

An Assessment of Credit Management Practices on Loan Performance of Commercial Banks in Sri Lanka: Perception of Managers

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Abstract— Studies in the area of credit risk management practices and loan recovery systems are of important research topic among researchers. This study mainly focused on examining the relationship between loan appraisal (avoidance), risk management techniques and loan performance. Purposive sampling method was used as the target groups of respondents are top level managers. Data was collected from 42 Credit Officers including managers of each bank from Licensed Commercial banks with a credit related function and 08 from licensed specialized banks.

Correlations and regression analysis are employed to test the relationship. Results revealed that independent variables and dependent variables are strongly correlated. Value of the regression results indicates that appraisal component (RAC) with four dimensions, credit history, financial viability, technical feasibility and credit rating and risk management techniques (RMT) with three dimensions, risk transfer, risk diversification and risk retention are collectively explained 73% to 87% of the variation of on loan performance. This results revealed that credit risk management influence the loan performance, more specifically, risk management techniques and risk appraisal significantly impact the loan performance in commercial banks in Sri Lanka.

This study recommends adoption of a more stringent policy on credit risk management, start practicing advanced hedging methods, diversify loan portfolio, risk retention and application of credit rating models in commercial banks to improve their loan performance. Implications are also discussed.

Index Terms— Risk Management, Credit, Loan Performance and Diversification.

I. INTRODUCTION

The concept of credit risk management can be treated as the heart of any commercial bank as it plays the vital role in the performance of a financial institution and it analyzes credit worth ability of borrowers. If there is any gap in credit risk assessment, then recovery of the provided loans and advances is challenged greatly. As a whole, profitability falls in a great uncertainty. A bad loan often arises from different factors or combination of factors, but the most important reason is the absence of proper loan classification system. It can identify

problem loans immediately and take necessary steps to minimize potential defaults and consequent losses. Poor credit risk management is the main consideration in case of banks' unsatisfactory performance and often the reason of bankruptcy (Ghosh, 2014).

According to Swarnapali (2014) an efficient financial intermediation is a prime requirement for a country's economic development and Tumin (2011) attest that the banks, as the critical part of financial system, play a vital role in a country's economic development. According to Rufai (2013) adequately managing credit risk in financial institutions is critical for the survival and growth of the Financial Institutions. In the case of banks, the issue of credit risk is of even of greater concern because of the higher level of perceived risks resulting from some of the characteristics of clients and business conditions that they find themselves.

Hamisu (2011) stated that the probability of incurring losses results from non-payment of loans or other forms of credit by debtors known as credit risks are mostly encountered in the financial sector particularly by institutions such as banks. The credit function of banks enhances the ability of investors to exploit desired profitable ventures. Credit creation is the main income generating activity of banks (Kargi, 2011; Kolapo et al., 2012).

The higher the exposures of a bank to credit risk, the higher the tendency of the banks to experience financial crisis and vice-versa. Among other risks faced by banks, credit risk plays an important role on bank's profitability since a large chunk of bank's revenue accrues from loans from which interest is derived. Credit risk and interest rate risk are intrinsically related to each other and not separable (Drehman & Stringa, 2008; Kolapo et al., 2012).

According to the Kiplimo and Kalio (2012) the financial success of MFIs depends on the effectiveness of their credit management systems because these institutions generate most of their income from interest earned on loans extended to small and medium entrepreneurs.

Rufai (2013) stated adequately managing credit risk in financial institutions is critical for the survival and growth of the financial institutions. Also to determines if credit risk have effect on the profitability and examining the relationship between interest income and bad debt of the union bank.

Haneef and Ramzan (2012) stated that the state bank of Pakistan brings its best effort to improve risk management continuously to address reduce the non - performing loans, one of the major problem of banks as it hampering the profitability. While these techniques have an important place in the risk management process, they can also compromise a financial institution's value through excessive risk avoidance.

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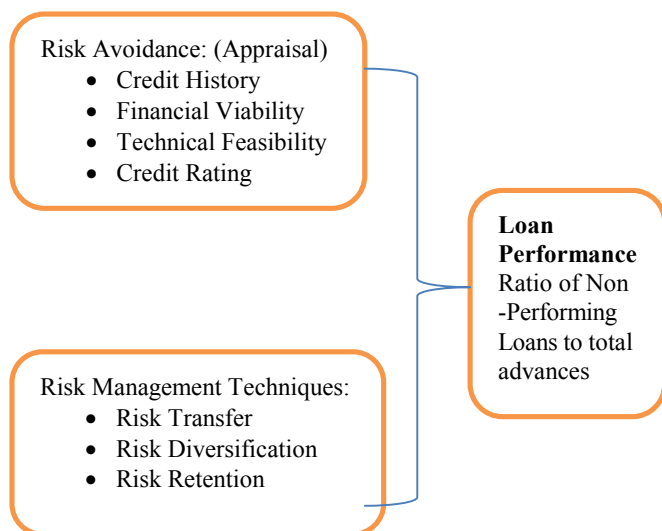
An Assessment of Credit Management Practices on Loan Performance of Commercial Banks in Sri Lanka: Perception of Managers

According to Gakure and Ngugi (2012) stated financial risk in a banking organization is possibility that the outcome of an action or event could bring up adverse impacts. Moti and Masinde (2012) argued microfinance institutions in Kenya experience high levels of non-performing loans. This trend threatens viability and sustainability of MFIs and hinders the achievement of their goals. Specifically, sought to establish the effect of credit terms, client appraisal, credit risk control measures and credit collection policies on loan performance. The failure of the banking sectors are increased because of lack of managing credit risk which create the financial crisis. So, analyzing the credit risk management on loan performance provides banks to do their activities globally with high performance.

Therefore, this study is most important for the banks to recover their loan and increase their performance in banks. A study on microfinance credit risk management practices and loan recovery systems is of considerable interest by many researchers particularly under the new constitutional dispensation (Migiri, 2012). Based on this background, this research aims to examine the relationship between loan appraisal (avoidance), risk management techniques and loan performance.

II. METHODOLOGY

Based on the literature (McNaughton et al., 1996) and the above discussion the conceptual frame work is developed to express the expected relationship.



Source: Developed for this study adapted from McNaughton et al, (1996).

Figure 3.1: Conceptual Framework

Independent variables credit risks have been divided into two component namely: the appraisal component (RAC) with four dimensions, credit history, financial viability, technical feasibility and credit rating and risk management techniques (RMT) with three dimensions, risk transfer, risk diversification and risk retention. The dependent variable loan performance which is indicated by ratio of non-performing loans to total advances.

One dimension of credit history (CH) of risk avoidance is defined as the process to ascertain the risks associated with

the extension of the credit facility and it is measured using five point likert scale of the scale developed by Arora, Gaur., and Babita (2013) and Varathan et al (2012). The dimension financial viability (FV) is about the analysis of corporate financial statements and its well-established situation and its measured using a Five- point likert scale of Griffith (1985). Technical feasibility (TF) dimension determines production capacity of any given firm and it is measured using five- point likert scale of Faria (2002) and Baldwin and Diverty (1995). The last dimension credit rating (CR) which summarizes the risk of loss due to failure by a given borrower to pay as promised, and it's measured by five – point likert scale of Treacy and Carey (2000) and Hickman (1996).

The other independent variables Risk Management Techniques is indicated with three dimensions. The dimension Risk Transfer(RT) refers to transfer markets have the potential to enhance financial stability by diffusing exposures and it is measured using a Five- point Likert scale developed by Rule (2001) and Andersen (2001). The dimension of Risk Diversification (RD) is the primary tool for lenders to control borrower risk, and highlighted the fact that risks arise well before default occurs and it is measured using a Five point Likert scale developed by Brannan (2000) and Jose Lopez (2000). The next dimension Risk Retention (RR) helps to decide how much risk you are able to retain which could be accomplished through risk and it is measured using a Five- point Likert scale developed by Amato et al. (2004) and Gordy (2003).

The dependent variable Loan Performance which is indicated by Ratio of Non -Performing Loan to Total Advances (NPL) which refers to that part of loan whereby interest and principal installment are still outstanding for at least six months after they are due, and it is measured using the formula of NPL ratio = non-performing advancesX100/ Total Loan Advances (Mugoya, 1972; Peterson, 1981).

The population of interest for the study comprised all commercial banks in Sri Lanka which deals with micro finance. According to the Central Bank of Sri Lanka (CBSL), as at end of 2015 there are 25 licensed commercial banks operate in Sri Lanka with 9 licensed specialized banks. Data was collected from 42 Credit Officers including managers of each bank from Licensed Commercial banks with a credit related function and 08 from licensed specialized banks. So, the total sample size was selected for interview was 50. Purposive sampling method was used because only Managers and Credit Officers were targeted to respond to the questionnaire. The greatest numbers of respondents were from Licensed Commercial banks representing 84% among the total number of respondents. On the other hand, about 16% of the respondents were from Licensed Specialized banks.

To derive the appropriate conclusion to the study the dependent variable (loan performance) was tested against the three main independent variables using multiple regressions following equation model.

$$\text{Model} \quad \blacktriangleright \quad \text{NPL} = \beta_0 + \beta_1 \text{RAC} + \beta_2 \text{RMT} + e$$

Where, NPL= Non - Performing loan,
RAC= Risk Appraisal Component,
RMT= Risk Management Technique

III. DATA ANALYSIS AND FINDINGS

To analyze the data correlation and multiple regression analysis are carried out. Pearson’s correlations coefficient analysis is used to establish the relationship between credit history, financial viability, technical feasibility, credit rating, risk transfer, risk diversification, risk retention with loan performance.

The correlation values indicate each independent variable is significantly correlated with the dependent variable. Therefore, it is implied that these independent variables and dependent variables are strongly related.

Table 1: Summarized of correlation between variables

	NPL	RAC	RMT
NPL	1		
RAC	.880**	1	
RMT	.876**	.901**	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

The multiple regression analysis is used to test the relationship between credit risk management and loan performance in commercial banks in Sri Lanka. Data were screened to test the auto correlation and the value of the Durbin-Watson (d) is 2.148 which indicate there is no auto correlation problem.

Value of the regression results of R, R square, and Adjusted R square indicates that appraisal component (RAC) with four dimensions, credit history, financial viability, technical feasibility and credit rating and risk management techniques (RMT) with three dimensions, risk transfer, risk diversification and risk retention are collectively explained 73% to 87% of the variation of on loan performance. Unexplained variation ranges between 13% and 27%. Results of ANOVA shows a significant value of 38.932 and its significant value is 0.000, thus the model is significant at 5% level.

Table 2: Model Summary of Multiple Regression Analysis between NPL RMT, RA

Model	Coefficients			
	B	Std. Error	t	Sig.
Constant	-.081	.027	-2.963	.004
ΔRAC	.733	.337	2.175	.032
ΔRMT	.628	.238	2.642	.010
R	.871			
R Square	.759			
Adjusted Square	R .739			
F	38.932			.000

Number of Observation=50; Durbin-Watson (d) = 2.148

Regression results also indicate that one unit increased in risk appraisal component cause an increase in loan performance by 0.733. A unit increase in risk management techniques in commercial banks would cause an increase in loan performance by 0.628. This reveals that there is a positive relationship between loan performance of commercial banks and credit risk management, risk management techniques and risk appraisal by commercial banks in Sri Lanka.

IV. CONCLUSIONS AND RECOMMENDATION

This study is most important for the banks as they are facing difficulties to recover their loan and increase their performance in banks. Therefore, studies in the area of microfinance credit risk management practices and loan recovery systems are of considerable interest by many researchers. Therefore, this research aimed at examining the relationship between loan appraisal (avoidance), risk management techniques and loan performance.

This study had two independent variables. One is appraisal component (RAC) with four dimensions, credit history, financial viability, technical feasibility and credit rating and risk management techniques (RMT) with three dimensions, risk transfer, risk diversification and risk retention. The dependent variable loan performance which is indicated by ratio of non-performing loans to total advances.

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Through risk appraisal, the banks will be able to know credit worthiness of clients and thus reduce non-performing loans. Further, it is important for the bank to formulate an appraisal procedure, format that details ways of capturing all the credit risk. The appraisal process should identify and analyze all loss exposures, and measure such loss exposures. This should guide in selection of technique or combination of techniques to handle each exposure.

From the findings, risk management techniques had a significant relationship with loan performance. Under this risk transfer, risk diversification and risk retention are part of the variables which are given same results that there is a significant relationship between independent variables with dependent variables.

So, it is recommends to commercial banks, should increase use of insurance firms in a bid to transfer or share risk in case of default. It is also important for the bank to start practicing

An Assessment of Credit Management Practices on Loan Performance of Commercial Banks in Sri Lanka: Perception of Managers

advanced hedging methods for example use of derivative products like swaps, option, and futures. Moreover, Diversification of loan portfolio should be part and partial of banks policy in a bid to spread risk. Loan portfolio should be invested in different sectors, regions. Diversification should also be done across nations where the benefits are much stronger than when diversification occurs across sectors. And also, risk retention is needed to the banks indicate that risk retention analysis should be never an ending process as banks constantly decide how much risk to retain. Hence use of credit rating models should continuously be applied. This will help to the commercial banks to ascertain how much interest rate to charge for a given loan as it summarize and quantify risk in a given loan portfolio.

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