The International Journal of Business Management and Technology, Volume 5 Issue 6 November–December 2021
ISSN: 2581-3889

Research Article Open Access

Loan Portfolio Management and Performance of Financial Institutions in Rwanda

Seraphine Uwimabera
Masters student, University of Kigali-Rwanda

Abstract: Lending is the principal business activity for most commercial banks. The loan portfolio is typically the largest asset and the predominate source of revenue. The main purpose of the study was to examine the relationship loan portfolio management and performance of financial institutions in Rwanda. The study was anchored on Modern Portfolio Theory and Customer-Supplier Relationship Theory. The study used descriptive design in providing an in-depth study and analysis. The findings indicated that portfolio planning is a key indicator in enhancing performance of financial institutions. As evidenced from the findings, the study concluded that there is a strong positive relationship between portfolio planning and clients screening on the performance of financial institutions. The study recommends that clients need to be trained on how financial institutions work; there is still a need in establish proper methods in approaching clients by increasing agents and number of branches as some financial institutions are located away from rural areas and are only accessible in urban centers. There is still a need in sensitizing citizens on how loans work, and expose them to the most factors that could lead to loss in case someone asked for a loan. There is still a need in collaborating between different financial institutions to avoid confusion regarding financial policies in Rwanda.

Keywords: Loan Portfolio Management, Portfolio Planning, Clients Screening and Performance

I. Introduction

Loan portfolio management (LPM) is the process by which risks that are inherent in the credit process are managed and controlled (Comptroller's Handbook, 2017). 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. Loans are primary source of profitability for most financial institutions, especially depository institution: unfortunately, the loan portfolio is a major source of risk (Sarraf, 2006), According to Van-Horne(2012), careful management and monitoring of loan portfolio cycle, generates profitability while maintaining risks at acceptable levels, The lending activities of Commercial banks should be taken in a prudent and acceptable manner that will unduly ensure the safety of depositor's money which brings loss of confidence in the stability of banking and financial system, loan portfolio problem rise widespread concern as problems disrupt the flow of credit to households and enterprises reducing investment and saving and possibly force banks to close their doors.

Banks are key financial intermediaries or institutions that serve as "middleman" in the transfer of fund from servers to those who invest in real assets as house, equipment, and factories. In performing this function financial intermediaries improve the well-being of both saver and investor. By improving economic efficiency, they raise living standard of the society. Commercial banks make the productive utilization of ideal funds, thus assists the society to produce wealth. Commercial banks are the institutions specifically designed to further the capital formation process through the attraction of deposits and extension of credit (Turnbull, 1997). Therefore, effective management of loan portfolio's loan risk requires that the board and management understand and control the bank's risk profile and its loan culture. To accomplish these, they must understand the portfolio's product mix, industry and geographic concentrations, average risk ratings, and other aggregate characteristics (Van-Horne (2012)

The situation with the loan portfolio performance of Uganda's MFIs generally and those in Wakiso district in particular, is not any different (Kagwa, 2010). Despite the ongoing Uganda government's policy of encouraging and supporting establishment of MFIs as vehicles for reducing poverty through helping the poor have easy access to capital, many of these institutions achieve poor loan portfolio performances (Ministry of Finance, Planning and Economic Development,

2014). This has hit them so much that a number of them have not only frustrated the achievement of their clients' business goals but have themselves also failed to survive in business. The Government of Rwanda with central bank has developed in 2005 the policies lead banks management where every financial institution uses various techniques of mitigating credit risk. The most common techniques are collateral, guarantees, netting off of loans against deposits of the same counter-party. The payments are made against the receipts and then the balance is paid hence reducing the credit risk. Credit Insurance, factoring, debt collection, surety bonds, and letter of credit are other techniques widely used (National Bank of Rwanda, 2019).

Banks' loan portfolio remains concentrated to trade and mortgage sectors, although this slightly reduced in June 2019. The combined share of mortgage and trade loans in the total banking sector loans stood at 50.3 percent in June 2019, down from 54.3 percent in June 2018 as banks diversify their lending to manufacturing, consumer loans and communication. The high banking sector exposure to trade and mortgage sectors remains among key risks facing the financial sector. With this structure, shocks to the mortgage sector like fluctuation of housing prices, rental prices and occupancy rates would weigh on the Banking sector performance

According to BNR annual report (2010), the major business of commercial banks is acceptance of deposits of customers and provision of loans to those who need money in business or for personal use. In these commercial banks managing loan portfolio is very crucial to sustain in banking industry. However, according to (National Bank of Rwanda, 2020) some of these banks are indicating the failure of managing loans given to customers, due to poor assessment of the customer's capability or solvability to repay the loans, lack procedures to pursue the loans provided to customers for answering these problems related, they require the commercial officer to improve on how loan portfolio is managed for increasing its financial performance in related banks which are commercial banks. The loan portfolio is insufficient and supply of nonperforming loans is alarming to the extent of causing liquidity problems and consequential closures (National Bank of Rwanda, 2020) this situation raises concern, leading to the need to examine loan portfolio management and performance of financial institutions in Rwanda.

II. Literature Review

2.1 Modern Portfolio Theory (MPT)

Modern portfolio theory (MPT) is a theory of investment which tries to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets (Sharpe and William, 1964). In conventional portfolio theory one typically seeks to minimize portfolio variance for a given expected portfolio return (Markowitz, 1991; Elton and Gruber, 1995).Nevertheless, in the case of the modern portfolio theory, the performance of the past never provides a guarantee for the result that could arise in the future. Considering only the past performances sometimes leads to overpassing the newer circumstances, which might not be there when historical data were considered but could play an important role in making the decision. In this theory, there is an assumption that securities of any of the sizes can be bought and sold, which hold true as some of the securities doesn't have minimum order sizes, which cannot be dealt with in the fraction.

2.2 Customer-Supplier Relationship Theories

Krapfel *et al.,* (1991) define relationship value as a function of four factors: criticality, quantity, substitution and slack. They also use a portfolio approach to analyze customer supplier relationships and propose a relationship classification matrix based on the concepts of "relationship value" and "interest commonality". The conceptual issues in customer-supplier relationships have been led by Shapiro *et al*., (1987). Besides, Turnbull and Zolkiewski (1997) have also contributed to these theories subjecting towards appropriate tests. Shapiro et al. (1987) in developing a customer classification matrix focus on customers as profit centres. Shapiro *et al.,* (1987) suggest that while many suppliers believe that if they analyze the breakdown of their accounts, most accounts will fall into the "carriage trade" and "bargain basement" quadrants. Yet, when analysis is actually performed, it will usually show that over half a suppliers' accounts fall into the "passive" and "aggressive" quadrants. They contend that "Four aspects of the customer's nature and position affect profitability: customer economics, power, the nature of the decision-making unit, and the institutional relationship between the buyer and seller" (Shapiro *et al.,* 1987). They further developed the approach and demonstrated that the grid can be successfully used to segment customers in mature industrial markets. Customer-Supplier Relationship Theory shows that desire causes the business to continually invest in developing and maintaining relationships with its customers. (Turnbull and Zolkiewski, 1997) Through a series of relationship-building activities, the business shows its commitment to the suppliers. As a result, suppliers trust these businesses, and the mutual loyalty helps both parties fulfill their needs.

2.3 Empirical review

2.3.1 Portfolio planning and Performance of financial institutions

Portfolio planning deals with portfolio policies such as loan segmentation, risk identification cost allocation, and profit maximization (Sarraf, 2006). The aim is to create a risk efficient portfolio and to maximize the portfolio return at a given level of risk. The financial institutions especially commercial banks are vulnerable to risk of default, failing to recover loaned money from those they lend and to realize expected returns, this casts doubts on how their portfolio segmentation is conducted. Secondly portfolio planning focuses on identification of sub portfolio risk. The idea behind is that the foundation of effective loan portfolio performance is rooted in the probability of default and loss as estimated in accordance with the type and capacity of the businesses of customers in a given sub portfolio. According to Kagwa (2010), many sub portfolio risk estimation methods exist such as migration and sub portfolio stress testing, but for financial institutions, the method usually employed to identify sub-portfolio volatility considers group guarantees determined according to the level of trustworthiness and cooperation that the financial institutions has with the customers in a particular sub portfolio. However, sometimes portfolio planning, invest funds among large categories of assets whose control becomes impossible. In the efforts to diversify the risk it goes beyond the limit to manage efficiently. Loss arising in such situations is quite high and can bring serious repercussions. Portfolio planning is a tool that helps the investor in choosing the right portfolio of assets. It enables in making more informed decisions regarding investment plans in accordance with the goals and objectives. It’s there hypothesize that;

H_o1:*Portfolio planning has no significant relationship on the performance in financial institutions in Rwanda.*

2.4.2. Client screening and Performance of financial institutions

Van Horne (2012) noted that client screening involves obtaining information on loan applicants, and then using the information to analyze and determine the creditworthiness of the applicants so as to make credit decisions. The information is obtained from the applicants’ financial statements, credit ratings and reports, trade checking, and experience in business. This information helps in the analysis of not only the creditworthiness and ability of the applicant to meet the minimum standards for qualifying for the loan being applied for, but also the probability of bad debts. All this is done so as to take an informed decision as to the extension of any loan. Nonetheless, his observations can guide a study into how these institutions go about their client screening and how this affects their portfolio performance. According to Berger & Gregory (2014) historical financial indicators can be used to screen clients. These indicators can be calculated from previous financial statements and used to assess past trends in liquidity, solvency, profitability, efficiency, and debt repayment capacity. This information is important to lenders as they evaluate the borrower’s current financial position and how well the borrower has performed in recent years. These indicators should then be compared to the lender’s underwriting standards to assess the individual borrower’s creditworthiness. If an applicant’s balance sheet shows that the applicant has more loans than assets, that is, if the applicant’s equity to assets ratio is low, lending the applicant is at a greater risk of not recovering the loan extended (Sarraf, 2006). This is because low equity to assets ratio indicates that the applicant is at a greater risk of collapsing any time. On the other hand, a high equity to assets ratio indicates that the applicant is in a sound position and can service and repay the loan, regardless of whether the applicant has made profits or not Berger & Gregory (2014).Nevertheless, client screening only reduces the risk through diversification but does not provide full protection. It’s there hypothesize that;

H_o2: *Clients screening has no significant relationship on the performance in financial institutions in Rwanda.*

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 = Performance
X_1= Portfolio planning
X_2= Clients screening
β_0= Constant

β_1-β_2 = Coefficient of estimates
ε = Error tem

Findings

4.1 Correlation results

Statistical findings in Table 1 revealed that there was a positive and significant correlation between portfolio planning and performance of financial institutions in Rwanda ($r = 0.392$, $p<0.05$). Again, the correlation between clients screening and performance of financial institutions in Rwanda was a positive and significantly associated at ($r = 0.358$, $p<0.05$). Therefore, it was concluded that the portfolio planning and clients screening were positively correlated toperformance of financial institutions in Rwanda at 5% level of significance.

Table 1 Correlation Matrix

	Performance	Portfolio planning	Clients screening
Performance	1		
Portfolio planning	0.392**	1	
Clients screening	0.358**	0.207*	1

* Correlation significant 5% (2-tailed).** Significant at 0.01 level (2-tailed)

4.2 Hypothesis Testing

The statistical findings in table 2 depicted that there is presence of the association between the variables ($R^2 = 0.632$) implying that the combined prediction of the two predictor variables accounted for approximately 63.2% of the total variation on performance of financial institutions in Rwanda. The model was fit in predicting the contribution between the study variables which was statistically significant at 0.05 level of confidence ($F = 25.75$, $p<0.05$). The first hypothesis stated that portfolio planning has no significant effect on the performance of financial institutions in Rwanda. The study findings revealed that portfolio planning was positive and statistically significant ($\beta = 0.412$, $p<0.05$) hence it was concluded portfolio planning positively and significantly influencing performance of financial institutions in Rwanda. This therefore implies that a unit change in portfolio planning increases performance by 0.412units. The second hypothesis stated that clients screening has no significant effect on the performance of financial institutions in Rwanda. Results showed that there was a positive and significant effect on clients screening and the performance of financial institutions in Rwanda ($\beta = 0.334$, $p<0.05$). This implies that a unit change in clients screening enhances performance by 0.334units.

Table 2: Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		Beta	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	0.702	0.022		15.75	0.00
	Portfolio planning	0.589	0.255	0.412	6.525	0.02
	Clients screening	0.417	0.182	0.334	4.659	0.00
	Model Summary					
	R	0.774				
	R Square	0.632				
	F	25.75				
	Sig.	0.001				

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

Conclusion and Recommendation

The study sought to access the relationship loan portfolio management and performance of financial institutions in Rwanda. The extant literature has indicated that loan portfolio management enhances performance of financial institutions in Rwanda. The findings indicated that portfolio planning is a key indicator in enhancing performance of financial institutions. As evidenced from the findings, the study concluded that there is a strong positive relationship between portfolio planning and clients screening on the performance of financial institutions. Clients need to be trained

on how financial institutions work. This will enable some clients who often use bank services and other related financial needs to avoid falling in unexpected losses. From different conclusions clients screening plays in improving financial performance of most of the financial institutions here in Rwanda. Therefore, there is still a need in establish proper methods in approaching clients by increasing agents and number of branches as some financial institutions are located away from rural areas and are only accessible in urban centers. This will also promote the culture of quality customer care that could enhance the productivity for both customers and the institutions itself.

Financial institutions face challenges mostly in supporting and monitoring loans. There is still a need in sensitizing citizens on how loans work, and expose them to the most factors that could lead to loss in case someone asked for a loan. This happened to most of the people who took loans and finally they find themselves selling what they own including their houses or land. Public and private institutions should provide trainings to workers to reduce the risk for customers to fall in loss as long as they don't have so much knowledge on how money functions. There is still a need in collaborating between different financial institutions to avoid confusion regarding financial policies in Rwanda. Due to rapid development that Rwanda facing, a lots of financial institutions appear every day which tend to create confusion and conflict between customers but mostly clients. Therefore, financial institutions should work together to establish general guidelines and financial policies that should be followed for all and work together to avoid the loss that occur for some minor or developing financial institutions. This will solve the problems that lower financial institutions face in the beginning including losses which might even led to their closure.

Area of further research

After carrying out this research, learning some problems in the field and considering some limiting factors, the researcher came up with the following areas for further research:

- Proportional analysis of commercial banks and microfinance institutions.
- Credit risk management towards better performance of financial institutions.

References

[1.] Berger, A. N. & Gregory, F. U. (2014).*The institutional memory hypothesis and procyclicality of bank lending behavior*. Journal of financial intermediation 13, pp458-495

[2.] Comptroller's Handbook, (2017). *Loan Portfolio Management*. Administrator of National Banks

[3.] Elton, E.J., Gruber, M.J. (1995). *Modern Portfolio Theory and Investment Analysis*. 5th ed., Wiley, New York, NY.

[4.] Kagwa, P. (2010). *Financial institutions loan portfolio performance in Uganda*. A comparative study of commercial banks and micro-finance institutions. Kampala University. Unpublished Msc. Dissertation.

[5.] Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

[6.] Krapfel, R.E. Jr, Salmond, D., Spekman, R. (1991). *A strategic approach to managing buyer-seller relationships*. European Journal of Marketing, Vol. 25 No.9, pp.22-37.

[7.] Markowitz, H. (1991). *Portfolio Selection*: Efficient Diversification of Investment, Blackwell, Cambridge, MA,

[8.] Ministry of Finance, Planning and Economic Development. (2014). *Background to the Budget, Kampala*: Ministry of Finance, Planning and Economic Development

[9.] National Bank of Rwanda (2019).*BNR Annual financial stability report*. July, 2018- June 2019.

[10.] National Bank of Rwanda (2020).*BNR Annual financial stability report*. July, 2019- June 2020.

[11.] Sarraf, H. (2006). *Active Portfolio Management: A framework to manage credit risk – and build competitive edge*. SAS-Risk journalpp10-15

[12.] Shapiro, B.P., Rangan, V.K., Moriarty, R.T., Ross, E.B. (1987). *Manage customers for profits (not just sales)*. Harvard Business Review, No. 4. September-October, pp.101- 8.

[13.] Sharpe, William F. (1964). *Capital asset prices: A theory of market equilibrium under conditions of risk*. Journal of Finance 19 (3): 425–442.

[14.] Turnbull, P.W., Zolkiewski, J.M. (1997). *Profitability in customer portfolio planning*. in Ford, D. (Eds), Understanding Business Markets, 2nd ed., The Dryden Press, London.

[15.] Van-Horne, J.C. (2012).*Financial management and policy*. London, England: Prentice-Hall, 12th Edition.