Effect of Credit Risk Management on Financial Performance: Evidence from Commercial Banks in Sri Lanka

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Abstract

Introduction – Credit risk is the primary focus of any risk management approach in commercial banks, which is defined as the risk of loss due to debtors' non-payment of a loan or a line of credit which may include either the principal and interest, or both. With the banking systems' increased involvement in all facets of the economy, the impact of credit risk on a bank's profitability has been the foremost focus of many researchers. Therefore, in this study the objective is to identify the impact of credit risk management on financial performance of commercial banks in Sri Lanka.

Design/methodology/approach – The investigation was performed using panel data regression for a sample of 12 out of 26 licensed commercial Banks of Sri Lanka during 2011-2019. Descriptive statistics, correlation matrix and panel regression analysis were used to analyze the collected secondary data.

Findings – The results suggested that non-performing loan, Capital Adequacy have significant negative impact on Return on Equity while the Cost Per Loan Asset has positive impact on Return on Equity.

Conclusion – This study has laid some groundwork to explore the impact of credit risk management on financial performance of Sri Lankan commercial Banks. Accordingly, based on above findings, it is recommended the Sri Lankan commercial banks to develop credit risk management policies and strategies to increase the financial performance.

Keywords: *Capital adequacy, Cost Per Loan asset, Commercial bank, Credit risk management, financial performance*

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1. Introduction

1.1. Background of the study

Risk is the "combination of the probability of an event and its consequences which can range from positive to negative" (Institute of Risk Management, 2002). A bank is a commercial or state institution that provides financial services, including issuing money in various forms, receiving deposits of money, lending money and processing transactions and the creating of credit (Campbell, 2007). Banks are risk machines which takes risk, transfer, and embedded risk. A bank has several types of risks called Credit risk, Market risk, Liquidity risk, Operational risk, Reputation risk, Country risk, Strategic risk, Legal and documentation risk. Risk Management has interpreted all the process involved in identifying, assessing, and judging risks, assigning ownership, taking actions to mitigate or anticipate them, and monitoring and reviewing to avoid or reduce risks (Eduljee, 2000).

Risk management is the human activity which integrates recognition of risk, risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources (BOCEAN, 2008). Risk management become important for global banks as Risk Management assume, manage, transfer and advice on risk and furthermore, Risk Management is useful to banks because of high leverage on banks, asset liability mismatch, systematic influence, backbone of payment and settlement system, volatile value of collateral (Bhattarai, 2017).

Credit particularly remains the primary source of revenue for any bank around the world. However, the probability of default borrowers' loan commitments has been an increasing concern for those banks particularly for unsecured bank loans which is categorized as the credit risk (Bhattarai, 2017). Banks grant loans to the customer with an expectation of receiving the capital together with an interest. A loan facility is considered as performing, if the payment of both capital and interest are paid accordingly with agreed repayment terms. The risk poses a significant exposure not only to the banks (lenders) but also to the entire economy.

The adoption of credit risk management is becoming a significant factor for every commercial bank and around the world as the credit risk is the potential loss that arises from customers and counterparties failing to meet their contractual obligations. According to Chijoriga (1997), 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.

With the increased involvement of banking systems in all parts of a modern economy, the impact of credit risk on a bank's profitability has been the main focus of many researchers. In financial institutions this is one of the group key risk exposures, stemming from loans and advances portfolio, financial guarantees, letter of credit and acceptance issued and made on behalf of the customers (Annual report of people's bank- 2019). Banks need to manage the credit risk inherent to the entire portfolio as well as the risk in individual credits as transactions (Sinkey , 1992).

As per the study conducted by Kolapo, Ayeni, and Oke (2012), credit risk management has a significant impact on the profitability of banks. Hence, the credit risk as a significant factor that affect the financial performance, the attention of many researchers around the globe has been drawn to credit risk management phenomena in the banking sector (Sinkey , 1992). Nevertheless, the attention paid on this in context of Sri Lanka is minimal with the dearth of researches in this area. Therefore, there exists a vacuum in identifying the significance of credit risk management on financial performance. Hence, the researcher focuses on bridging the empirical gap through the findings of this study. Accordingly, the broad research question of this study can be set forth as,

"*Does credit risk management affect the financial performance of Sri Lankan commercial banks?*"

1.2. Research objectives

Based on broad research question, following research objectives of study are as follows,
1. To identify the relationship between credit risk and financial performance of commercial banks in Sri Lanka.
2. To identify the impact of credit risk on financial performance of commercial banks in Sri Lanka.
3. To identify the most influential factor of credit risk on financial performance of commercial banks in Sri Lanka.

The remainder of the paper is structured as follows. Section 2 reviews previous literature Credit risk, credit risk management and its impact on financial performance. Section 3 discusses the research methodology. Section 4 discusses on findings and Section 5 brings the conclusion and recommendations.

2. Literature Review

This section brings the findings of previous researches and theoretical background of the financial performance of commercial banks along with the relationships between financial performance of commercial banks and Credit risk determinants.

Financial performance is company's ability to generate new resources, from day - to- day operations, over a given period. Performance is gauged by net income and cash flows from operations and portfolio is a collection of investments held by an institution or a private individual (Apps, 1996). Profitability is a major indicator of banks' ability to generate positive cash flows and maintain sustainable earnings flows. When considering the banks' profitability CAMEL model is most important factor. Capital adequacy, Asset quality, Management quality, Earnings, and Liquidity indicate the factors of CAMEL model. Out of those factors, the asset quality has been extensively used for determining the bank profitability. Asset quality always played a crucial role in overall bank performance and has been an important factor in determining credit and liquidity risks in banks in different countries. The study conducted by Saif-Alyousf, Saha, and Md-Rus (2017) has determined that the CAMEL factors affected the profitability of Saudi banks. The study has shown Low asset quality increases NPL and thus reducing banks' profitability. Then, they also found that Saudi domestic banks were performing better than foreign banks during the period of their study.

Risk is the "combination of the probability of an event and its consequences which can range from positive to negative" (Institute of Risk Management, 2002). Risk disclosures are important and significant part of risk management as per Basel Committee on Banking Supervision (Allini, Manes, & Hussainey, 2016).

Companies use several types of incentives for risk disclosures, such as decreasing the cost of capital (Linsley & Srives, 2006) and strengthening their reputation, increasing legitimacy and reducing stakeholders' uncertainty (Oliveira, Rodrigues, & Craig, 2011). Companies also have incentives to decrease risk disclosures harmful to their competitive position (Woods, Dowd, & Humphrey, 2008). However, Investors benefit from effective risk disclosures as they can compare expected returns with associated risks, thus maximizing the utility of their portfolio-investment decisions (Beretta & Bozzolan, 2004;Linsley & Srives, 2006). Nevertheless, when risk disclosure is generic, and qualitative rather than practical, its utility is limited (Abraham & Shrives, 2014).

An appropriate credit risk management system, which includes risk identification, risk assessment, risk control and monitoring, would require precise guidelines and strategies to manage credit portfolios to determine the entire process of loan allocation, appraisal, supervision, and collection (Greuning, Bratanovic, 2003).

Credit risks are identified and monitored by different methods such as physical inspection by bank managers, analyzing financial statements, audits, and risk surveys (Al-Tammi,Al- Mazrooei, 2007). Fatemi and Fooladi (2006) reported similar findings in US-based financial institutions that suggested identifying counterparty default risk is

the most important parameter for modelling credit risk. In addition, risk identification was found to impact the cost of capital in case of banks in Ghana where their banks were suffering from a high credit risk due to problems of borrower identification, insufficient collateral, and high frequency of default.

All in all, different types of researchers have studied the impact of credit risk management on bank profitability and pointed out that there is a statistically significant relationship between credit risk management and bank profitability. Li and Zou (2014) found that there is a significant and positive relationship between credit risk management and bank profitability in Europe. Moreover, as large financial institutions, commercial banks face many potential sources of risk, including liquidity risk, credit risk, market risk, regularity risk, foreign exchange risk and political risk (Campbell, 2007) while the credit risk being the most important risk all financial institutions are exposed (Grey, Cassidy & RBA, 1997).

Using a sample of Chinese commercial banks over the period 2000-2005, Sufian and Habibullah (2009) investigate the impact of credit risk on bank profitability. Their results suggest that credit risk has a significant and positive impact on the profitability of Chinese state-owned commercial banks (SOCBs) and joint-stock commercial banks (JSCBs). In addition, Sufian (2009), uses 4 SOCBs and 12 JSCBs to examine the determinants of bank profitability during2000-2007 in China with a focus on the credit risk and liquidity risk under a fixed – effects model. The results show that Chinese commercial banks with greater levels of credit risk and liquidity risk have higher profitability.

Saiful (2017) reports that effective management of credit risk is a pivotal element in the all-encompassing approach to risk management of banks and is crucial to the long-term success of banks. the results of the study show that credit risk management and enterprise risk management have a positive influence on bank performance in Indonesia. Hakim and Neaime (2005) noted that credit risk variable was a good predictor of profitability across all banks in their study of banking systems in Lebanon and Egypt. The study showed that a high ratio of loans to assets shows banks commitment to additional risk and should result in an increased profitability, so far as higher assumed risk results in higher return. And the study suggested that liquidity risk was insignificant across all banks and seems to have no statistically significant relationship with profitability.

Ndoka and Islami (2016) found that high Non-Performing Loan (NPL) affected the bank profitability and thus, they should be monitored periodically where they suggested that banks should enhance credit analysis of the borrower's capacity and the process of loan administration. Moreover, Charles and Kenneth (2013) recommended that for banks to earn sustainable interest income streams, appropriate credit risk strategies to be instituted. Banks were also recommended to facilitate the functioning of credit bureaus which could ensure that financial creditworthiness of lenders are analyzed when loan requests are made.

The total operating expenses and the total loan portfolio of a commercial bank will be contributed to the bank performance through the credit risk management. Cost per loan asset (CLA) is the average cost per loan advanced

to customer in monetary term. CLA indicator is important when measuring the credit risk of a bank time to time. Purpose of this indicator is to indicate efficiency in distributing loans to customers. (Apps, 1996).

Olusegun (2015) found that the impact of the antecedents such as loan and advance loss provision, total loan and advances, non-performing loan and total asset on Return on Equity (ROE) and Return on Asset (ROA). The return on assets (ROA) is a ratio that measures company earnings before interest & taxes (EBIT) against its total net assets. The ratio is considered an indicator of how efficient a company is using its assets to generate before contractual obligation must be paid.

3. Methodology

3.1 Research design

The research focuses on the effect of credit risk management on the financial performance of commercial banks in Sri Lanka and its design involves selection of samples, population, survey design, collection of data, secondary data collection, conceptual framework of the research, hypotheses development, operationalization, analysis of research, and data presentation which helps to answer the formulated questions and also to test the research hypotheses.

The overall study Focuses on the Licensed Commercial banks in Sri Lanka to generalize the findings. Twelve number of banks have been selected as the sample for the study covering the period of 2011 to 2019. Secondary sources

were used to collect the data including annual reports and websites where the collected data were analyzed through the E-Views 11 student version software.

3.2 Population and Sample

3.2.1. Population

The population refers to the entire group of people, events, or things of interest that the researcher wishes to explore (Sekaran, 2013). The relevant population of this study is the Licensed Commercial Banks (LCB) in Sri Lanka.

In Sri Lanka by the end of 2019, Sri Lankan banking sector includes 26 licensed commercial banks including 13 branches of domestic banks and 13 foreign banks. Foreign LCBs were excluded from the study because of several reasons. First reason is the difference in the banking operation and accounting format compared with the domestic commercial banks mainly due to multi-currency transactions while second being the unavailability of the financial data.

3.2.2. Sample

A sample is a subset of the population. It comprises some members selected from it. In other words, some, but not all, elements of the population form the sample (Sekaran, 2013a). The sample of this study is Twelve (12) Licensed Commercial Banks. Sample is consisted with two state banks and eight local banks which represent about 50% of LCBs sector asset (CBSL 2019).

3.3 Conceptualization

The researcher aims to explore the broad research question as formulated in the problem statement, ***"Does credit risk management affect the financial performance of Commercial Banks in Sri Lanka?"***. Accordingly, the hypotheses will be developed based on the previous literature on which the conceptual framework will be developed.

3.3.1 Hypotheses Development

3.3.1.1 Impact of Capital Adequacy on Bank Performance

Previous researches considering capital adequacy as a determinant of profitability of banks have shown that a high capital adequacy ratio should signify a bank that is operating over-cautiously and ignoring potentially profitable trading opportunities (Goddard, Molyneux, and Wilson 2004), implying a negative relationship between equity to asset ratio and bank performance. Similarly, banks with higher equity to asset ratio will have less requirements of external funding and thus, higher profitability (Pasiouras and Kosmidou, 2007). Various studies suggest that banks with higher levels of capital perform better than their undercapitalized peers. Staikouras and Wood (2003) claimed that there exists a positive link between a greater equity and profitability among EU banks. Abreu and Mendes (2001) also trace a positive impact of equity level on profitability. Goddard et al. (2004) supports the prior finding of positive relationship between capital/asset ratio and bank's earnings. Thus, the first hypothesis can be formulated as,

H1: There is a significant impact of Capital Adequacy on Profitability

3.3.1.2 Impact of Non-Performing loans on Bank Performance

The lack of risk management has led to increased non-performing loans that threatens the bank profitability (Haneef & Riaz, 2012). Stuti and Bansal (2013), specified that the best indicator for the healthy banking industry in a country is its level of Nonperforming assets (NPAs). Nonperforming loans reflects the performance of banks and deterioration in the ratio of Nonperforming loans shows enhancement in the asset quality of public sector banks and private sector banks. Non-performing Assets are threatening the stability and demolishing bank's profitability through a loss of interest income, write-off of the principal loan amount itself. Michael, Vasanthi, and Selvaraju (2006) emphasized that NPL in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks. Thus, the second hypothesis can be formulated as,

H2: There is a significant impact of Non-Performing Loans on Profitability

3.3.1.3 Impact of Cost per Loan Assets on Bank Performance

Cost per loan asset (CLA) is the average cost per loan advanced to customer. It is calculated dividing total operating costs by total amount of loans. The empirical studies show the diverse results about the effect of cost per loan asset (CLA) on bank profitability. Paudel (2012) has found negative but statistically insignificant association between cost per loan asset (CLA) and bank performance (ROA) in Nepal whereas in Nigeria, Kurawa and Garba (2014) have

found significant positive association between cost per loan asset (CLA) ratio and bank's profitability. However, banks that are efficient in managing their expenses (costs), holding other factors constant, earn high profits. Thus, the third hypothesis can be formulated as follows.

H3: There is a significant impact of Cost per Loan Assets on Profitability

3.3.2 Conceptual Framework

With the main objective of the study being to assess the effect of credit risk management on the financial performance of commercial banks in Sri Lanka, the conceptual framework was developed to test the relationship between variables. Aligning with the objective of the study and based on the hypotheses developed above, the conceptual framework of this study can be depicted as follows.
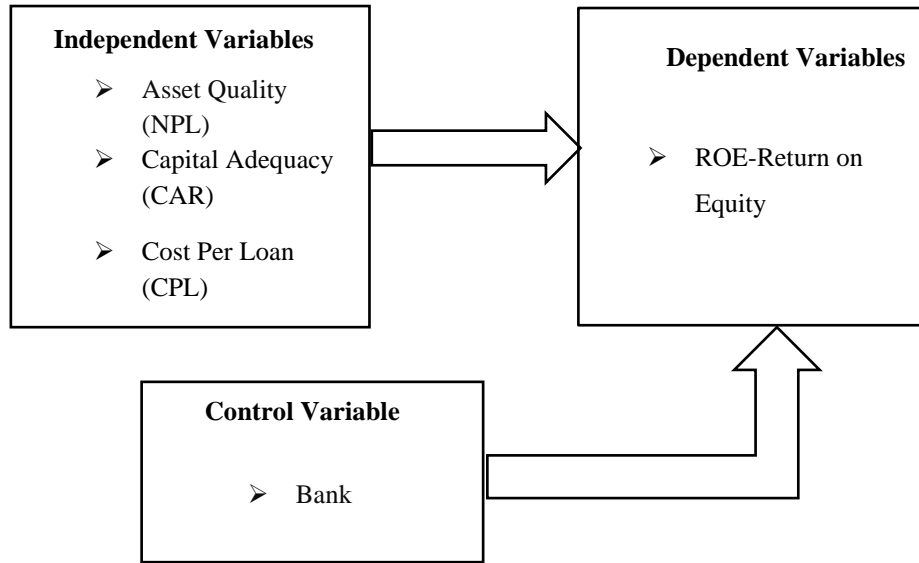
Independent Variables

➢ Asset Quality (NPL)
➢ Capital Adequacy (CAR)

➢ Cost Per Loan (CPL)

Dependent Variables

➢ ROE-Return on Equity

Control Variable

➢ Bank

Figure 1: Conceptual Framework.

Source: Author Compiled

3.4 Variables of the Study

3.4.1 Operationalization

The operationalization table of the research was developed by assigning variables as per the concept, covering dimension of each variable and the relevant indicators measured using data derived from the annual reports. The following table represent the operationalization model of this study.

Table 3.1: Operationalization

Variables	Proxy	Definition	RATIO
	Return On Equity (ROE)	The Return on Equity (ROE) is a ratio that measures the company's Net income attributable for shareholders against its total equity	Net Income/Total Equity*100
Independent variables (Credit Risk Management) Capital Adequacy	Capital Adequacy Ratio **(CAR)**	CAR is a ratio that measures the total capital of bank articulated as a percentage of its risk weighted credit coverage (Kolapo, Ayeni, & Oke, 2012)	(Sum of the bank's tier 1 capital+ tier 2 capital)/ Risk weighted asset
Asset Quality	Non-Performing Loan Ratio **(NPLR)**	As for NPLR it is a measure of Asset quality of a bank, relevant with banks loans.	Total NPL/Total Advances *100
Loan Quality	Cost Per Loan Asset (**CLA)**	CLA is the average cost per loan advanced to customer in monetary terms. The function of this is to point out efficiency in distributing loans to customers (Kolapo et al., 2012). .	Total Operating Expenses/Total Loans*100
Control Variable- Bank size	**Total Assets**	Natural Logarithm of Total Assets	

Source**:** *Author Compiled*

3.5 Data Collection Methods

This study uses the secondary and quantitative data which was published by the commercial banks in Sri Lanka by using annual reports, and web sites over the period of Nine (9) years. Data on banks specific factors were extracted from annual reports mainly income statement, balance sheets, notes to the financial statement and from the 10-year summaries.

3.6 Data Analysis and Data Presentation

The research will conduct the descriptive Statistics, correlation Analysis, and regression Analysis as the mode of analysis. The sample data are regressed using STATA to find the descriptive and the correlation among all the variables that would affect the performance of Sri Lankan commercial banks.

4. Findings and Discussion

As previously stated, the study employs regression models with the purpose of testing the formulated hypothesis. Table 4.2 provides the summary of the descriptive statistics of the variables in the study.

4.1. Descriptive Statistics

Table 4.2: Descriptive Statistics

	ROE	NPL	CAR	CPL	BSIZE
Mean	15.85639	3.607593	15.55139	13.96763	11.46441
Median	16.01000	3.400000	14.81500	12.42828	11.51726
Maximum	42.90000	8.010000	26.90000	112.4766	12.38294
Minimum	1.000000	0.890000	10.80000	0.931539	10.16125
Std. Dev.	8.332724	1.547478	3.155605	11.83375	0.524443
Skewness	0.661776	0.642302	1.287379	5.651927	-0.355100
Kurtosis	4.239246	2.879552	4.848685	45.99972	2.368054
Obs.	108	108	108	108	108

Source: Author compiled

The mean values of Return on Equity, Non-performing Loan, Capital Adequacy, Cost per Loan Asset, and Bank size are respectively 15.85639, 3.607593, 15.55139, 13.96763, 11.46441. Maximum values of Return on Equity, Non-performing Loan, Capital Adequacy, Cost per Loan Asset, and Bank size are respectively 42.90000, 8.010000, 26.90000, 112.4766, 12.38294 and while the minimum values of Return on Equity, Non-performing Loan, Capital Adequacy, Cost per Loan Asset, and Bank size are respectively 1.000000, 0.890000, 10.80000, 0.931539, 10.16125.

4.2 Correlation Matrix

The Pearson's correlation was used to identify the association between Credit Risk Management and Financial performance of Sri Lankan Commercial Banks.

Table 4.3: Correlation matrix

Correlation Probability	ROE	NPL	CAR	CPL	BSIZE
ROE	1.000000				

ROA	0.511739				
	0.0000				
NPL	-0.150012	1.000000			
	0.1212	-----			
CAR	-0.294059	0.206751	1.000000		
	0.0020	0.0318	-----		
CPL	0.480431	0.091713	0.340117	1.000000	
	0.0000	0.3452	0.0003	-----	
BSIZE	0.479554	-0.096664	-0.461854	-0.090529	1.000000
	0.0000	0.3196	0.0000	0.3515	-----

Source: Author compiled

According to the table 4.3 above, the values on the diagonal indicate 1.0000, reflecting that each variable is perfectly correlated with itself. The highest correlation with ROE is for CPL (0.480431). The correlation is positive which implies that as the value of CAR and CPL increases, the profitability of the bank increases. On the other hand, NPL and CAR are negatively correlated with the bank profitability where the correlation between NPL and ROE is insignificant. The values indicate that when the value of Non-Performing Loans ratio and Capital Adequacy ratio increases, the performance of the bank decreases.

4.3. Regression Analysis

The authors used the Hausman specification test to determine the compatibility of either the random or the fixed effect model with this work. Hausman test result shows the probability value of 0.0775. So, the results will provide the evidence that the random effect model is appropriate where the null hypothesis is accepted rejecting the alternative hypothesis.

After selecting appropriate estimates for regression analysis, Panel EGLS (Cross section random effects) model can be used to examine the relationship and statistical impact between, dependent variables (Return on Equity) and independent variables (Capital Adequacy, Non-performing Loans, Cost per Loan Asset) also control variable (Bank size). Following table shows the panel regression results with random effects and the model summary, respectively.

Table 4.4: Panel EGLS-ROE (Cross-section random effects)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPL	-0.479454	0.232348	-2.063521	0.0419
CAR	-0.616934	0.152135	-4.055165	0.0001
CPL	0.319406	0.056726	5.630691	0.0000
BSIZE	3.621554	0.878843	4.120819	0.0001
C	-25.50054	10.63196	-2.398479	0.0185

Source: Author compiled

$$ROE = -25.50054 + 0.377721ROE\ (-1) - 0.479454NPL - 0.616934CAR + 0.319406CPL + 3.621554\ BSIZE + U_i$$

Table 4.5: Model summary-ROE

Model Summary	
R-squared	0.705125
Adjusted R-squared	0.688743
Durbin-Watson stat	1.766653
F-statistic	43.04278
Prob(F-statistic)	0.000000

Source: Author compiled

According to the results obtained, the overall model is significant 1% level with a F Statistic of 43.04278. R square is 0.705125 which shows the variance of dependent variable explained by independent variables. Accordingly, it implies that 70.51% of variation in ROE is explained by the credit risk management of Sri Lankan Commercial Banks.

If the coefficients are 0, then it can be concluded that the ROE will be -25.50054. The coefficient $\beta1=-0.479454$ expresses that if the NPL increases by 1 percent, ROE will also be decreased by 0.47. The coefficient $\beta2= -0.616934$ expresses that if the CAR increases by 1 percent, ROE will also be decreased by 0.61. The coefficient $\beta3= 0.319406$ expresses that if the CPL increases by 1 percent, ROE will also be increased by 0.31 The T-test is used to determine whether each of the individual independent variable is significantly related to the dependent variable. In this model, a T-test can be conducted to determine the significance of each of the individual parameters. Higher the t- value, higher the influence of the variable. Accordingly, all the independent variables have a significant influence on ROE with t-statistic being above 1.96 and probabilities being significant at 1% level. All in all, with a t-statistic of 5.630691, it is identified that the cost per loan asset as the most influential credit risk factor on the bank profitability.

Table 4.6: Results of hypothesis testing

Variable	Accepted or rejected
H1: There is a significant impact of Capital Adequacy on Profitability	Accepted
H2: There is a significant impact of Non-Performing Loans on Profitability	Accepted
H2: There is a significant impact of Cost per Loan Asset on Profitability	Accepted

Source: Author compiled

4.4 Discussion on findings

The significant negative impact of Capital Adequacy on Return on Equity was found in this study with a coefficient value of -0.616934. Thus, results of regression accepted the alternative hypothesis that there is a significant impact of capital adequacy on Return on Equity. The findings of the study are in line with the findings of Goddard, Molyneux, and Wilson (2004), that states a negative relationship between equity to asset ratio and bank performance.

The significant negative impact of Non-Performing Loan on Return on Equity was found in this study with coefficient value of -0.479454. Therefore, results of regression accepted the alternative hypothesis that there is a significant impact on Non-Performing Loans on Return on Equity. The findings are in line with Michael et al. (2006)

who emphasized that NPL in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks. Moreover, these results are in line with the previous research (Ndoka & Islami, 2016) findings that mentioned as NPL increases by 1 unit, profitability as measured by ROA will reduce by 0.2869 units and the variable ROE by 0.018582 units. Hence, findings suggested that banks should enhance credit analysis of the borrower's capacity and the process of loan administration. It was also found that high NPL affected the bank profitability and they should be monitored periodically.

The significant positive impact of Cost per Loan Asset on Return on Equity was found in this study with coefficient value of 0.319406. Therefore, results of regression accepted the alternative hypothesis, there is a significant impact on Cost per Loan Asset on Return on Equity. However, Paudel (2012) has found negative but statistically insignificant association between cost per loan asset (CLA) and bank performance (ROA) in Nepal whereas in Nigeria, Kurawa and Garba (2014) have found significant positive association between cost per loan asset (CLA) ratio and bank's profitability. However, banks that are efficient in managing their expenses (costs), holding other factors constant, earn high profits. But as per authors findings, CPL has a significant impact on bank financial performance. Moreover, the bank size as a control variable also have a significant positive impact on the profitability of the bank with a positive coefficient of 3.621554 and a t-value of 4.120819 at a 1% significance level.

5. Conclusion

5.1. Summary of the findings

This study has laid some groundwork to explore the impact of credit risk management on financial performance of Sri Lankan commercial Banks upon which a more detailed evaluation was carried out. The results suggested that non-performing loan, Capital Adequacy have negative impact on Return on Equity while the Cost per Loan Asset has a positive impact on Return on Equity.

The first objective of this study is to identify the relationship between credit risk management and financial performance of commercial banks in Sri Lanka. Hence, with the correlation analysis, the first objective was achieved. The second objective is to identify the impact of credit risk management on financial performance of commercial banks in Sri Lanka. Hence, Regression Analysis was performed for achieving this objective. Finally, the third objective is to identify the most influential factor of credit risk on financial performance of commercial banks in Sri Lanka. Accordingly, the cost per assets loan asset is the most influential towards the profitability of the banks with a higher t-statistic.

As per the findings, the study recommends that commercial banks to pay attention to maintain Basel III accord in proper manner. As increase of NPL ratio causes to enhance the loan loss provisions, the authorities to take the possible strategic initiatives to write off through the profit of the banks. This impact has denoted that profitability

of banks fairly affected by credit risk within the commercial banks in Sri Lanka. Hence, banks should increase the skills of recovery departments to maintain NPL rate at 5%. It can be recommended that commercial banks should pay attention on their loan portfolio. As per authors findings, CPL has significant impact on bank financial performance. Hence, it is important to maintain low cost per Loan Asset to gain a high profit for the bank.

5.2 Suggestions for future studies

This research heavily relied on secondary data that was obtained from the commercial banks' annual reports and also used the Colombo Stock Exchange website. Hence, Future researchers should try to incorporate the views of the executive managers of the Commercial Banks.

The research also did not collect data on all 26 Commercial Banks in Sri Lanka. That did not have continuous data for the nine years from 2011 to 2019. And also Licensed specialized Banks did not take into the sample of this study. Hence, future researchers should also consider the Licensed Specialized Banks to investigate the impact of credit risk on banks profitability. And to increase independent variables such as loan provision to total loans, loan provision to total assets, bank default rate.

This study confined to Sri Lankan context only. Therefore, it is suggested to consider the cross-country discussion also for this study. Then, they can gain a better result for the impact of credit risk management on financial performance of commercial banks.

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