FACTORS AFFECTING NON-PERFORMANCE OF PERSONAL LOANS IN BANKING INDUSTRY

CASE STUDY OF TIER ONE BANKS IN KENYA

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ABSTRACT

- Banks in Kenya experience high levels of non-performing loans a trend that threatens viability and sustainability of banks and hinders the achievement of their goals.
- The purpose of this study was to find out the factors affecting non-performance of personal loans and hence the profitability of banks in Kenya.
- Some of the factors that the researcher looked at included growth in GDP, unemployment, interest rates and inflation.
- A case study research design of tier one banks in Kenya was employed.
- The relationship between the four economic variables; GDP, Inflation, Unemployment and Interest rates was noted to be strong as depicted by the correlation coefficient of 0.68 on regression analysis.
- GDP and unemployment are negatively related to loan non-performance while inflation and interest rates are positively related to loan non-performance.

INTRODUCTION

- ✓ In Kenya credit was initially given to the rich people and big companies and was not popular to the poor. In 1990s loans given to customers did not perform which called for an intervention.
- ✓ The concept of credit management became widely appreciated by banks in the late 90s, but again this did not stop loan defaults to this date (Modurch, 1999).
- ✓ Lending is not an easy task for banks because it creates a big problem which is called non-performing loans (Upal, 2009). Due to the nature of their business, commercial banks expose themselves to the risks of default from borrowers (Waweru & Kalami, 2009).
- ✓ Non-performing loans are one of the main reasons that cause insolvency of the financial institutions and ultimately hurt the whole economy (Hou, 2007).
- ✓ By considering the facts above, it is necessary to control non-performing loans for the economic growth in the country.

Categorization of Kenyan Banks.

Tier Group	Asset Base
One	Above Ksh.40 Billion
Two	Between Ksh.10 B and Ksh. 40 B
Three	Less than 10 Billion

According to the 2009 Banking Survey, there are eleven commercial banks in tier group one, eleven commercial banks in tier group two and twenty one commercial banks in tier group three comprising to a total of forty three commercial banks.

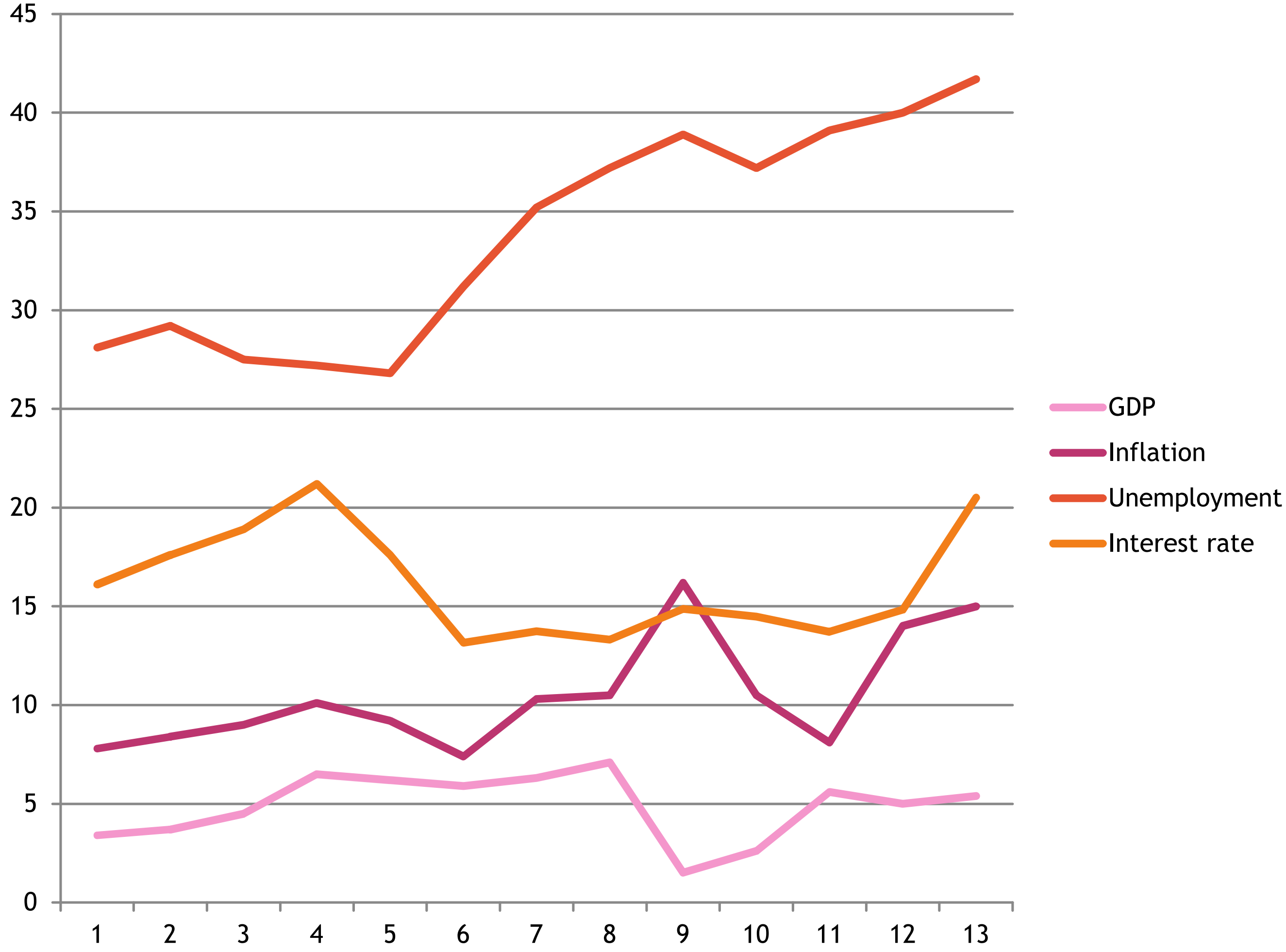
Tier Bank Groups Total Assets

Tier group	Total assets (Billions)	percentage of total assets
One	948.814	78%
Two	172.616	14%
Three	93	8%
Total Assets	1214.43	100%

Source: CBK 2009

- ✓ These are fully fledged banks and regulated by the Central Bank of Kenya (CBK) and are regularly inspected using CAMEL ratings which look at Capital, Assets, Management, Earnings and Liquidity. (Banking Survey, 2009).

Figure 1.1: Trend of the variables for the period 2000-2012



Motivation of the study

- ✓ Several studies conducted on the subject have not fully addressed the factors affecting non-performance of personal loans and have not looked into ways of improving the overall performance of personal loans and profitability of the bank in general.
- ✓ It is with this background that the researcher intended to fill the research gap by looking into the factors affecting non-performance of personal loans in banking sector, taking tier one banks as a sample using recent data

General objective

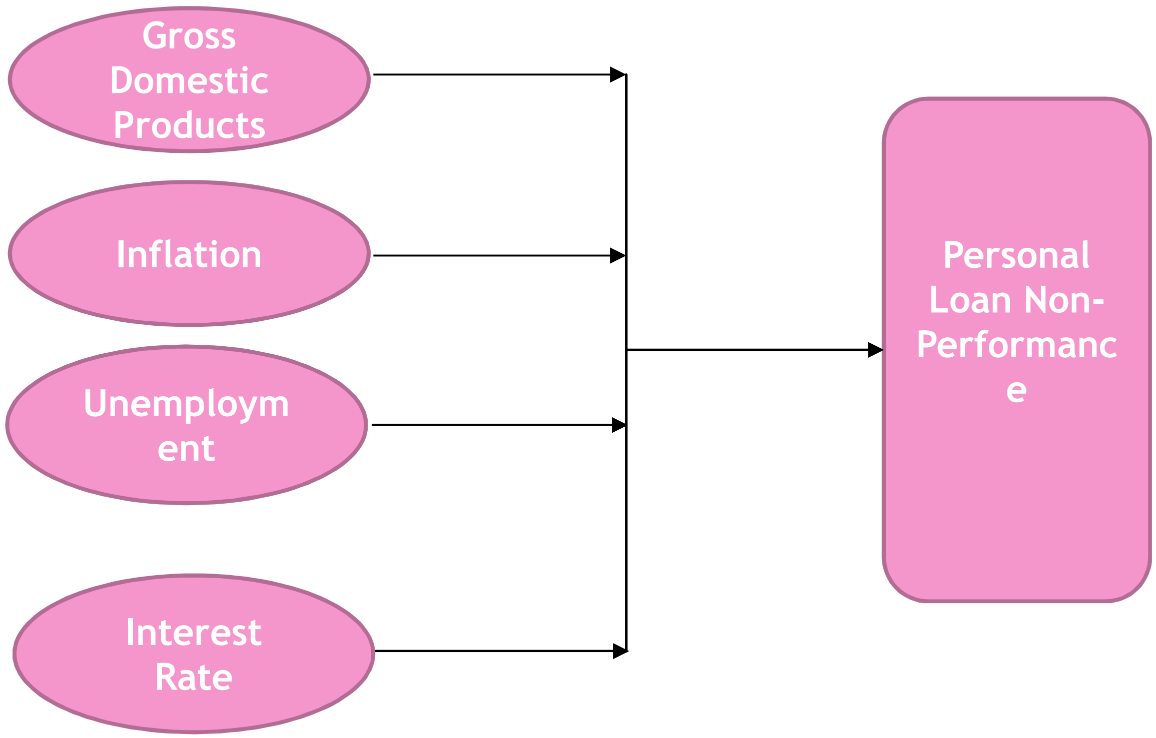
The general objective of the study was to identify the factors affecting non-performance of personal loans in banking industry.

Specific Objectives

- ✓ To establish the effects of GDP on non-performance of personal loans.
- ✓ To identify the effects of inflation on non-performance of personal loans.
- ✓ To identify the effects of unemployment on personal loan non-performance.
- ✓ To determine the effect of interest rates on non-performance of personal loans.

LITERATURE REVIEW

Conceptual framework



Independent Variables   Dependent Variable

RESEARCH METHODOLOGY

Data Analysis and Presentation

- ✓ The study employed quantitative research design and the population of the study was the entire banking sector in Kenya. This study focused on all those banks which are involved in the lending dissension, handling non-performing loan portfolios and making credit risk assessments.
- ✓ The sample of the study was tier one banks in Kenya. This is representative of various banks in Kenya as it holds 78% of total assets in banking industry and also because non-performance of personal loans in the recent years is a problem faced by banks both locally and internationally. The researcher used secondary data sources for the period 2000 to 2012 (13 years) to gather information relevant in achieving the research objectives. Sources included CBK annual reports and KNBS economic surveys.
- ✓ Quantitative techniques were used to analyze the data. The data obtained was analyzed using a software called Gretl. This is a cross-platform software package for econometric analysis, written in C programming language and uses Windows.
- ✓ A Regression analysis on panel data was carried out to analyze the impact of selected independent variables on non-performance of personal loans. Both fixed and random effects models were estimated.

Data Analysis and Presentation (Cont….)

- ✓ The model estimated is as follows:

$$NPLi = \beta_0 + \beta_1 IR_i + \beta_2 UE_i + \beta_3 IN_i + \beta_4 GDP_i + \mu$$

Where NPLi = Non-performing Loans, IR= interest rate, UE= unemployment, IN= inflation, GDP= growth in gross domestic product and μ = error term.

- ✓ In this regression model NPLi is the dependent variable and percentages of independent variables; Interest rate (IR), Unemployment (UE), Inflation rate (IF) and growth in GDP were used. The regression and correlation analysis was used to show the impact of independent variables on the dependent variables.

DATA ANALYSIS, INTERPRETATIONS AND DISCUSSIONS

The Relationship between Economic Variables and Loan Non Performance

Descriptive statistics

Source: Researcher 2013

Variable	Mean	Std. Dev.
Loan Non-Performance	4.33	2.91
GDP	4.90	1.61
Inflation	10.50	2.73
Unemployment	33.79	5.37
Interest rate	16.15	2.66

Correlations Coefficient Matrix

Source: Researcher 2013

Loan Non Performance	GDP	Inflation	Unemployment	Interest rate	
1	-0.1413	0.0655	-0.1581	0.0694	Loan Non Performance
	1	-0.2995	-0.1173	0.0567	GDP
		1	0.674	0.1319	Inflation
			1	-0.3876	Unemployment
				1	Interest rate

Multiple Linear Regression Model-Fixed Effect Model

Multiple Regression Model Coefficients-Fixed Effects

Source: Researcher 2013

Name of variable	Coefficient	Std. Error	t-ratio	p-value	
Const	8.746	1.856	4.712	0.00001	***
GDP	-0.292	0.094	-3.117	0.00222	***
Inflation	0.003	0.091	0.029	0.97667	
Unemployment	-0.095	0.048	-1.992	0.04836	**
Interest rate	0.011	0.071	0.161	0.87251	

N/B: * Significance at 1% level, ** Significance at 5% level**

Dependent variable is loan non-performance

The Relationship between Economic Variables and Loan Non Performance(Cont..)

- Fixed model was estimated as follows:

$$NP_l = 8.7459 - 0.2921x_1 + 0.0026x_2 - 0.0947x_3 + 0.01149x_4$$

Where 8.7459, -0.2921, 0.0026, -0.0947 and 0.01149 model coefficients refer to constant, GDP, Inflation, Unemployment and Interest rate.

Multiple Regression Model Coefficients-Random Effects

Multiple Regression Model Coefficients-Fixed Effects

Source: Researcher 2013

Name of variable	Coefficient	Std. Error	t-ratio	p-value	
Const	8.746	1.977	4.424	0.00002	***
GDP	-0.292	0.094	-3.117	0.00219	***
Inflation	0.003	0.091	0.029	0.97667	
Unemployment	-0.095	0.048	-1.992	0.04822	**
Interest rate R Square	0.011 0.6816	0.071	0.161	0.87250	

N/B: * Significance at 1% level, ** Significance at 5% level**
Dependent variable is loan non-performance

The Relationship between Economic Variables and Loan Non Performance(Cont..)

- Fixed model was estimated as follows:

$$NP_l = 8.7459 - 0.2921x_1 + 0.0026x_2 - 0.0947x_3 + 0.01149x_4$$

Where 8.7459, -0.2921, 0.0026, -0.0947 and 0.01149 model coefficients refer to constant, GDP, Inflation, Unemployment and Interest rate.

- ✓ The fact that the signs and the significance level is the same for both fixed and random effects shows that the model specification is okay. R2 as a measure of goodness of fit is 68% implying that the model fits the data well.

CONCLUSION AND RECOMMENDATION

- ✓ The specific null hypotheses for this study were; there is no negative relationship between GDP and non- performance of personal loans, there is no negative relationship between inflation and non-performance of personal loans, there is no negative relationship between unemployment and non-performance of personal loans and, there is no negative relationship between interest rates and non-performance of personal loans.
- ✓ In conclusion, this study revealed that;
- *There is a negative relationship between growth in GDP and loan non-performance of personal bank loans. Therefore, the null hypothesis of no negative relationship between GDP and loan non-performance is rejected in favor of the alternative negative relationship.*
- *There is a positive relationship between inflation rates and non-performance of personal loans. As such, the null hypothesis of no negative relationship between inflation and personal loan non-performance is accepted.*
- *There is a negative relationship between unemployment rates in an economy and personal loan non-performance. With this, the null hypothesis of no negative relationship between unemployment and loan non-performance is thus rejected in favor of an alternative negative relationship.*
- *Finally, the study also established that interest rates and personal loan non-performance are positively related. Therefore, the null hypothesis of a no negative relationship between interest rates and personal loan non-performance is accepted.*

CONCLUSION AND RECOMMENDATION(CONT..)

- The following recommendations have been made from the study;
- *The central banks should apply stringent regulations on interest rates charged by banks so as to regulate their interest rate spread. Commercial banks should also apply rigorous policies on loan advances so as loans are awarded to those with ability to repay and mitigate moral hazards such as insider lending and information asymmetry.*
- *Banks should apply efficient and effective credit risk management that will ensure that loans are matched with ability to repay, no or minimal insider lending, loan defaults are projected accordingly and relevant measures taken to minimize the same. The banks should also enhance periodic/regular credit risk monitoring of their loan portfolios to reduce the level of NPA.*
- *Since the four economic variables: Un-employment Rate, Inflation Rate, growth in GDP, and Interest Rate, affects loan non-performance, the banks ought to impound an element of all the four variables in the costing of their credit facilities. Also, other factors that affect the loan non-performance ought to be established and their effect included in costing the bank loans. The researcher therefore recommends that future studies should seek to establish other factors that influence loan non-performance and their relationships with loan performance. Further, relatively longer research periods, like 50-100 years could be used in future. The big challenge in this case would be the availability of the data for such a period since most young banks would be locked out from the study. However, the data from such a long time period, though from a few banks would achieve different findings for comparability.*

THANK YOU.