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EFFECT OF CREDIT RISK MANAGEMENT ON THE PERFORMANCE OF FINANCIAL INSTITUTIONS; A CASE OF AB BANK RWANDA

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Abstract: This study aimed to assess the effect of credit risk management on performance of financial institutions; a case of AB Bank Rwanda. The research was based on certain goals. The study's first objective was to determine the relationship between client appraisal and performance of AB Bank Rwanda; to determine the effect of credit risk controls on the performance of AB Bank Rwanda; to assess the effect of loan supervision on the performance of AB Rwanda; and to analyse the effect of credit collection and recovery policy. To accomplish the aforementioned objectives, a mix of surveys, interviews, document reviews, and other reports were used. Questionnaires were provided to a set of 71 respondents, and all 71 questionnaires were properly filled out and returned for analysis. In addition, the director of Credit delivery were interviewed, Universal sampling was used.

Since the population size, which comprises employees of credit delivery and recovery, finance and internal audit departments at the AB Bank Rwanda headquarters, was insufficient to cover the whole population. Using SPSS descriptive statistics, the influence of internal audit on the project performance of financial institutions in Rwanda were examined. Using correlation analysis and regression analysis, the link between the research variables were determined.

1. General Introduction

This chapter provides basic information on the background of the study, the statement of the problem, the research objectives, the research questions, study scope and the study significance. The basic of the study is the effect of credit risk management on the performance of financial institutions.

1.1 Background of the Study

The history of credit risk management can be traced all the way back to the period after industrialization of the Western World, Europe and Asia. This was due to the fact that banking was never left out after general industrialization in the West; hence, the need for credits or loans was a necessary need. However, most consumers could expect to pay cash or use a credit card when making a purchase, commercial customers typically wanted to be billed for any products and services they could buy. There was a need to decide how much credit they could be willing to extend and under what circumstances. However, there was no one-size-fits-all credit policy; their policy was based on their particular business and cash-flow circumstances, industry standards, current economic conditions, and the degree of risk involved (Feo et al., 2019).

In India, when a bank strategy, procedure and directives have been carefully formulated and administered from the top and well-understood at all organizational levels, it enables the bank to maintain proper credit standards, avoid excess risk and evaluate business opportunities properly (Grawitz, 2019). A series of studies conducted in Asia have consistently shown that there is a large demand of capacity building, with the type of services demanded depending on the maturity of the financial institution. There is a number of local capacity building service providers but some tend to offer similar services on a narrow range of topics routinely accessing public domain training materials (Howard et al, 2015).

In Latin America, Howard et al, (2015) asserts that financial institutions (FI) have a challenge of identifying and responding appropriately to the different needs of their members through designing needs of their members, through designing credit policies and reviewing existing ones with a focus of meeting those needs and sustaining the institutions. According to Wolfgang (2014), there is an increasing competition between FIs and commercial banks in the delivery of financial services to clients in the community, FIs are constrained with the expansion of their credit services due to limited portfolio. The main aim of every banking institution is to operate profitably to maintain its stability and improve in growth and expansion. In the last twenty years, the banking sector has faced various challenges that include non-performing loans (NPL), political interference and fluctuations of interest rate among others, which have threatened the banks stability.

African Development Bank (2021) cited that the Credit and Portfolio Management Policies Manual is intended to help staff and board make loans that meet the project-related credit needs of community development organizations in localities while simultaneously meeting the obligations to investors for safety, liquidity, and social and financial returns. Also the credit and portfolio management policies are intended to help staff and Board make loan decisions, and manage and monitor the Loan Fund's risk related to diversification of the bank borrowers, type of project financed, and terms of credit extended while simultaneously maintaining liquidity and income sufficient to meet all of the set bank's obligations to investors (William, 2019). Okwor (2020) urged that in Nigeria, credit management guidelines must express a general course of action. It can be supplemented, however, with some procedures that can guide daily functions. The question of companies having policies with differing contents is worth mentioning. Bank of Uganda reported that credit policies differ in both length and content. Concerning length, some are as short as several paragraphs, while others can go on for many pages. As one might suspect, there are advantages and drawbacks to each approach. In a positive sense, a detailed policy leaves little room for doubt. Procedures are spelled out, and employees need only refer to their manual to know how to perform. There will be no gray areas between departments, and consistency will reign. On the other hand, long and excessively detailed management policies can limit employee creativity or empowerment. New ideas on how to work in a changing world will be superseded by a set of omniscient regulations. In addition, a huge volume of rules can be overwhelming (Kanyesigye, 2019).

In Rwanda, financial institutions are a part of the banking industry. The local people pooling their savings and other resources together form them and providing appropriate finance and non–financial services to their clients of the MFI, are co-owners of the co-operatives and have equal privileges, opportunities and responsibilities (BNR, 2022). According to Walker (2013), credit policy creates a common set of goals for the organization and recognizes the

credit and collection department as an important contributor to the organization's strategies. If the credit policy is correctly formulated, carried out and well understood at all levels of the financial institution, it allows management to maintain proper standards of the bank loans to avoid unnecessary risks. Hence, the need for a study on the effect of credit risk management on the performance of financial institutions taking AB Bank Rwanda as a case study.

1.2 Problem Statement

Banks in Rwanda are having own rules and regulations at which they follow for credit/loan delivery and recovery in addition to the central banks rules and regulations to the banks in Rwanda as it is striving to increase customers it simplifies the process of loan delivery and recovery and this seems as weakness on the financial market, in addition to the poor performance of some staff mainly these in charge of loan/credit delivery as observed in some banks in Rwanda. (MINECOFIN, 2022). The total Rwandan banking sector lending to these sectors stood at 20.1% as at end June 2020. In the prevailing conditions of lower external demand, firms in these sectors are significantly performing below their potential, with little or no revenues to service their outstanding loans and this increases credit risk for banks and could induce losses and capital erosion.

According to BNR (2021), the financial sector remains dominated by the banking sector, which accounts for 67.0 percent of the total financial sector assets especially in form of loans for stance the banking sector increased lending by 15.4 per cent to close the year at Rwf1230bn compared to a contraction of 8.2 per cent. However, according to BNR (2022), in 2021 banks wrote off Rwf75bn whereas Rwf22bn was written off in 2020. A loan write-off is an action taken by the lender when the chances of loan recovery are almost zero and its assets are non-performing. This enables the bank wishes to maintain a clear record of the unrecovered loan amount in their balance sheets. The statistics further show that loans in watch category (loans where repayment is late by 30 to 90 days) increased by 77 per cent to Rwf489 in December 2021 14.2 per cent from Rwf277 billion. In response to the perceived credit risk outlook, banks have increased their provisions by Rwf48bn to Rwf189bn in December 2021 leading to the provisions coverage ratio of 119.8 per cent.

In line with the above, although the statistics which was cited in the above reports could have been affected by the COVID-19 pandemic outbreak, the researcher desires to tackle other possible factors that influence performance of financial institutions — and in particular credit risk management. This study, therefore, will assess the effect of credit risk management on the performance of financial institutions in Rwanda, a case of AB Bank Rwanda.

1.3. Specific Objectives

- 1. To determine the effect of client appraisal and performance of AB Bank Rwanda;
- 2. To determine the effect of credit risk controls on the performance of AB Bank Rwanda;
- 3. To assess the effect of loan supervision on the performance of AB Rwanda;
- 4. To analyze the effect of credit collection and recovery policy on the performance of AB Bank Rwanda.

2. LITERATURE REVIEW

2. 1. Theoretical Review

The theories, pertinent to credit risk management and financial performance reviewed in this study are transaction theory; in-kind finance theory and modern portfolio theory. These are discussed below:

2.1. Transaction Cost Theory

Schwartz (2014) proposed the theory; this hypothesis deduces that providers may have a high ground over customary loan specialists in checking the credit value or genuine monetary circumstance of their clients. Providers additionally have a favoured capacity to screen and pressure reimbursement of the credit. Every one of these superiorities may give providers a cost favourable position when contrasted and money related organizations. This theory conjectures that suppliers may have an advantage over traditional lenders in checking the real financial situation or the credit worthiness of their clients (Coase, 2013). There are three wellsprings of cost-preferred standpoint as characterized by Petersen and Rajan (2017); securing of data, controlling of the purchaser and rescuing esteem from existing resources. The main wellspring of cost preferred standpoint can be clarified by the premise that

dealers can get data about purchasers at lower cost and speedier since it is acquired in the ordinary course of business.

Therefore, transaction costs arise every time a product or service is being transferred from one stage to another, where new sets of technological capabilities are needed to make the product or service. Managers must therefore weigh the internal transaction costs against the external transaction costs, before the company decides whether or not to keep some activity in-house. Williamson (2021). Transaction cost theory is great importance on credit standards since in order for the deposit taking AB Bank Rwanda Nyarugenge branch. To determine a credit worth and potential creditor they need to have genuine credit standards. Therefore transaction cost theory is of great importance to credit management since all enables organisation to practice credit standards which needs to be influence in order for it to have a great impact on financial performance of the AB Bank Rwanda Nyarugenge branch these is because the AB Bank Rwanda is assured that the creditor will pay his debt hence reduces default in credit risk (Wright, 2010).

2.2. Credit Risk Theory

Credit risk theory was introduced by Melton in 1974. The theory states that the default event derives from a firm's asset evolution modeled by a diffusion process with constant parameters. It views default as put option available when circumstance is economically attractive to the borrower to exercise the default option. In this model, the default can happen throughout the life of a corporate bond and not only in maturity. The application of this theory is that MFIs should consider the ability of repayment by a borrower before issuing loan. The critique of this theory is that the parameters of determining credibility of a borrower are dynamic and sometimes specific to a particular organization and so it is not good practice to provide standard parameters without cognizant of the dynamics situations each MFI faces. However, a credit environment cannot operate on the assumption that every MFIs shall be guided by its circumstances to determine borrower credit ability (Burkart & Ellingsen, 2012). Robust financial management practices are associated with better financial performance of microfinance institutions. Efforts by the MFIs management to improve financial performance must be matched with adoption of financial management practices that provide MFIs with sustained competitive advantage over their rivals (Rahaman, 2010). Credit risk is the potential that a financial institutional borrower or counterparty will fail to meet its obligations in accordance with agreed terms. According to Chijoriga (2013), credit risk is the most expensive risk in financial institutions and its effect is more significant as compared to other risk as it directly threatens the solvency of financial institutions. The magnitude and level of loss caused by the credit risk as compared to other kind of risks is severe to cause high level of loan losses and even institutional failure. Thus, offering an additional dollar of trade credit does not force a firm to reduce its real investment by one dollar (Schwartz, 2014) Firms in financial distress increase their supply of trade credit, a result that they consider surprising. Trade credit should have shorter maturity than bank credit as trade credit loses its advantages once illiquid input is transformed into liquid output that is why bank credit is routinely rolled over, whereas trade credit is not.

2.3. Modern Portfolio Theory

Portfolio theory was developed in 1950"s through the early 1970"s and was considered an important advance in the mathematical modeling of finance. Since the 1980s, banks have successfully applied modem portfolio theory (MPT) to market risk. Many banks are now using earnings at risk (EAR) and value at risk (VAR) models to manage their interest rate and market risk exposures. Unfortunately, however, even though default risk remains the largest risk facing most banks, the practical of MPT to default risk has lagged (Margrabe, 2012).

Conceptual Review

In the conceptual review section, the researcher presents the conceptual literature related to the main variables of this research, including the concepts of credit management; the concepts of client appraisal; concepts of credit risk controls; concepts of credit collection and recovery policy, loan supervision and concepts of financial institutions performance.

Literature on Credit Risk Management

Credit risk refers to the probability of loss due to a borrower's failure to make payments on any type of debt. Credit risk management is the practice of mitigating losses by understanding the adequacy of a bank's capital and loan loss reserves at any given time – a process that has long been a challenge for financial institutions. The global financial crisis – and the credit crunch that followed – put credit risk management into the regulatory spotlight. As a result, regulators began to demand more transparency. They wanted to know that a bank has thorough knowledge of customers and their associated credit risk. In addition, new Basel III regulations will create an even bigger regulatory burden for banks (Schwartz, 2014).

Literature on Performance in Financial Institutions

Financial intitutions financial performance is assessed by giving a summary of how the banks' business incurs its revenues and expenses through both operating and non-operating activities. It also shows the net profit or loss incurred over a specific accounting period, typically over a fiscal quarter or year. The income statement is the one of the three major financial statements. The other two are the balance sheet and the statement of cash flows. The income statement is divided into two parts: the operating and non-operating sections. In addition, one key area of financial analysis involves extrapolating the company's past performance into an estimate of the company's future performance (Garry et al, 2014)

Empirical Review

Mukhopadhay (2013) conducted a study on the factors that affect credit risk management successful application in the banking sector towards financial performance in Europe. He found out that despite the efforts put by the governments through reforms towards adoption of e-banking still remains a major challenge for many banking functions. The findings further revealed that successful implementation of e-banking established systems and feedback mechanism. They associated e banking with improved financial performance in most banks UK. Findings of study done by Naale et al. (2013) on e-banking revealed that e-banking facilitates the increase of customer base mostly form rural areas which in turn enhances transparency and accountancy especially in banking. The research further revealed that e banking is associated with improved efficiency and enhanced banking operations. Other benefits of e banking include increased customer satisfaction, improved professionalism in the banking functions improving public perceptions the banking sector.

In his study, Gopinath (2015) found out that credit risk management solutions lead to improved satisfaction of customer demands, improved contract compliance, enhanced supply chain capacity, reduced bank operational costs and improved human resource management. The group identified the keys to e-banking success. They pointed out that e banking should not be treated as a strategy, the commercial bank must know what is spent on, the bank must have a plan, the application of electronic banking commences by benchmarking, the application of electronic banking needs to be controlled from the topmost, the application of e-banking must be supported by other functional areas.

Phannindra et al (2015) explored internal and external organizational factors influencing credit risk management its systems by commercial banks in Jordan. The authors used a model covering the factors that supported mobile banking adoption using confirmatory factor analysis. This allowed an exploration of the relationships between factors, and facilitated both quantitative and qualitative approaches to the research. These included interviews to measure awareness and adoption in e banking among SMEs in Jordan. The study found that the adoption of this stagey by SMEs has been influenced by both internal and external banking industry factors, mainly readiness, strategy, manager's perceptions and external factors by partners. The study suggested that the most important factors influencing the achievement of maximum benefit were readiness and external pressure.

Kwebena (2013) conducted a study identifying the variables that influenced the adoption of mobile banking, namely: top management support, organizational competency, IT capability, perceived benefits, perceived comparability, perceived complexity, supporting industries, and market and government readiness. The results of the study indicated that banks with top management support and commitment to e banking have a better chance of adopting retail banking. Furthermore, banks with suitable IT and business resources and proper infrastructure are more likely to adopt excellent retail banking activities. Unavailability of reliable and efficient banking strategies has affected performance of most of the banking institutions in Rwanda hence reduced profits in the downstream chain thereby leading to loss of chain profits.

Credit risk management changes are inevitable in many sectors, which include the financial sector. Internet banking

has totally evolved and competition has intensified among banks after the introduction of online banking and mobile banking, which are the main pillars of electronic banking. The penetration of the internet into new areas has presented banks with new markets and distribution channels. Allen, McAndrews and Strahan (2012) describes electronic banking as "the provision of financial services through electronic computing and communication". In today's markets, banks are changing to multi-channel distribution of services by the means of hybrid platforms where the traditional forms of banking are offered through branches as well as the internet.

After their successful study, Barahona and Elizondo (2012) reiterated that technology in credit risk management is a great medium of transacting businesses in banks for efficiency. Through electronic payment systems like credit cards and sms banking, not mention online advertising like Google ads and online shipping like Japan car trade view, businesses are meant to boom simply through use of banking technology tools. They added that African countries need to have real time updates about the Stock exchange's daily market status in order for them to develop an efficient investment mind. Technology also integrates a given economy into the global economy. Through internet based banking, an economy is able access a global market hence resulting into better balance of disbursements at the conclusion of the financial year.

Gap Identification

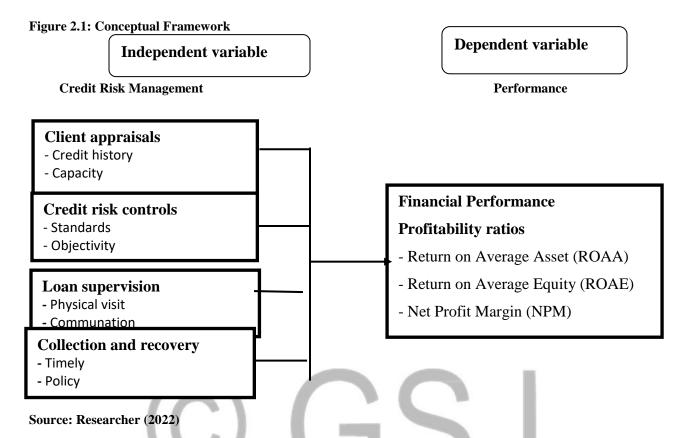
Most researchers urged that the pressure of globalization and competition from all over the industry strike commercial banks. The question of what drives financial performance is at the top in understanding bank managers and superior performance and hence striving for it. Substantial research efforts have gone into addressing this question, starting from the premeditated level and going down to operational details.

However, for my present study, the research believes that Rwanda is still faced with some challenges, which need to be addressed in order to promote effective and efficient institutional adoption, and performance and these are the individual's feelings/intention towards the use of new innovation. The development of an efficient monetary transfer system in Rwanda has been hampered by so many factors. Rwanda is faced with infrastructural deficiency such as erratic power supply and communication link in some areas, inadequate skilled managers and requisite tools on end users, high charge or cost for the e-payment terminals, so the strong legislation should set out standard charges for e-services.

Hence, this study seeks to illustrate if the credit risk management significantly affect the performance of Rwandan commercial banks. The implementation of effective credit risk management by most commercial banks can vary widely, from the simple use of mobile banking to the more innovative use of online platforms to provide services to users including capital, influence and partners. Credit risk management services specifically adoption of client appraisal, credit risk controls, credit collation and recovery policy and loan supervision have been realized among the commercial banks in today's banking sector.

2.5 Conceptual Framework

The conceptual framework below exemplifies the relationship between the independent variables on one hand and the dependent adjustable on the other hand.



The model is a simple flow chart establishing the relationships between the constructs of the study. The attitude toward using, in turn is a function of two variables (credit risk management and performance).

Credit risk management factors include client appraisal, credit risk controls, loan supervision, collection, and recovery policies. Financial performance as measured in terms profitability ratios in particular the return on asset, return on equity and net profit margin. This study stems primarily on three theories; transaction cots theory, in-kind finance: a theory of trade credit and modem portfolio theory. These theories enhance understanding of innovative strategies in the commercial banks like credit risk management.

3. RESEARCH DESIGN AND METHODOLOGY

Research Design

According to Burns (2013), research design is "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings". In the same time, Saunders et al (2016) argued that research design is a framework that is used by researcher to collect and analyze data. This research adopted descriptive and correlational research designs. Researcher used descriptive to describe variables and determine frequency with which something occurs or relationship between the variables of this study. Explanatory design helped researcher to explain the relationship between credit risk management and performance of AB Bank Rwanda and exploratory design helped researcher to gather preliminary information that help to define problems and recommend solution.

Study Population

According to Kenneth, (2010), a population is a universe or sum of all units of analysis. Sommer, (2012) defines a population as the total number of items in a specified field of inquiry and he added that population is an asset of cases about which one wishes to draw some conclusions. The study was carried out at AB Bank Rwanda. Considering the population as the totality of persons or objects with which a study is concerned, the population to be consult in this study is seventy-one (71) staffs from credit delivery and recovery, finance and internal audit departments.

Table 3.1: Research Population Composition

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Respondents' Category	Population
Credit and recovery	21
Finance	34
Internal audit	06
Total	71

Source: AB Bank Rwanda HR Department (2022)

4. SUMMARY OF MAJOR FINDINGS

The study was about the effect of credit risk management on the performance of financial institution. Case of AB bank Rwanda (2019-2021) Specifically this study examined the extent to which AB bank use collection policy in Credit risk Management; determined the extent to which AB bank use client appraisal in Credit risk Management analyzed the extent to which AB Bank use credit risks control, assessed the level of financial performance of AB Bank within the period of 2019-2021 and determined the effect of credit risk management on the performance of AB Bank.

The relationship between two variables also were assessed and results on linear regression revealed that there is higher positive correlation between total loans and the return on assets, return on equity, net profit margin and net profit at AB Bank Rwanda, this implies that the main source of profitability at AB Bank is through loan portfolio. This result is similar to ahamedlebbe (2020) where the study revealed that Pearson's correlation test and regression are used to analyze the data, show that there is a strong positive correlation between loan performance and banks' net profit of banks.

Conclusions

From the findings, the study found that client appraisal, credit risk control and collection policy contribute on financial performance of AB Bank. The study established that there was strong relationship between financial performance of AB Bank and client appraisal, credit risk control and collection policy.

The study revealed that a unit increase in client appraisal would lead to increase in financial performance of AB Bank, this is an indication that there was positive association between client appraisal and financial performance of the AB Bank understudy, an increase in credit risk control would lead to increase in financial performance of AB Bank, which shows that there was positive relationship between financial performance of this AB Bank and credit risk control and a unit increase in collection policy would lead to increase in performance; this is an indication that there was a positive relationship between financial performance of AB Bank and collection policy. Client appraisal, credit risk control and collection policy significantly influence financial performance of AB Bank Rwanda. Thus, the researcher concluded that there was a strong positive relationship between the study variables as shown by both correlation and regression analysis since they both indicated positive and significant effect of credit management (client appraisal, credit risk controls, and electronic loan supervision and credit collection and recovery) on performance of AB Rwanda. Therefore, no the study's null hypotheses were accepted.

RECOMMENDATIONS

Recommendations were developed based on data, discussion, and conclusions from the study;

The study recommends that AB Bank should enhance their collection policy by adapting a more stringent policy to a lenient policy for effective debt recovery.

The study also recommends that there is need for AB Bank to enhance their client appraisal techniques to improve their financial performance.

Through client appraisal techniques, AB Bank will be able to know credit worth clients and thus reduce their non-performing loans. There is also need for AB Bank to enhance their credit risk control this will help in decreasing default levels as well as its non-performing loans. This will help in improving their financial performance.



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