

Effect of Credit Management on Profitability of Selected Commercial Banks in Rwanda

Mwizerwa Isaac

Masters student, University of Kigali-Rwanda

Abstract: Banking sector in Rwanda has faced various challenges that include non-performing loans and fluctuations of interest rate among others, which have threatened the bank stability. Credit management is important to bank management because banks are risk machines they take risks; they transform them and embed them in banking products and services. Risks are uncertainties resulting in adverse variations of profitability which shows the performance or in losses that show the bank's failure. The main aim of the study was to assess the effect of credit management on profitability of commercial banks. The findings revealed that client appraisal affects the bank profitability because the bank before loans to borrowers they make sure that make an assessment of that borrower to will be able to pay back the loan through collateral, capacity, capital, character and conditions. The study concluded that client appraisal affect the profitability commercial banks. The study concluded that there is a strong positive link between that credit management and profitability of selected commercial banks in Rwanda. The study therefore recommends an appropriate value at risk model for credit risk management. Banks needs to put in place rigorous measures to ensure that collateral are well assessed so that in case the borrowers are not able to repay the loans the bank recover the money lost from the collateral provided by borrowers.

Keyword: credit management, Client Appraisal, Credit risk control and Profitability

I. Introduction

Banks are financial institutions that are established for lending, borrowing, issuing, exchanging, taking deposits, safeguarding or handling money under the laws and guidelines of a respective country. Among their activities, credit provision is the main product which banks provide to potential business entrepreneurs as a main source of generating income. The importance of strong credit management for building quality loan portfolio is of paramount importance to robust performance of commercial banks as well as the overall economy (Yeager, 2018). Lending practices are long dated and for many years up to 2007, interest rates were very low in Western countries and money was cheap (Ben-Naceur&Omran, 2008). Banks need to lend as much as they can if they are going to make the level of profits that they were used to. Some banks for instance in the France lent to poorer people who had less chance of paying back their loans than the traditional customers (Ben-Naceur&Omran, 2008). To manage risks, banks invented new and complex ways to lending processes and invested in new ways way to package up the debts.

In USA, the decision to lend out finances by the commercial banks is always influenced and guided by numerous factors based on the prevailing circumstances like interest rates, economic fluctuations, and potential of the borrowers to repay the loans or advance among other factors (Godquin, 2014). The other factors guiding the lending capacity of banks are inclusive of: the bank's liquidity ratio, level of domestic and foreign investment in the economic as well as in the bank and volume of deposit for a given period. Costumer's deposits directly determine the ability of the commercial banks to lend out their finances, whenever the banks give loans or advances in excess of its cashing ability deposits amounts, the bank soon runs into difficulty in meeting its customers' cash drawings and lending ability Lindergren (1987).

Greuning, (2000) found out that it is crucial for banks to have comprehensive risk management framework as there is a growing realization that sustainable growth critically depends on the development of a comprehensive risk management framework. Kargi (2011) identified a significant effect between the way the banks manage their credits portfolio and the profitability of the banks in Nigeria. Kargi (2011) argued that failure of bank management to establish sound lending policies and adequate credit administration procedure do not have significant effect on the performance of banks in Nigeria. Elaine (2018) discovered that, habit of borrower, loan size, perception of borrowers on repayment period, source of income, availability of training, business experience, business type and family size and purpose of saving were found to be influential in determining loan repayment. Since the review of loan performance management is so important, it is primary a supervisory activity in Financial Institutions. In Tanzania, assessing credit management on loan performance involves evaluating the steps bank management takes to identify and control risk through the

credit process. In most cases, the assessment focuses on factors affecting loan performance in particular Financial Institution.

Banking sector in Rwanda has faced various challenges that include non-performing loans and fluctuations of interest rate among others, which have threatened the bank stability. According to Kargi(2011) credit management is important to bank management because banks are risk machines they take risks; they transform them and embed them in banking products and services. Risks are uncertainties resulting in adverse variations of profitability which shows the Financial Performance or in losses that show the bank's failure. Therefore, the purpose of this study was to establish the relationship between credit management and profitability of Commercial Banks in Rwanda.

1.1 Statement of the Problem

In commercial banks credit management has caused a huge loss as a result of non-performing loans whilst Sound credit management is a prerequisite for a financial institution's stability and continuing profitability, and deteriorating credit quality is the most frequent cause of poor financial performance and condition. According to Gitman (1991), the probability of bad debts increases as credit standards are relaxed. Firms must therefore ensure that the management of receivables is efficient and effective. Such delays on collecting cash from debtors as they fall due has serious financial problems, increased bad debts and affects customer relations. If payment is made late, then profitability is eroded and if payment is not made at all, then a total loss is incurred. On that basis, it is simply good business to put credit management at the 'front end' by managing it strategically.

Ariff (2020) also conduct research on bank performance and credit management found that there is a significant relationship between financial institutions performance (in terms of profitability) and credit management (in terms of loan performance). Lending or credit creation seek to maximize profitable objective of bank, the rate at which commercial banks borrow from the central bank has gone down to 7% from 7.5%. This is expected to facilitate commercial banks to borrow cheaply so that they also lend cheaply in an attempt to continue supporting Rwanda's economy. However, the biggest problem faced banking and a financial intermediary is the risk of customers or counter party default. In addition, deteriorating credit quality was the most frequent cause of poor financial performance and condition. If payment was made late, then profitability was eroded and if payment was not made at all, then a total loss was incurred. Therefore, the study assessed the effect of credit management practices on profitability of commercial banks.

II. Literature Review

2.1 Capital Asset Pricing Model theory

The Capital Asset Pricing Model (CAPM) was first developed by Sharpe (1964) and Markowitz (1991). Sharpe and Lintner version of CAPM was based on the one period mean variance portfolio theory of Markowitz. The Markowitz assumes that investors are risk averse and only care about risk (variance) and return (mean) of theory one period investment return. Therefore, investors chose mean variance -efficient portfolio, meaning that they either maximize the expected return, giving a certain variance of portfolio return or minimize the variance given a certain expected return. To obtain the CAPM in the basic form some assumptions need be fulfilled and are explained in the following: Firstly, investors are risk adverse as in Markowitz Model and evaluate their investment only in terms of expected return and variance of return measure over the same single holding period. The second assumptions is that Capital market are perfect meaning that all assets are indefinitely divisible, that no transactions cost, short selling restrictions or taxes occurs, that all investors can lend and borrow at the risk free rate and that all information is costless and available for everyone.

2.2 Asymmetric Information Theory

The asymmetric information theory was brought to light by Vickrey and Mirrlees, award winners of Nobel Prize for the economics of asymmetric information. The problem of the economics of information and the special issue of asymmetries of information had been under discussion for some time prior to the crucial breakthroughs by Akerlof, Spence, and Stiglitz in the 1970s (Shao and Yeager, (2018). Information asymmetry refers to a situation where business owners or manager know more about the prospects for, and risks facing their business, than do lenders (Eppy 2005). It describes a condition in which all parties involved in an undertaking do not know relevant information. In a debt market, information asymmetry arises when a borrower who takes a loan usually has better information about the potential risks and returns associated with investment projects for which the funds are earmarked. The lender on the other hand does not have sufficient information concerning the borrower (Edwards and Turnbull, 2014). Binks and Ennew (1997) point out that perceived information asymmetry poses two problems for the banks, moral hazard (monitoring entrepreneurial behavior) and adverse selection (making errors in lending decisions). This is because data needed to screen credit applications and to monitor borrowers are not freely available to banks. Bankers face a situation of information asymmetry when assessing lending applications (Binks and Ennew, 1997). The information required to assess the competence and commitment of the entrepreneur, and the prospects of the business is either not available, uneconomic to obtain or difficult to interpret. Thus creates two types of risks for the Banker (Deakins and Hussain 1999).

2.3 Empirical review

2.3.1 Client appraisal and Profitability

Ahmed and Malik (2015) examined on loan performance and CRM taking empirical evidence from Pakistan. Multiple regression analysis was used. The study found that client appraisal and credit terms had a significant positive influence on the loan performance whereas collection policy and credit risks had a positive but insignificant influence on how the loans performed. The study was based in Pakistan which has different social and economic structures from those in Kenya. The current study looked at the specific practices affecting loan performance of commercial banks in Kenya. Mulyungi et al (2018), conducted research on the client appraisal and profitability of commercial banks in Rwanda, the purpose of this study was therefore to establish the Effect of Client appraisal on financial performance of Financial Institutions in Rwanda. The results confirmed a linear, positive and significant relationship between client appraisal and financial performance with Thus, the study concludes that client appraisal, on the basis individuals and businesses financial and physical characteristics in credit scoring models and utilization of the credit reference bureau and client credit risk analysis on individuals is key in identifying appropriate and reliable clients for disbursement of bank loans. Hence, it is imperative that banks in Rwanda adopt appropriate appraisal strategies that enhance identification of suitable clients and borrowers to minimize on loan defaulters. Such strategies may include a combination of individual and businesses characteristics, financial and physical characteristics, credit scoring models, utilization of the credit reference bureau and client credit risk analysis amongst others.

H₀₁: Client appraisal has no significant effect on Profitability of commercial banks in Rwanda

2.3.2 Credit risk control and Profitability

Harley (2019) conducted a research on the impact of credit risk management on commercial banks' performance in Nigeria from 2013 to 2017 on a panel data analysis. The key objective of the study is to find out the impacts of nonperforming loans and performing loans on capital adequacy ratio. The Generalized Method of Moments (GMM) regression results, the study found out that there is a negative relationship between non-performing loans and capital adequacy ratio in the Nigeria banking sector. The study therefore recommends an appropriate value at risk model for credit risk management in the Nigeria banking sector. Otieno and Nyagol (2016) investigated on CRM practices and performance. The research results were that the parameters of credit management had a significant negative correlation with the performance measures. The research did not explore how credit risk management affected loan performance but rather looked at performance in general of which the results can only be applied on performance. However, the study confirmed the importance of managing credit risks on performance. Alshatti (2015) has examined the effect of credit risk management on financial performance of the Jordanian commercial banks during the period 2005-2013 credit interest/credit facilities ratio. Kodithuwakku (2015) has analyzed the impact of credit risk management on the performance of the commercial banks in Sri Lanka. The study concludes that commercial banks consider credit terms necessary for its financial success and thus debt collection policy is necessary.

H₀₂: Credit risk control has no significant effect on Profitability of commercial banks in Rwanda

III. Methodology

The study adopted descriptive research design which is concerned with finding out what, where and how of a phenomenon. Kothari (2017) defines descriptive research studies which are concerned with describing the characteristics of a particular individual or of group. Inferential statistics were used to draw inferences from the data. Multiple linear regression analysis was applied in the study to test the formulated hypotheses and expressed as;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where,

Y = Profitability

X₁ = Client Appraisal

X₂ = Credit risk control

β_0 = Constant

$\beta_1 - \beta_2$ = Coefficient of estimates

ε = Error term

IV. Results

4.1 Correlation results

Statistical findings in Table 1 revealed that there was a positive and significant correlation between client appraisal and profitability ($r = 0.392, p < 0.05$). Again, the correlation between credit risk control and profitability was a positive and significantly associated at ($r = 0.358, p < 0.05$). Therefore, it was concluded that the client appraisal and credit risk control were positively correlated to profitability at 5% level of significance.

Table 1 Correlation Matrix

	Profitability	Client Appraisal	Credit risk control
Profitability	1		
Client Appraisal	0.392*	1	
Credit risk control	0.358*	0.207*	1

* Correlation significant 5% (2-tailed).

4.2 Hypothesis Testing

The statistical findings in table 2 depicted that there is presence of the association between the variables ($R^2 = 0.629$) implying that the combined prediction of the two predictor variables accounted for approximately 62.9% of the total variation on profitability of commercial banks in Rwanda. The model was fit in predicting the contribution between the study variables which was statistically significant at 0.05 level of confidence ($F = 10.75, p < 0.05$).

The first hypothesis stated that client appraisal has no significant effect on profitability of commercial banks in Rwanda. The study findings revealed that client appraisal had a positive influence which was statistically significant ($\beta = 0.212, p < 0.05$) hence client appraisal had a positive and significant effect on profitability of commercial banks in Rwanda. This therefore implies that a unit change in client appraisal increases profitability by 0.212 units.

The second hypothesis stated that credit risk control has no significant effect on profitability of commercial banks in Rwanda. Results showed that there was a positive and significant effect on credit risk control and profitability of commercial banks in Rwanda ($\beta = 0.237, p < 0.05$). This implies that a unit change in credit risk control enhances profitability by 0.237 units.

Table 2: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		
	Beta	Std. Error	Beta	T	Sig.
1 (Constant)	0.702	0.122		5.75	0.00
Client Appraisal	0.389	0.255	0.212	1.525	0.04
Credit risk control	0.800	0.482	0.237	1.659	0.04
Model Summary					
R	0.773				
R Square	0.629				
F	10.75				
Sig.	0.000				

* Significant at 0.5 level (2-tailed), ** Significant at 0.01 level (2-tailed)

5.0 Conclusion and Recommendation

The study is analyzed the effect of credit management on profitability of commercial banks in Rwanda. The existing literature showed that credit management improves profitability of selected commercial banks. The study concluded that there is a strong positive link between credit management and profitability of selected commercial banks in Rwanda. The study revealed that client appraisal affects the bank profitability because the bank before loans to borrowers they make sure that make an assessment of that borrower to will be able to pay back the loan through collateral, capacity, capital, character and conditions. The researcher conclude that client appraisal affect the profitability of commercial banks. The author concludes that all the credit risk control has significant effect on improves profitability of selected commercial banks. The study therefore recommends an appropriate value at risk model for credit risk management. Banks needs to put in place rigorous measures to ensure that collateral are well assessed so that in case the borrowers are not able to repay the loans the bank recover the money lost from the collateral provided by borrowers.

The researcher is also recommended to carry out studies on:

- The effect of impact of non performing loans management on profitability of commercial banks.
- The effect of loan portfolio management on financial performance of commercial banks in Rwanda.

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