Credit Risk of Non-Performance Loan as an Antecedent of Performance of Sri Lankan Commercial Banks

Ahamed Lebbe Abdul Rauf

Abstract— **The study examines the impact of credit risk, especially credit risk of non-performance load on performance of Sri Lanka Commercial Banks. For this purpose this study used capital adequacy, liquidity and company size as independent variable and the financial performance of the Bank as the dependent variable. Five licensed commercial banks are selected on the basis of purposive sample. Study had conducted based on secondary data which are collected from the sample banks for the financial period from 2008 to 2014. Descriptive analysis and regression analysis are employed to analyze the data.**

The findings revealed that there is a significant effect of credit risk of non-performance loan on financial performance of commercial banks in Sri Lanka. The model explained 62% influence on the performance of the banks. However, only two factors, liquidity and company size shown significant influence whereas others, capital adequacy not.

The findings suggest that the Government of Sri Lanka should introduce policy and legal environment which mitigate risks. Similarly, the bank management also should adapt mechanism which will ensure effective risk identification and assessment, and periodical evaluation of the financial performance which may lead to ensure the stability in financial position and avoid unnecessary financial crisis. This study is particularly important and useful for future investors and the senior management

Index Terms— **Capital adequacy, Liquidity, Performance and Credit risk**

I. INTRODUCTION

Financial systems mobilize capital domestically and thereby promote a country's economic growth. Financial system is also crucial to the resource allocation in any economy. Therefore, maintaining a stable and resilient financial system is essential for every country. Financial performance refers to the act of performing financial activity. It is a measure of a company's ability to generate income within a time period. Financial performance is vital one as evaluation of it allows decision makers to judge the results of business strategies and activities in objective monetary terms.

Sri Lankan financial system comprises licensed commercial banks (LCBs), licensed specialized banks (LSBs), contractual savings institutions and other financial institutions. Banks play a central role through providing liquidity to the economy and maintaining payment facilities (Weerasooriya, 1998). Banks are generally exposed to several types of risks, such as credit risk, market risk, liquidity risk, operational risk, legal risk, and reputation risk. Among these risks, credit risk is one of the most common causes of bank failures. Generally, credit risk refers to a situation where a borrower has failed to repay the loan and or interest when they are due.

Banks operate today in a more competitive and complex environment, which provides them opportunities to augment revenues quickly, but also, possess huge risks. Creation of new products and aggressive marketing by banks has led to uncontrollable credit risks that arises of poor credit assessment and follow up and also credit concentration (Gupta & Jain, 2010).

The existence of credit rationing need not imply that lending exceeds the full-information level. In this plausible class of models, the appropriate policy is not to subsidies or tax lending but to make alternatives to entrepreneurship more attractive. Doing so may actually increase the number of those borrowing to set up their own business and yield a strict pare to improvement (Meza & Webb, 2009).

Credit risk has a crucial effect on the performance of banks (Poudel, 2012) since it gives rise to Non-Performing Loans (NPL). NPL is a loan for which the interest or payment are overdue. Most of researchers have been found that a negative relationship between credit risk and performance. Practically, an increase in credit risk reduces the profitability of banks because banks have spent more on bad debt cost and cost per loan asset (Musyoki & Kadubo , 2012; Nawaz & Munir, 2012.

Stated that the level of NPL affects the banks' profitability. Further it affects the financial position and stability of the bank as well. Godlewski (2004), and Mansoor, Hafiz, and Yasir (2012 also mentioned that NPLs have a significant impact on the financial performance of banks. therefore, high level of NPLs is a risk to banks' stability importantly, increase in NPL necessitates the banks to tighten the lending procedures (Gopalakrishnan, 2004; Kerlin, 2013; Sushil, 2011).

But Andrew Crockett (2003), as cited in Aziz, Ibrahim and Isa (2009), argued that NPL may not have a serious negative effect on profitability of banks. Kithinji (2010) revealed that the profit of commercial banks are not influenced by credit and NPLs and suggested that other variables impact on profits. Further he stated that commercial banks can be keen on making high profits by concentrating on other factors other than focusing more on credit and NPLs. Funso, Kolade and Ojo (2012) stated that NPLs has significant positive effect on profitability. Boahenel, Dasah and Agvei (2012) have supported for this. Balasubrammaniam (2013) mentioned that NPL does not affect current profit and future profit but it may lead to loss of some long term beneficial opportunity. Epure and Lafuente (2012) highlighted that the banks

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Ahamed Lebbe Abdul Rauf, Senior LecturerDepartment of Accountancy and Finance South Eastern University of Sri Lanka

performance improvement follows regulatory changes and not credit risk.

Loans, advances and non-performing loans are major variables in determining asset quality of a bank. Management need to be cautious in setting up a credit policy that will not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit. Improper credit risk management reduce the bank profitability, affects the quality of its assets and increase loan losses and non-performing loan which may eventually lead to financial distress (Samuel, 2009).

Credit risk management in banks has become more important not only because of the financial crisis that the industry is experiencing currently, but also a crucial concept which determine banks' survival, growth and profitability (Abiola, 2008). The prediction of corporate bankruptcies is an important and widely studied topic since it can have significant impact on bank lending decisions and profitability (Amir, 2011).

Raghavan (2013) stated that credit risk comes as a result of failure of debtors to meet its obligation when due. Credit risk may increase due to the inadequate knowledge on lending of the banks and this increasing gradually leads to liquidity and solvency problems (Funso, Kolade & Ojo, 2012). Mikasha (2011) highlighted that declining the profitability and becoming worthless of the bank's assets are the features of credit risk and its banking activities. Magnifique (2008) found that there are four specific objectives of establishing how credit risk identification, credit risk analysis and assessment, credit scoring mechanism and risk monitoring affect financial performance of commercial banks in Rwanda.

Empirical evidence reviewed in the above implies that there are conflicting views on the relationship between credit risk and financial performance. As such this study mainly aims to investigate the impact of credit risk on the performance of Commercial Banks in Sri Lanka.

II. Methodology

Based on the literature the following conceptual framework (Figure 1) is developed. Credit risk is considered as independent variable which consists of three dimensions as capital adequacy, liquidity and company size. As the dependent variable is profitability which is the indicator of financial performance.

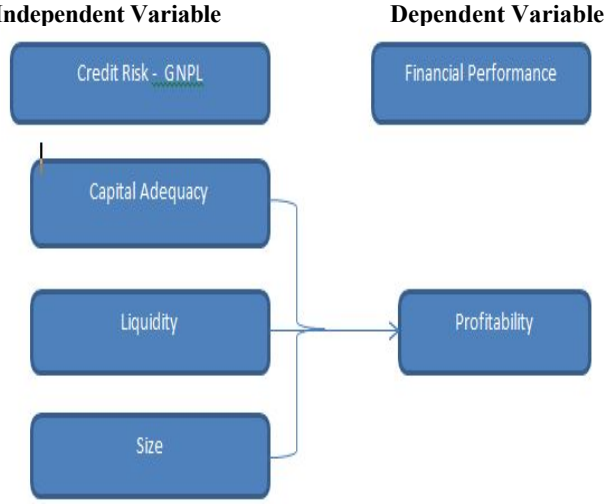

Figure1: Conceptual Framework

Thus, the following regression equation has been used in this study based on the CAMEL model.

$$PER = \alpha + \beta 1CA + \beta 2LQ + \beta 3SIZE + \varepsilon$$

It is the regression function which determines the relation of CR to PER. α is the constant term and β is the coefficient of the function, it is the value for regression equation to predict the variances in dependent variable from the independent variables.

In this equation, PER denotes performance of commercial banks which is measured through return on assets (ROA). Credit risk denotes for credit risk in terms of NPLs and it was measured by gross non-performance loan GNPL which is covered with three dimensions of capital adequacy ratio (CAR) is a measure of the amount of bank's capital expressed as a percentage of its risk weighted credit exposure. Liquidity is measured by statutory liquid asset ratio (SLAR). Size denotes the size of bank which is measured through the total assets of each bank.

This study was facilitated by the use of secondary data obtained from the annual reports of five licensed commercial banks in Sri Lanka. Purposive sampling was used in selecting these five banks by considering the time concern and availability of data covers seven years from 2008 to 2014.

III. Data Analysis and Findings

This research aims to investigate the impact of credit risk on financial performance of Sri Lankan commercial banks. For this purpose, descriptive statistics and OLS were employed to analyze the secondary data.

The Table 1 presents the results of descriptive analysis. The mean of ROA is only 2.051 with a standard deviation of 0.647. However, the mean of the independent variable CA is 12.483 with a standard deviation of 3.192. The mean of the SLAR is at higher level with 24.606 with a standard deviation of 5.609. The mean of the total asset is 20.00 and its standard deviation is 9.909.

Table 1: Results of the Descriptive Analysis

Variable	N	Min	Max	Mean	SD
Return on Asset	35	0.800	3.000	2.051	0.647
Capital Adequacy	35	1.900	19.500	12.483	3.192
Statutory Liquid Asset Ratio	35	8.200	41.000	24.606	5.609
Total Asset	35	7.047	36.231	20.000	9.909

Source: SPSS output

IV. Regression Analysis

The proposed model also has undergone regression analysis. Results of the regression analysis are presented in the Table 2.

Table 2: Results of the Regression Analysis

	Coefficients		
	Beta	Std. Deviation	Sign
Constant	3.396	0.452	0.000
Capital Adequacy	0.008	0.052	0.885
Liquidity	0.111	0.039	0.008
Total Asset	0.039	0.008	0.000
R^2	0.620		
Durbin Watson	1.985		
F	16.879		0.000
N = 35			

Sources: SPSS output

Regression analysis results are presented in the Table 2. Results reveals that the model is significant with R2 value of 0.62 which means 62% of the variance in the dependent variable is explained by this model. The F value of 16.879 which is significant, this implies that the model is very good model. However, the beta value for CA is only 0.008 and it is not significant. The beta for liquidity is 0.111 and it is also significant. The beta of total asset is 0.039 with a significant impact. Durbin Watson value is 1.985 which is around 2, this implies that the autocorrelation is not seriously affected the model.

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The coefficient value shows that 1 percent increase in capital adequacy will lead to an increase in ROA by 0.008 percent, and also1 percent increase in liquidity will lead to an increase in ROA by 0.111 percent. In addition to that 1 percent increase in total asset causes to an increase in ROA by 0.039 percent.

The results of the regression show that profitability is affected by credit risk in these commercial banks in Sri Lanka. Therefore, increase in credit risk in terms of GNPL decreases profitability in terms of ROA of the banks. This results are consistent with the findings of Nawaz and Munir (2012); Hasna, Manzura and Juanjuan (2009); Funso et al; Musyoki and Kadubo (2012) and Gopalakrishnan (2004).

CONCLUSION

This study is conducted on the purpose of studying the impact of Credit risk on performance of Sri Lankan commercial banks. The sample consists of five licensed commercial banks in Sri Lanka whose annual reports are available in year 2008 to 2014. The credit risk being the independent variable and bank performance variables being the dependent variables are tested under regression model. The analysis of variance revealed that there is a very high effect of credit risk on financial performance of commercial banks in Sri Lanka. The model explained 62% influence on the performance of the banks and the rest of the 38% is unexplained. Regression results have shown that, there is credit risk associated with the performance of banks in Sri Lanka. Further, only two factors, liquidity and company size shown significant influence whereas others, capital adequacy not.

Credit risk management is a key factor for the success of financial institution operations in Sri Lanka and by extension pillar to financial prosperity and stability. It is therefore important for the Government of Sri Lanka to introduce policy and legal environment that is conducive to strengthen the financial performance in commercial banks.

Banks management should enhance the construction of employee teams through providing training and seminars to improve the business knowledge this will ensure effective risk identification and assessment is carried out before disbursement of credit to creditors mitigates the occurrence of credit risk and improves financial performance. Periodical evaluation of the financial performance must be conducted in order to ensure the stability in financial position and avoid unnecessary financial crisis.

On the basis of this study many future research directions can be suggested. It is possible that a study can be conducted in Sri Lanka including other variables such as diversification of assets and portfolio asset quality banks. This study topic will be a good area for future researchers because this study may change in future according to the future expected data.

This study provide the necessary direction to mitigate credit risk issues for different parties for making corrective and optimal investing decisions, formulating and implementing policies. The credit risk management and its effect on financial performance and this information will particularly be important and useful to future investors in the industry and the senior management. The government will obtain information on the importance of implementation of various legal frameworks in relation to credit risk management, developing policy papers, policy making regarding credits and other regulatory requirements of commercial banks. The study can take as bench mark to impose the appropriate rules, regulation & principles on the Banking sector by the regulatory parties of the financial sector.

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