutions, which tend to own large portfolios, indirectly; the customers of these financial intermediaries are also implicated; deposit holders, shareholders and so forth. Add to this, NPA is not only affecting the banks and its intermediaries, it is having impact on the development of the nation as well. For a bank, NPA means unsettled loan, for which they have to incur financial losses. The cost for recovering NPA is as well considerable. There are banking failures on account of the mounting NPA since it is affecting the profitability and long run survival of the bank.

### Research Methodology

The research will use secondary data form journals and Central bank of Kenya annual reports. The data is of five year period i.e. 2008-2012. The data will be presented in tables, graphs and charts.

### Number of Commercial banks

The Kenyan banking sector comprises 43 commercial banks, 1 mortgage finance company, 6 deposit taking microfinance institutions, 2 credit reference bureaus, 5 representative offices and 115 foreign exchange bureaus (CBK Annual Report 2010).

Table 2 loans and advances and non-performing loans

Period	Loans and Advances	Non-Performing Loans
2012	1,296,452 billion	61.9 billion
2011	1,152,011 billion	58.3 billion
2010	786,591 billion	61.5 billion
2009	668,580 billion	68.8 billion
2008	555,062 billion	58.3 billion
2007	518,917 billion	56.1 billion
2006	396,149 billion	65.4 billion
2005	338,399 billion	68.6 billion
2004	382,290 billion	70.8 billion
2003	315,321 billion	73.9 billion

Researcher 2013 adopted from CBK Annual Reports and Bank Supervision Annual Reports

Table 3: GDP, Interest Rates and Inflation

Period	GDP %	Interest Rates %	Inflation %
2012	3.9	20.40	16
2011	4.4	14.14	18.1
2010	5.8	13.87	3.2
2009	2.6	14.79	5.23
2008	1.6	14.1	17.8
2007	7	13.32	9.8
2006	6.1	13.7	15.6
2005	5.8	13.2	7.6
2004	4.2	13.19	8.6
2003	2.7	13.5	9.8

Researcher 2013 adopted from CBK Annual Reports Bank Supervision Annual Reports



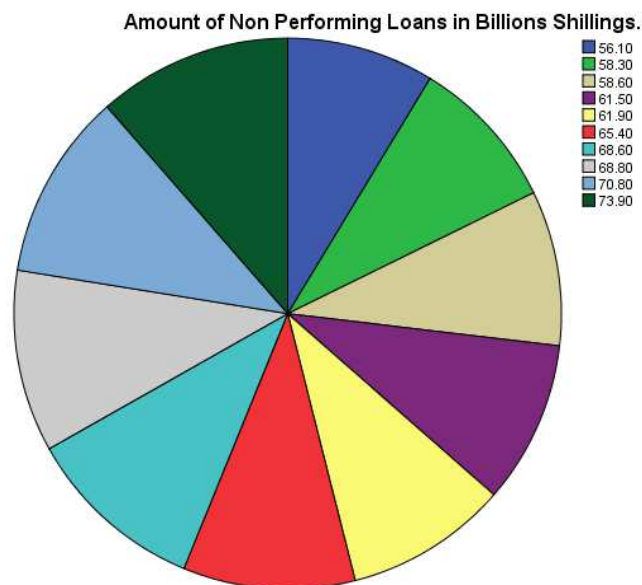
TABLE 4: Sectoral distribution of NPLs loans (ksh bn)

Sectors	Jun-12	Jun-11%	Change
Personal/Household	19.7	18.8	4.80%
Trade	12.3	11.7	5.10%
Manufacturing	5.7	-2.8	60%
Real Estate	6.5	6.7	-3.00%
Transport and Communication	3.7	3.7	0.00%
Agriculture	4.1	4.9	-16.30%
Financial Services	1.4	1.6	-12.50%
Building and Construction	2.3	1.7	35.30%
Energy and Water	0.3	0.2	50.00%
Tourism, Restaurant and Hotels	2.1	1.8	16.70%
Mining and Quarrying	0.1	0.2	-50.00%
Gross/Total	57.5	58.3	-1.40%

Source: Central Bank of Kenya 2012

Majority of the NPLs are in personal and or household sector than any other sector and this reflects the Kenyan NPLs are spread.

### Discussions



Cases weighted by Amount of Non Performing Loans in Billions Shillings.

The pie chart shows how the Non-performing loans are distributed for the last ten years. They not really declined much as they seem evenly all through.

### Recommendations

It is apparent that banks need to seriously consider all the internal and external factors causing non-performing loans as well as the impact of non-performing loans on the bank's overall performance.

Since the introduction of the CRB the amount of NPLs in Kenya are in declining flow but more needs to be done and especially on Macro-economic factors due these factors increasing we are experiencing an increase of NPLs. The impact of environmental factors such as natural disasters and government policy should be considered seriously during the credit assessment process. The bank should slow down on issuing loans to companies in the agricultural and manufacturing sectors as they are currently not performing well. Loans in these sectors should only be granted if the borrower proves that they have the capacity to pay back loans given.

Management need to ensure that borrowed funds are being used for the intended purpose through enhanced credit monitoring. This can be achieved by adopting a relationship management approach which helps management to have a closer look at the business as well as the characters of the senior managers running the organization.

### CONCLUSION

While much has been accomplished with regard to banking reform in Kenya, the commercial banks and other financial institutions have increased in Kenya than any other Eastern Africa country there remains much left to do. Credit information sharing will facilitate the development of information capital and the defaulters of one institution will be discovered and brought to justice however much needs to be done.

The Credit reference bureaus have a positive impact on the reduction of non-performing loans and therefore their use should be adopted by all banks and other lending institutions like Saccos in order to curtail the serial defaulters. Since the introduction of the CRB's in 2008, banks have been able to reduce the level of non-performing loans to advances ratio compared to the periods prior to 2008.

It can be concluded that the macro-economic factors have led to the increase of NPLs, high interest rates and spread is a key factor contributing to this rates of NPLs. High inflation rates, leads increase the prices as a result the interest rates increases.

The government needs to look for ways to ensure that economic stability as seen in the year 2008 the political instability also lead to lower GDP and high rate of inflation.

Due to these high rates of NPLs it can cause the following impacts;

Banks profitability is affected adversely because of the provision of doubtful debts and consequent write off as bad debts, Return on Investment (ROI) is reduced, the capital adequacy ratio is disturbed as NPAs are entering into the calculation, the cost of capital will go up, The assets and liability mismatch will widen, the economic value additions (EVA) by banks gets upset because EVA is equal to the net operating profit minus cost of capital, and it limits recycling of the funds.

The cost of nonperforming loans is significant for taxpayers and depositors in especially with Kenyan's fiscal deficits, this rise of non-performing loans lead to a deterioration of bank assets and erosion of their capital. In the short run, numerous banks facing liquidity problems resorted to short-term financing in the form of interbank loans.

The study therefore recommends at the bank level, to register lower interest margins in Kenya banking industry commercial banks need to improve operational efficiency by reducing operating expense using appropriate cost reduction strategies and by enforcement of standards in credit risk management (CRM) as a means to prevent banks from taking excessive risks.

## References

- Ahmed, JU. (2010). An Empirical Estimation of Loan Recovery and Asset Quality of Commercial Banks; The NEHU Journal, Vol.8 (1).
- Borbora. (2007). Management of Non-Performing Assets (NPAs) in the Urban Cooperative Banks (UCBs), Reserve Bank of India, [Online], URL: <http://www.cab.org.in/Lists/Knowledge%20Bank/Attachments/26/NPA%20MANAGEMENT.pdf>
- Barron, J.M., and Staten, M.E., (2008). The Emergence of Captive Finance Companies and Risk Segmentation in Loan Markets: Theory and Evidence. Journal of Money Credit and Banking. 40, 173-192.
- Central bank of Kenya; Financial Sector stability report 2012
- Central bank of Kenya annual report 2008
- Central bank of Kenya annual report 2009
- Central bank of Kenya annual report 2010
- Central bank of Kenya annual report 2011
- Central bank of Kenya annual report 2012
- Chijoriga, M.M. (2000). The Interrelationship Between Bank Failure and Political Interventions in Tanzania in the Pre-Liberalization Period, African Journal of Finance and Management, Vol.9(1), 14-30.
- Collins, NJ., & Wanjau, K. (2011). *The Effects of Interest Rate Spread on the Level of Non-Performing Assets: A Case of Commercial Banks in Kenya*, International Journal of Business and Public Management Vol. 1(1).
- Greenidge K and Grosvenor T (2010), Forecasting non-performing loans in Barbados. Journal of Business, Finance and Economics in Emerging Economies, 5, 80-107
- Hennie V. G (2003), Analyzing and Managing Banking Risk: A Framework for Assessing Corporate Governance and Financial Risk, 2nd Edition, Washington DC: World Bank Publications.
- Jimenez G and Saurina J (2005), "Credit cycles, credit risk, and prudential regulation", Banco de Espana, May 2007.
- Karunakar, M., Vasuki, K., & Saravanan, S. (2008). *Are non - Performing Assets Gloomy or Greedy from Indian Perspective?*, Research Journal of Social Sciences, 3: 4-12, 2008
- Misukin A.K. (1991). "The Economics of Money, Banking and Financial Markets" Town. Addition Wesley 5th Edition
- Michael, JN., Vasanthi, G., & Selvaraju, R. (2006). Effect of Non-Performing Assets on Operational Efficiency of Central-Cooperative Banks, Indian Economic Panorama, Vol. 16(3). 33-39

- Oloo O. (2003). Challenges facing Kenya's Banking Sector. In Market Intelligence. The Business and Finance Journal, Annual Special Edition
- Panta, R., (2007). *Challenges in Banking: A Nepalese Diaspora*, Socio-Economic Development Panorama, Vol. 1(2), 9 -22
- Rajaraman, I., & Vasishtha, G. (2002). Non-Performing Loans of PSU Banks, Some Panel Results, Economic and Political Weekly, Vol.37(5), 2-8.
- Rajan R. (1995). "The Effect of Credit Market Competition on Lending Relationships", The Quarterly Journal of Economics.
- Sethi, J., & Bhatia, N. (2007). Elements of Banking and Insurance, 2nd Edition, Prentice Hall India Publications
- Rouse C. N. (1989). Bankers' Lending Techniques, Chartered Institute of Bankers Publication.
- Thiagarajan, S., Ayyappan, S., & Ramachandran, A. (2011). *Credit Risk Determinants of Public and Private Sector Banks in India*, European Journal of Economics, Finance and Administrative Sciences, Issue 34.
- Yadav, M.S. (2011), Impact of Non Performing Assets on Profitability and Productivity of Public Sector Banks in India, AFBE Journal, Vol.4, No. 1



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