

EFFECTS OF LOAN PORTFOLIO MANAGEMENT ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN RWANDA: A CASE OF BANQUE POPULAIRE du RWANDA

¹LILIANE MWIZERWA, ²Dr. PATRICK MULYUNGI, ³Dr. JAYA SHUKLA

¹Student at Jomo Kenyatta University of Agriculture and Technology, Kigali, Rwanda

^{2,3}Lecturers at Jomo Kenyatta University of Agriculture and Technology, Kigali, Rwanda

Abstract: Any banking institution main goal is to operate profitably in order to maintain stability and sustainable growth. Both external and internal economic environments are viewed as critical drivers for bank performance. The main purpose of this study was to determine the effects of loan portfolio management on the financial performance of commercial banks in Rwanda for a period of 3 years, starting from the year 2014 to 2016. The study was guided by the following objectives; to determine the effects of loan risk analysis on the financial performance of commercial banks in Rwanda, to determine the impact of risk monitoring on the financial performance of commercial banks in Rwanda and to evaluate the effects of loan risk diversification on the financial performance of commercial banks in Rwanda. Firm performance was measured using Return on Equity (ROE). This study adopted a descriptive research design in soliciting information on effects of liquidity management on financial performance of commercial banks. Stratified random sampling was used to determine the sample size. The study targeted BPR management and employees totaling to 110 respondents, the sample size was 87 respondents. The study used both primary and secondary data, where questionnaires, interview and annual reports of BPR was used. Primary quantitative data was collected by use of self-administered structured questionnaires. The researcher also used secondary data derived from the audited financial statement of the commercial banks for the period 2014 to 2016. The data collected was analyzed, with respect to the study objectives, using both descriptive and inferential statistics. The data was analyzed using descriptive statistics such as mode, median, mean, standard deviation. Multiple regression analysis was employed to determine relationship between loan portfolio management and financial performance of commercial banks in Rwanda. Data was presented in tables, charts, figures and mathematical expressions.

Keywords: Portfolio, Loan, Management, Portfolio Management, Financial performance, Loan risk analysis, Loan risk diversification and Loan risk monitoring.

1. INTRODUCTION

1.1 Background to the study:

As financial intermediaries, banks play an important role in the operation of an economy. Banks are the sole providers of funds, and their stability is of paramount importance to the financial system. As such, an understanding of determinants of their profitability is essential and crucial to the stability of the economy (Babalola, 2012). The banking sector in any economy serves as a catalyst for growth and development. Banks are able to perform this role through their crucial functions of financial intermediation, provision of an efficient payment system and facilitating the implementation of monetary policies (Aburime, 2008). Loan portfolio management comprises of loan portfolio planning, customer screening and credit risk control Karekaho, (2009).

As portrayed by Magali, & Qiong, (2014), performance may be referred to as how much financial related goals and objectives of a financial institution have been refined or are being accomplished. To measure performance profitability ratios are used, ROE (Return-on-Equity) which is probably the most basic pointer of a bank's profitability and growth potential. It is the rate return to shareholders. ROA (Return-on-Assets), which exhibits how much net income, is generated per dollar of Assets Ngumi, (2014). ROE is in the region of 15% and 30%, for ROA is no under 1%. Measuring profitability is the most basic measure of the accomplishment of the business (Muriithi, 2013).

According to Naude (2015), the banking sector is considered to be an important source of financing for most businesses. Increase in financial performance leads to more improved functions and activities of any organization. It has effect on total economy of the country and the activities of any organization. This is because banks form better sources of finance for better job opportunities development of new ideas, research and overall prosperity. Lending practices are long dated and for many years up to 2007, interest rates were very low in Western countries and money was cheap (Masinde, 2015).

The economic growth of a country, region, continent, and globally in general is vitally influenced by the commercial banks trading, which are the most important financial savings and lending, mobilization and financial resource allocation institutions in an economy. In the modern economy, commercial banks have a myriad of functions (Zeller, 2001). Firstly, they provide a safe deposit for money and other valuables. Secondly, they lend money to borrowers partly because they charge interest on the loans, which is a source of income for them, and partly because they usually lend to commercial enterprises and help in bringing about development. Thirdly, they provide safe and non-inflationary means for debt settlements using cheques, in that no cash is actually handled. This is particularly important where large amounts of money are involved. Fourthly, they act as agents of the central banks in dealings involving foreign exchange on behalf of the central bank and issue travelers' cheques on instructions from the central bank. Finally, they offer management advisory services especially to enterprises, which borrow from them to ensure that their loans are properly utilized (Bessis, 2005; Tang and Jiang, 2003).

In Rwandan organizations portfolio theory provides a context to help understand the interaction of systematic risk remand. It has helped to shape how institutional portfolio are managed and fostered the use of passive investment management techniques. It led to the use of portfolio management in numerous other areas, especially in project management as more and more organizations move toward adopting a management by projects approach. According to National Bank of Rwanda (2014), Rwandan banking sector is also exposed to Different types of Risks mentioned above, through the National Bank of Rwanda (BNR) the government has set some tools and strategies to make sure that Loan Exposure Risks are mitigated. According to National Bank of Rwanda (2014), most of Rwandan financial institutions had a cut dawn in the process of loan Granting in the last quarter of the year 2012 up to first quarter 2013 and this drastic dawn word trend is suspected to be associated with Inability to apply right credit risk Management techniques. The aim of this research study is to analyze the relationship between proper loan portfolio management of BPR and its performance. BPR being one of commercial banks in Rwanda is also exposed to the same risks, thus served as a case study

1.2 Statement of the Problem:

Loan Portfolio management considers the relationship between risk and return; they assess the risk and return relationship both at the individual and portfolio levels. Banks are increasingly measuring the performance of loan portfolio by their risk adjusted returns (Sultana, 2010). Generally, the loan portfolio Management subject studies anything that is related with building a portfolio of assets (stocks, derivatives, or bonds, or even real estate) with the goal of maximizing the expected returns and minimizing the risk (Nwankwo, 2010). The main point of this research, as its title indicates, is to demonstrate the relationship linking loan portfolio management and performance of commercial banks in Rwanda.

However, the way credit risk is managed greatly determines the performance of such a bank. Many banks that failed to manage their credit risk through loan portfolio management very well have performed poorly while those ones that managed them properly have had good profits. Loan Performance of banks has attracted many researchers' minds. This is because some banks have gone under while others are facing serious default or low loan uptake (Kiplimo and Kalio, 2012). Studies carried out by Rukwaro, (2011), Kitaka, (2016), Korir (2011), Mokogi, (2003) Kisala, (2014) and Kibor et al, (2015) have shown a high diminishing rates among the MFIs however, loan portfolio management practices for commercial banks in Rwanda are not known because from literature this type of information has not yet been documented in Rwanda. Studies have been done in other countries and some studies in commercial banks in Rwanda and Sacco's but none of the studies has been done in commercial banks in Rwanda given their unique nature of providing services to the unbanked population and eradicating poverty. This paper opens a platform for a study to be carried out to fill the gap in

knowledge through studying the relationship between loan portfolio management and performance and the effect of internal control as a moderating variable in commercial banks in Rwanda. This study sought to fill this gap.

1.3 Objectives of the study:

The general objective of this study was to determine the effects of loan portfolio management on the financial performance of commercial banks in Rwanda. Case study was Banque Populaire du Rwanda. The specific objectives were; to evaluate the effects of loan risk analysis on financial performance of commercial banks in Rwanda, to determine the effects of loan risk diversification on financial performance of commercial banks in Rwanda and to determine the impact of loan risk monitoring on financial performance of commercial banks in Rwanda.

2. CONCEPTUAL FRAMEWORK

A conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Strong conceptual frameworks capture something real and do this in a way that is easy to remember and apply (Amor, 2009). The purpose of a conceptual framework is to help the reader to quickly see the proposed relationships. Figure 2.1 shows the conceptual framework identifying the various variables and their effects on the financial performance of commercial banks in Rwanda.

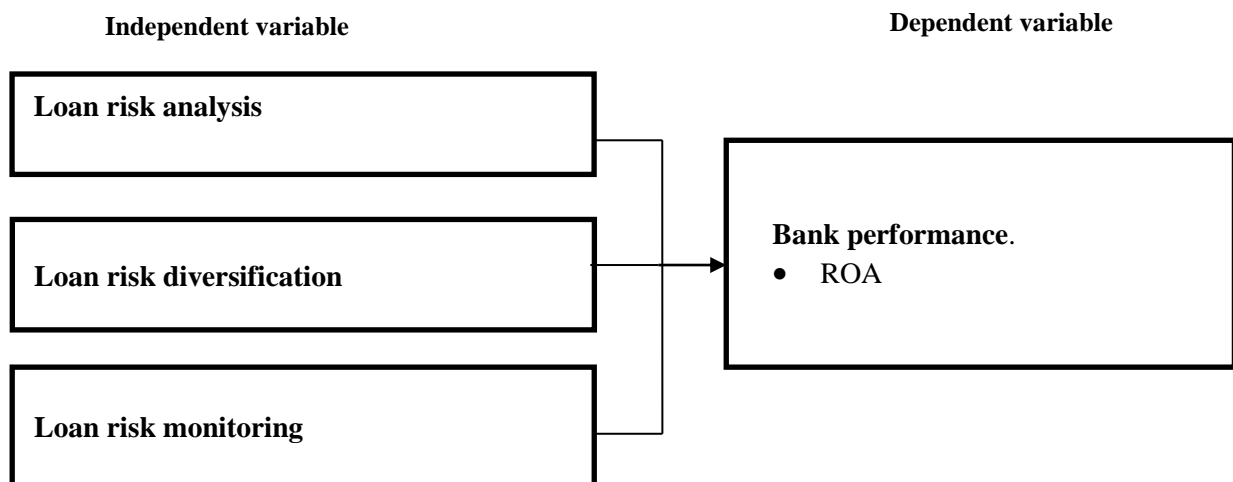


Figure 2.1: Conceptual framework

The loan portfolio management was considered as independent variable whereas dependent variables was the performance of commercial bank in Rwanda. This framework shows how Independent variable which is loan portfolio management can influence the dependent variable which is performance of commercial in Rwanda, where loan risk analysis, loan risk monitoring, loan risk diversification, system and procedure for identification and acceptance risk play the important role for improve the performance of commercial bank items of revenue gain per year, Expense, net income and profitability.

3. RESEARCH DESIGN

Manheim and Rich (1995), define research design as a plan of the study that organizes observations in such a way as to establish a sound logical basis for casual influence. The author also added that it is a plan of action adopted by researcher in carrying out the research.

This study adopted a descriptive survey. Descriptive survey research design is a scientific method which involved observing and describing the behavior of a subject without influencing it in any way (Coopers & Schindler, 2008), just it determines and reports the way things are.

The target population of this study comprised of 110 managers of BPR. These included eight boards of directors, thirty senior managers, thirty-two middle management and eighty lower managers stationed at Bank Populaire du Rwanda, Head office, (BPR, 2016). The study preferred to use managers, because are the ones who decisions in commercial banks.

A sample size of 87 respondents was determined from a total population of 110 individuals using the formula by Yamane (1967). Stratified random sampling technique was used to select the managers. Stratified random sampling technique ensure that different groups of a population are adequately represented in the sample. Stratified sampling divides the population into homogeneous groups such that the elements within each group are more alike than the elements in the population as a whole (Sekaran, 2010). In this section of sampling design, the researcher mainly strategies related to sampling techniques for easy access to right data from respondents.

$$n = \frac{N}{1 + N(e)^2}$$

Where n = the desired sample size

e= probability of error (i.e., the desired precision, e.g., 0.05 for 95% confidence level)

N=the estimate of the population size.

$$n = \frac{110}{1 + 110(0.05)^2} = 87$$

The study used both primary and secondary data to collect data to answer the specific objectives regarding loan portfolio management on the performance of financial institutions in Rwanda. Primary data was collected through scheduled interviews with the identified target managers in BPR. The researcher also employed the use of email questionnaires to fit into the need for convenience for the busy managers. A structured questionnaire with both closed ended and open-ended questions were used to use to guide the interview. However, all questionnaires were numbered to ensure the responses are tracked carefully. Secondary data was obtained from a desk top analysis that reviewed published reports, newspapers, financial journals industry regulatory laws and investor briefing reports. The study used secondary data derived from financial statement submitted to BNR by each commercial bank in Rwanda. Kothari (2014) posit that secondary data is data collected by someone else and which have already been passed through the statistical process.

4. LOAN MANAGEMENT

4.1 Aspects of loan management on financial performance:

To analyze the functionality of BPR the respondents were requested to determine the extent of implementation of portfolio management within BPR in the following aspects of financial performance of BPR. In order to achieve this, respondents were asked different question and/ or asked to indicate their level of agreement to different statement which helped the researcher to summarize the answers to the research question under investigation.

4.2 Loan risk analysis in BPR;

The study sought the view of the respondents in regard to loan risk analysis in BPR on financial performance.

Table 4.1

Statements	Mean	Std. Dev
BPR rate the loan analysis and procedure in extending loan	3.14	.744
BPR provide loan service that fit to the preference of the borrowers	3.56	.685
BPR limits the exposure to bad debts	3.73	.770
In the case of failure to pay the loan the BPR takes measure to recover it	3.88	.572
The allocation of BPR risk management deeply relies on the diversification of loan risk to decrease the NPL amount	3.45	.791
Irrespective of the state of the borrower, an NPL is written off as a default loss in BPR	3.58	.748
The loan collection technique used by BPR is effective	3.14	.744
In BPR customers are regularly contacted if payments are late	3.56	.685
BPR evaluate the loan term enforcement mechanism	3.73	.770

Table 4.1 revealed the perception of respondents on the implementation of loan risk analysis in loan portfolio management.

Generally, all nine items assessing the appreciation of respondents on the implementation of loan risk analysis in loan portfolio management showed the overall mean of 3.88 (strong). This is to conclude that respondents agreed that the loan risk analysis is highly appreciated, and this has a great influence in financial performance of BPR. This is in the line with

Lawrence (2012) identified five C's of credit. They include; Character, Capacity, Capital, Collateral, and Conditions. Character: The applicant's record of meeting past obligations, financial, contractual, and moral. Past payment history as well as any pending or resolved legal judgments against the applicant would be used to evaluate its character. Capacity: The applicant's ability to repay the requested credit. Financial statement analysis, with particular emphasis on liquidity and debt ratios, is typically used to assess the applicant's capacity. Capital: The financial strength of the applicant as reflected by its ownership position. Analysis of the applicant's debt relative to equity and its profitability ratios are frequently used to assess its capital.

4.3 Loan risk diversification in BPR:

This section illustrates the views of respondents on how loan risk diversifications implemented in BPR.

Table 4.2

Statements	Mean	Std. Dev
BPR apply risk diversification in term of portfolio management	3.56	.685
BPR use bank management systematic and unsystematic risk in terms of portfolio management	3.45	.791
Cost of loan portfolio diversification is determined in case of loan portfolio management within BPR	3.73	.770

Table 4.2 revealed the perception of respondents on the implementation of loan risk diversification in loan portfolio management.

Generally, all 3 items assessing the appreciation of respondents on the implementation of loan risk diversification in loan portfolio management showed the overall mean of 3.54 (strong). This is to conclude that respondents agreed that the loan risk diversification is highly appreciated, and this has a great influence in financial performance of BPR.

The study is similar to Afroz (2013) who declared that in order to manage the loan portfolio well in Bangladesh Krishi Bank diversified its credit portfolio among various groups of poor farmers who are engaged in horticulture, dairy, fishery, poultry, sericulture, tea plantation, irrigation equipment, farm machinery, processing and marketing of agricultural or fish produce, employment generation and poverty alleviation programs. In order to run the lending activities successfully, the study recommended the employment of graduates who can handle the portfolio management functions and train farmers on entrepreneurship.

4.4 Loan risk Monitoring in BPR:

The study sought the view of the respondents in regard to loan risk monitoring in BPR on financial performance.

Table 4.3

Statements	Mean	Std. Dev
Monitoring risk is well applied in BPR.	3.73	.744
BPR determine nature of risk during risk monitoring	3.56	.685
BPR categorizes risks during risk monitoring in term of primary risk	3.14	.704
BPR categorizes risks during risk monitoring in term of contributory risk	3.88	.572
Knowledge of controlling risk elaborates gaps of financial position	3.45	.791

Table 4.3 revealed the perception of respondents on the implementation of loan risk monitoring in loan portfolio management.

Generally, all 5 items assessing the appreciation of respondents on the implementation of loan risk monitoring in loan portfolio management showed the overall mean of 3.54 (strong). This is to conclude that respondents agreed that the loan risk monitoring is highly appreciated, and this has a great influence in financial performance of BPR. This finding is in the line with Bourke (2009) who stated that risk monitoring is very important, and it goes hand in hand with risk control. Risks in banks need to be monitored just like any project in progress. The risk manager needs to constantly do assessment and make updates where there is need so as to be sure to handle any unforeseen risks at the right time before it is too late. This is because any neglected or minimized risk can have very long term big and negative consequences since the banking activities are so interrelated.

4.5 Loan portfolio management on financial performance of BPR:

In this section the researcher wanted to assess how the operations of BPR have performed over the period of 2014 up to 2016, basing on both the respondents’ views and the existing records in the Bank’s annual reports. The financial performance of commercial bank is demonstrated by their profitability, resilience and stability. These indicators are in turn reflected by the financial information reflected in financial reports. Also, the respondents were asked to highlight financial performance of this bank in the last 5 years. The following sub-sections display different indicators of financial performance of the bank.

Table 4.4: Respondents views on financial performance in the years 2014 to 2016

Statements	Mean	Std. Dev
Controlling risk in loan portfolio management is necessary in order to reduce expenses in BPR	3.58	.748
Knowledge of controlling risk elaborates gaps of financial position in BPR.	3.14	.744
The loan collection technique used by BPR is effective to maintain the liquidity of BPR	3.56	.685
In BPR customers are regularly contacted if payments are late as the way of enhancing the profitability of BPR	3.88	.572
BPR has a state of quality standards applicable to all loan as the way of enhancing the liquidity of BPR	3.45	.791

Table 4.4 revealed the perception of respondents on the level of financial performance of BPR within the years of 2014 up to 2016. In assessing these variables 5 statements (Items) were considered and the findings are presented in the Table 4.4.

Generally, all 5 items assessing the appreciation of respondents on the relationship between loan portfolio management and financial performance of BPR within the years of 2014 up to 2016 showed the overall mean of 3.3 (strong). This is to conclude that respondents agreed that the relationship between loan portfolio management and financial performance of BPR within the years of 2014 up to 2016 is highly appreciated.

5. CONCLUSIONS

This study intended at finding out the effect of loan portfolio management on financial performance of BPR. Respondents from credit department from this Bank were selected using purposive sampling techniques and they have received and responded to the self-administered questionnaires.

The study findings reveal that there is a close relationship between loan management and financial performance achieved by BPR from 2013 to 2016. Through the assessment of respondent’s views on this relationship, the researcher found out that the loans risk analysis, loan risk diversification and loan risk monitoring were well managed, because all indicators considered at this level shown that the employees working in credit department have experience in credit management, there was professional training organized in order to keep them up to date, they have recognize being independent in loan review and the researcher found that there are lending procedures and guidelines designed and implement in order to improve loan management.

Findings revealed also that there are factors considered in loan management like credit quality, Sufficiency of credit and collateral documentation and Compliance with internal policies and procedures and applicable laws and regulations. These factors help credit managers to a common understanding of what is required and what should be done in order to avoid errors and other mismanagement which may occur with loan analysis and approval. In addition, to strengthen the loan portfolio management BPR has introduced categorization in credit analysis and approval, so that any credit may be reviewed at different levels and by different people.

Finally, the researcher assessed the respondent’s views on financial performance achieved by BPR, where they confirmed that performance to be at higher level from 2014 to 2016. This was supported by different awards received by BPR for the performance achieved, among others for being the best bank in Rwanda for several times. Furthermore, the respondents have shown that the financial performance achieved by BPR depends on an effective loan portfolio management. It was shown that it is impossible to have a good performance with a poor loan management.

5.1 Recommendations:

Referring to the mentioned results of analysis and interpretation of data from the respondents, BPR should put more effort on the following actions in order to maintain the increasing of its profit

1. BPR should make sure that all given loans are well analyzed in order to avoid the higher rate of non- performing loan.
2. BPR should make sure that all given loans are well collateralized in order to avoid the higher rate of non- performing loan.
3. BPR should hire the professional employees or make further training for the employees from loan recovery & loan evaluation departments.

5.2 Areas for Further Research:

The general objective of this study was to determine the effects of loan portfolio management on the financial performance of commercial banks in Rwanda. Further study in future can be done with emphasis on analysis of the contribution of ICT on the effectiveness of loan portfolio management in banking industry. Also, a study on the effect of Portfolio Management on the performance of private institutions in Rwanda.

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