Impact of Credit Risk Management on Profitability of Nepalese Commercial Banks

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Abstract

This study examines the impact of credit risk management on profitability of Nepalese commercial banks. Default rate, cost per loan assets and capital adequacy ratio are the independent variables used in this study. The dependent variables are return on assets (ROA) and return on equity (ROE). The secondary sources of data have been used from annual reports of selected commercial banks and supervision report of Nepal Rastra Bank. The regression models are estimated to test the significance and effect of credit risk management on profitability of Nepalese commercial banks. The beta coefficient of default rate and cost per assets with profitability (ROA, ROE) has been found negative and statistically significant. The negative sign indicates that there is statistically negative relationship between default rate and cost per loan assets with profitability. Likewise, the beta coefficient of capital adequacy ratio with ROA and ROE is found to be positive and statistically significant. The positive sign of beta coefficient indicates that there is statistically positive relationship between capital adequacy ratio and profitability. The study thus recommends an effective credit risk management for commercial banks of Nepal that maintains an optimum level of capital adequacy ratio, controls and monitors cost per loan assets and balances default rate to enhance financial performance.

Keywords: default rate, cost per loan assets, capital adequacy, return on assets, return on equity

Introduction

Credit activity is considered to be very important for the success of financial and banking institutions because the results of their business depend mainly on the quality and size of their credit portfolio. These institutions must direct resources to manage and monitor their credit portfolio. As a result of the extensive expansion of banking activity at the international level, the need has emerged for standards which can be used in banking and finance internationally to ensure a degree high level of international financial stability in a competitive environment (Shrestha, 2017).

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In country like Nepal, the financial sector is still in the primary development phase and many commercial banks have not been able to establish a firm risk management framework, particularly credit risk management, in order to prevent unfavorable events. This is dangerous when Nepalese banks' customer services are still in their infancy and bank's revenue depends heavily on lending activities and credit growth is central to any banking organization's profit. In addition, the control work from the central bank, though playing a growing role, has not been protective enough. Access to credit information and history is very limited. Some years ago and in recent times, lots of news arose that some of the development banks and finance companies were going to file for bankruptcy due to bad credit assessment practices brought a big loss to the bank. "Smoke cannot be released without a fire". There must have been something wrong in that bank's credit procedures (Dhakal, 2011).

The East Asia Financial crisis was indeed remarkable in many ways as it hit the most rapidly growing economies in the world. It is the least anticipated financial crisis in many years yet the sharpest to hit the developing nations since the 1982 debt crisis (Radelet & Sachs, 1998). These incidents raise a question for all financial institutions in general and banks in particular: What could they have done in order to prevent or at least lessen the bad impact of this happening?

It urges the significance of a sound credit risk management in lending organizations. Credit risk is a popular type of risk that both non-financial and financial institutions must deal with. Credit risk occurs when a debtor/borrower fails to fulfill his obligations to pay back the loans to the principal/lender. In banking business, it happens when payments can either be delayed or not made at all, which can cause cash flow problems and affect a bank's liquidity (Greuning & Bratanovic, 2009). Default rate is the possibility that a borrower will default, by failing to repay principal and interest in a timely manner. A bank is a commercial 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).

Burton, Nesiba, and Brown (2015) define credit risk as the probability of debtor not paying the principal and/or the interest due on an outstanding debt. When a bank issues loans to customers, it expects they will to repay principal and interest amount on an agreed time. If both the principal and interest payment are received on an agreed time with agreed terms, it is known as performing loan. However, if the loan payment is

not received on time, it is known as a non-performing loan (NPL). NPL is normally classified into three categories namely: a substandard loan, doubtful loan and loss loan (Kolapo et al., 2012). If the loan is not repaid more than 90 days from its due date is known as substandard loan and similarly, if it is not repaid more than 180 days from loan due date is known as a doubtful loan. Loss loan is meant when customers are not ready to repay more than 360 days from its due date. When the loss loan category accumulates to a large amount, it is a huge loss to the bank (Gestel & Baesens, 2009).

Credit risk management in a bank basically involves its practices to "manage" or , to minimize the risk exposure and occurrence. For a commercial bank, lending activities form a critical part of its products and services. Greuning and Bratanovic (2009) state that more than 70 percent of a bank's balance sheet generally relates to this aspect of risk management. So, credit risk management is crucial to any bank's success.

Credit risk management (CRM) in a financial institution starts with the establishment of sound lending principles and an efficient framework for managing the risk. Policies, industry specific standards and guidelines, together with risk concentration limits are designed under the supervision of risk management committee. These policies, standards and procedures govern how credit risk is measured, monitored, reported and controlled. As market conditions change rapidly, adequacy and effectiveness of internal controls should be reviewed regularly to manage the credit risk effectively.

The study of profitability is important because profits are key determinants of growth and employment in the medium term (Ongore & Kusa, 2013). The increasing level of non-performing loan rates in banks books, poor loan processing, undue interference in the loan granting process, inadequate or absence of loan collateral among other things are linked with poor and ineffective credit risk management that negatively impact on banks performance (Muriithi, Waweru & Muturi, 2016). Thus, credit risk may have a vital effect on profitability of banks as it gives raise to non-performing loans. A bad credit policy can lead to inappropriate allocation of credit which may result in bad debts and, hence, lost of income in the form of interest and banks asset on the principal loaned out. The extent and the level of loss caused by CR compared to others is severe to cause bank failures (Ladley, 2013). Over the years, there have been increased number of substantial bank problems in both matured and emerging economies. Credit problems, especially weakness in credit risk management (CRM), have been identified to be a part of the major reasons associated with banking difficulties. Loans constitute

a large proportion of credit risk as they normally account for highly significant in the equity of a bank. Thus, the banking business is likely to face difficulties when there is a slight deterioration in the quality of loans. Poor loan quality has its roots in the information processing mechanism. Laeven (2014) observed that these problems are at their acute stage in developing countries.

A strong credit risk management avoids significant drawbacks like credit concentrations, lack of credit discipline, aggressive underwriting to high-risk counterparts and products at inadequate prices and an effective credit risk management is verified by internal risk control and audit which monitor credit discipline, loan policies, approval policies, facility risk exposure and portfolio level risk (Gestel & Baesens, 2009). CRM in financial institution means establishment of sound lending principles and an efficient framework for managing the risk. The goal of CRM is to maximize a bank's risk adjusted rate of return by minimizing the credit risk exposure within acceptable parameters. This study therefore seeks to investigate the impact of CRM on a bank's financial performance in Nepal.

Literature Review

Abdelrahim (2013) investigates the determinants, challenges and drivers of developing the effectiveness of credit risk management of Saudi Banks. The study was based on descriptive and analytical perspective. In the said study, CAMEL independent variables were specified to be: capital adequacy ratio, assets quality, management soundness, earnings of credit facility, liquidity, and bank size. The findings of this study show that liquidity has a significant strong impact on the effectiveness of credit risk management of Saudi Banks, whereas bank size has a negative impact on the effectiveness of credit risk management of Saudi Banks. Similarly, the other variables like capital adequacy, assets quality, management soundness and earnings were found to have an insignificant impact on the effectiveness of credit risk management of Saudi Arabian banks. The study results have identified various challenges regarding the effectiveness of credit risk management that are of vital importance to Saudi banks. They include: low quality of assets, inadequate training, weak corporate governance, lack of credit diversification, granting credit ceiling exceeding customer's repayment capacity, absence of risk premium on risky loans, priority of loan guarantees at expense of customer repayment capacity, absence of analysis of customer's financial position, corruption of some credit officers and priority of profit at expense of credit safety. To alleviate these challenges, researcher recommends for Saudi

Arabian banks to have a comprehensive strategy for managing credit risk, to strengthen the role of credit risk committee, to implement Basel III accord, and to adopt available sophisticated technique to mitigate credit risk.

Alshatti (2015) investigated the effect of credit risk indicators on banks' financial performance during the period of 2005 to 2013 using thirteen commercial banks of Jordan. The author used secondary sources to collect data through annual reports of sample banks and carried out panel regression analysis study. The credit risk management indicators used in this study are capital adequacy ratio, credit interest/credit facilities, provision for facilities loss/net facilities, leverage ratio and level of non-performing loans. The bank financial performance indicators are ROA and ROE. The findings of this study show that there is a positive effect of non-performing loans/gross loans on banks' financial performance and a negative effect of provision for facilities loan/net facilities ratio on banks' financial performance. However, researcher found that capital adequacy ratio and credit interest/credit facilities ratio have no effect on banks' financial performance. Further, the significant variables found in this study are non-performing loans/gross loans, provision for facilities loss/net facilities and the leverage ratio. The author recommends that the Jordanian banks design an effective credit risk management system, operate under a sound credit granting process, and to maintain an appropriate credit administration with monitoring, processing and control mechanism. In nut shell, the study recommends improving banks' credit risk management to attain higher profitability.

Ejoh, Okpa, and Egbe (2014) evaluated the impact of credit risk and liquidity risk management on the profitability of deposit money held by banks in Nigeria from 80 respondents using a questionnaire. The data obtained were analyzed using descriptive statistics and correlation analysis. The findings of this study showed that there is a significant relationship between bank liquidity and profitability of deposit money among Nigerian banks. Hence, the authors recommend that deposit money banks should set up an effective system of internal controls to monitor risk in order to ensure complete compliance. Moreover, the banks should maintain a balance between deposit-loan ratios in order to avoid asset liabilities mismatch.

Kurawa and Garba (2014) devoted effort to assess the effect of credit risk management on the profitability of Nigerian banks during the period 2002 to 2011 using the generalized least square regression technique as a methodology. The credit risk management indicators used in this study are default rate, cost per loan asset and capital adequacy ratio. The

profitability ratio indicator like many other studies is ROA. The findings of this study show that default rate, cost per loan assets and capital adequacy ratio have a significant positive relationship with ROA. The authors recommend that it is necessary for Nigerian banks to practice scientific credit risk control, improve their efficacy in credit analysis and loan management, and minimize the high incidence of non-performing loans and their negative effect on profitability. Nawaz et al. (2012) evaluated the impact of credit risk on the profitability of Nigerian banks from 2004 to 2008 using multiple regression analysis. The ratio of non-performing loan to loan & advances and ratio of loan & advances to total deposit were used as indicators of credit risk. Return on asset was used as an indicator of financial performance. The findings of this study show that bank profitability is inversely influenced by the level of loan and advances, non-performing loan and deposits thus exposing them to risk of illiquidity and distress. The authors recommend for the management to be cautious when setting up the credit policy as not to affect profitability.

Ogboi and Unuafe (2013) examined the impact of credit risk management strategies and capital adequacy on banks financial performance in Nigeria from 2004 to 2009 using panel data analysis. The study considered loan loss provision, loan and advances, non-performing loan, capital adequacy ratio and liquidity as independent variables; and return on asset as the dependent variable. The result of panel data regression showed that sound credit risk management and capital adequacy impacted positively on bank's financial performance with the exception of loan and advances which was found to have a negative impact on bank profitability. Based on the result, the authors recommend Nigerian banks to establish appropriate credit risk management strategies by conducting rigorous credit appraisal before loan disbursement and draw-down. Additionally, the authors recommend Nigerian banks to pay adequate attention to enhancing Tier-One capital.

Yousuf and Felföldi (2018) identified the effect of credit risk management on profitability in private banks in Syria. Two main criteria were adopted for the management of credit risk in banks: capital adequacy ratio and non-performing loans. In order to achieve the objectives of the research and to test the hypotheses, an appropriate non-probability sample numbering 6 private banks was selected from those private banks in Syria for which financial reports and risk management reports were available sequentially from 2007 until 2011, because the researchers wanted to investigate the relationship between variables within normal conditions not in the light of instability in Syria. Credit risk was measured by the capital adequacy ratio (CAR), and non-performing loans (NPL), whereas

profitability was measured by the ROE indicator by calculating the data and financial reports of sampled banks and showing them in a quantitative manner and identifying the relationship between the variables by using the SPSS program to study the correlation and build the regression equation. The study concluded that there is a statistically significant relationship between capital adequacy and profitability, the capital adequacy ratio affects profitability negatively. Non-performing loans do not affect profitability (ROE). In general, credit risk management accounts for 19 percent of the profitability of banks.

Bhattarai (2016) examined the effect of credit risk on the performance of Nepalese commercial banks using pooled data of fourteen commercial banks of Nepal for the period of 2010 to 2015 totaling to 77 observations. The 77 observations include capital adequacy ratio, non-performing loan ratio, cost per loan assets, cash reserve ratio and bank size as an independent variable; and return on assets as a dependent variable. Regression analysis was used to assess the data. The findings of the study showed that the commercial banks under consideration has been practicing poor credit risk management. This was further evidenced by the negative effect of non-performing loan ratio on bank performance and the positive effect of cost per loan assets on bank performance. In contrast to other studies, the author found that capital adequacy ratio and cash reserve have no influence on bank performance. Since there is a significant relationship between credit risk and bank performance, the author suggests that the banks establish proper credit risk management strategies by conducting sound credit evaluation procedure before granting loans to customers.

Likewise, Bhattarai (2017) observed the effect of credit risk on the profitability of commercial banks in Nepal over the period of 8 years (2009 to 2016). Panel data of six commercial banks were analyzed using pooled OLS model, fixed effects model and random effect model. The results from the estimated regression models showed that default risk was significantly positively associated with banks' profitability. However, capital adequacy ratio was found significantly negatively associated to profitability. The effect of cost per loan assets seems minimal in explaining the variation of commercial banks' profitability. Thus, this study concludes that credit risk indicators like: default risk and capital adequacy ratio have significant impact on the profitability of commercial banks in Nepal.

Methodology

This research is based on secondary data of sample banks and has employed regression analysis to measure the impact of CRM on profitability of Nepalese commercial banks. There are 26 commercial banks (government and private sector owned) operating in Nepal. All 26 licensed Nepalese commercial banks have been considered as the total population of this study. Out of the total population, five commercial banks have been taken as sample. These are Global IME bank limited, Citizens bank international limited, Machhapuchhre bank limited, Kumari bank limited and Nepal SBI bank limited. Eleven years' data has been collected for this study ranging from 2009 to 2019. Since, the sample remained consistent with the research objectives, so the purposive sampling design has been used.

Statistical Model

To find out the factors affecting profitability of commercial banks, a multiple linear regression analysis is carried out in respect of 5 commercial banks for data of eleven years from 2009 to 2019 A.D. The model adopted for this study is underpinned to the mode of Kargi (2014) in this study "Credit Risk and the Performance of Nigerian Banks" which measured profitability with Return on Assets (ROA) as a function of the ratio of Non-performing loan to Total Loan & Advances (NPL/TLA) and ratio of Total Loan & Advances to Total deposit (TLA/TD) used as indicators of credit risk. However, this study improved on the model by incorporating the ratio of CPLA ratio and CAR ratio as a measure for credit risk. This study has also measured profitability with ROA and ROE.

A multiple regression equation in this analysis can be expressed as:

$$Y_1 = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + e_{it} \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$Y_2 = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + e_{it} \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where,

$Y_{1=}$ dependent variable {(Return on assets (ROA) for firm 'i' during time period't')}

$Y_{2=}$ dependent variable {(Return on equity (ROE) for firm 'i' during time period't')}

$\beta_{0=}$ constant

$\beta_{1 =}$ regression coefficient of default rate

$X1_{it =}$ Independent variable default rate for firm 'i' during time period't'

$\beta_{2 =}$ regression coefficient of cost per loan assets

$X2_{it =}$ Independent variable cost per loan assets for firm 'i' during time period't'

$\beta_{3 =}$ regression coefficient of capital adequacy ratio

$X3_{it =}$ Independent variable capital adequacy ratio for firm 'i' during time period't'

e_{it} = error term.

Results

Descriptive Statistics

Statistics, which describe the data that have been gathered, are called descriptive statistics. Such data are often in the form of raw, unorganized numerical values. Descriptive statistics allow to summarize the proportions of an entire distribution of scores with just a few numbers. Among various descriptive analysis tools, the researcher has used mean and standard deviation in this analysis. The descriptive statistics are summarized on table 1.

Table 1

Descriptive Statistics

The table shows the descriptive statistics which includes minimum value, maximum value, mean value, and standard deviation of dependent variables ROA in percentage and ROE in percentage. Similarly, independent variables Default rate, Cost per loan asset ratio and capital adequacy ratio in percentage, associated with five sample commercial banks for the study period of 2009 to 2019 that makes 55 total number of observations. This table represents the average value of mean, standard deviation for all five samples banks taken into consideration.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	55	.05	2.24	1.2849	.49428
ROE	55	.55	22.85	13.5487	5.03390
DR	55	0.00	4.17	1.4075	1.04050
CPLA	55	.48	10.12	3.1733	2.31076
CAR	55	10.31	16.88	12.6835	1.56984
Valid N (listwise)	55				

Table 1 clearly shows that return on assets has minimum value of 0.05 percent and a maximum of 2.24 percent and average value for bank's profitability as measured by ROA is 1.2849 percent, indicating that during the period of 2009 to 2019, the total assets of commercial banks generated 1.2849 percent return. The average return on equity of selected banks during the study period is noticed to be 13.5487 percent with minimum value of 0.55 percent and a maximum of 22.85 percent. The default rate has a minimum value of 0.00 and a maximum of 4.17 percent with an average of 1.4075 percent. Further, the average value for CPLA is 3.1733 percent, indicating that during the period of 2009 to 2019, the CPLA of commercial banks generated 3.1733 percent return with minimum value of 0.48 and a maximum of 10.12 percent. Similarly, the minimum capital adequacy ratio is 10.31 percent, which is closed to the regulatory requirement of Nepal Rastra Bank (NRB) directives 2015 is 10 percent. The average CAR is 12.6835 percent, which is greater than the regulatory requirement of NRB. The column of standard deviation denotes how much the variable deviates from the mean. Here, ROA has least standard deviation i.e. 0.49428 percent, while ROE has high standard deviation i.e. 5.03390 percent. Which means, the higher the standard deviation, the higher the variability of that factor.

Correlation Analysis

A correlation analysis is one of the most important part of inferential statistics that shows the correlation of dependent variable profitability (ROA) and (ROE) with that of explanatory variables such as default rate, cost per loan assets and capital adequacy ratio. The Pearson correlation has been computed and the results are presented in table 2 and 3.

Table 2

Bivariate Pearson correlation coefficients for Return on Assets (ROA) and components of CRM

Correlations					
		ROA	DR	CPLA	CAR
ROA	Pearson Correlation	1	-.336*	-.154	.417**
DR	Pearson Correlation		1	-.240	-.204
CPLA	Pearson Correlation			1	.076
CAR	Pearson Correlation				1
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

The Capital adequacy ratio is positively related to return on assets which indicates that higher the capital adequacy ratio, higher would be return on assets. However, default rate and cost per loan assets ratio are negatively related with return on assets which indicates higher the default rate and cost per loan assets ratio, lower would be return on assets.

Table 3

Bivariate Pearson correlation coefficients for Return on Equity (ROE) and components of CRM

Correlations					
		ROE	DR	CPLA	CAR
ROE	Pearson Correlation	1	-.407**	-.006	.063
DR	Pearson Correlation		1	-.240	-.204
CPLA	Pearson Correlation			1	.076
CAR	Pearson Correlation				1

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

In addition, the Capital adequacy ratio is positively related with return on equity which indicates that higher the capital adequacy ratio, higher would be return on equity. Likewise, default rate and cost per loan assets ratio are negatively related with return on equity which indicates higher the default rate and cost per loan assets ratio, lower would be return on equity.

Regression Analysis

Regression analysis is also a part of inferential statistics. This section deals with regression results from various specifications of the models to examine the impact of credit risk management on profitability of Nepalese commercial banks for secondary data obtained from 55 observations. The regression results for credit risk management and bank profitability i.e. return on assets and return on equity are shown in table 4 and 5 respectively.

Table 4

Estimated Regression of Return on Assets

The results are based on panel data of 5 commercial banks with 55 observations for the period of 2009 to 2019 A.D. by using linear regression model: $Y_1 = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + e_{it..}$ *Where,* Y_1 *refers to dependent variable (ROA) for firm 'i' during time period't',* β_0 *refers to Constant,* β_1 *refers to regression coefficient of default rate,* $X1_{it}$ *= Independent variable default rate for firm 'i' during time period't',* β_2 *refers to regression coefficient of cost per loan assets,* $X2_{it}$ *refers to Independent variable cost per loan assets for firm 'i' during time period't',* β_3 *refers to regression coefficient of capital adequacy ratio and* $X3_{it}$ *refers to Independent variable capital adequacy ratio for firm 'i' during time period't'.*

Specification	Intercept	DR	CPLA	CAR	R^2	F value	Significance
I	1.519 (14.082)	-0.160 (-2.60)			0.336	6.759	0.012
II	1.39 (12.234)		-0.133 (-1.137)		0.304	1.293	0.026
III	-0.381 (-0.758)			0.131 (3.340)	0.417	11.159	0.002
IV	1.719 (11.373)	-0.188 (-3.048)	-0.053 (-1.920)		0.414	5.393	0.007
V	-0.008 (-0.16)	-0.125 (-2.122)		0.144 (2.944)	O.490	8.201	0.001
VI	-0.310 (-0.623)		-0.40 (-1.514)	0.136 (3.487)	0.457	6.861	0.002
VII	0.196 (0.385)	-0.154 (-2.635)	-0.056 (-2.162)	0.117 (3.107)	0.551	7.411	0.000

The value of R^2 in model VII shows that 55.1 percent of the total variation in the ROA is explained by this model and the rest 44.9 percent cannot be explained indicating that there are other factors that may affect the performance of the banks. Moreover, the coefficient for default rate (-0.154) and the coefficient for cost per loan assets (-0.056) variables for ROA is negative. Similarly, the coefficient for capital adequacy ratio (0.117) variable for ROA is positive. Therefore, there is statistically significant (*P*-value < α) at 1 percent significant level.

Table 5

Estimated Regression of Return on Equity

The results are based on panel data of 5 commercial banks with 55 observations for the period of 2009 to 2019 A.D. by using linear regression model: $Y_2 = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + e_{it.}$ Where, Y_2 refers to dependent variable (ROE) for firm 'i' during time period't', β_0 refers to constant, β_1 refers to regression coefficient of default rate, $X1_{it}$ = independent variable default rate for firm 'i' during time period 't', β_2 refers to regression coefficient of cost per loan assets, $X2_{it}$ refers to independent variable cost per loan assets for firm 'i' during time period 't', β_3 refers to regression coefficient of capital adequacy ratio and $X3_{it}$ refers to independent variable capital adequacy ratio for firm 'i' during time period 't'.

Specification	Intercept	DR	CPLA	CAR	R^2	F value	Significance
I	16.322	-1.970			0.407	10.537	0.002
	(15.414)	(-3.246)					
II	13.594		-0.014		0.306	0.202	0.096
	(11.609)		(-0.047)				
III	11.004			0.201	0.363	0.208	0.065
	(1.959)			(0.456)			
IV	17.269	-2.099	-0.241		0.421	5.607	0.006
	(11.255)	(-3.348)	(-0.855)				
V	17.221	-1.991		-0.069	0.408	5.186	0.009
	(3.106)	(-3.182)		(-0.165)			
VI	15.344		-1.870	-0.049	0.41	3.20	0.021
	(10.30)		(-3.133)	(-0.169)			
VII	18.032	-2.166	-0.240	0.059	0.422	3.674	0.018
	(3.196)	(-3.182)	(-0.842)	(0.141)			

The value of R^2 in model VII shows that 42.2 percent of the total variation in the ROE is explained by this model and the rest 57.8 percent cannot be explained indicating that there are other factors that may affect the performance of the banks. Moreover, the coefficient for default rate (-2.166) and the coefficient for cost per loan assets (-0.240) variables for ROE is negative. Similarly, the coefficient for capital adequacy ratio (0.059) variable for ROE is positive. Therefore, there is statistically significant (*P*-value < α) at 5 percent significant level.

Conclusion

This research output was expected to provide new insights into the long-run impact of credit risk management on profitability and survival of the bank. A number of variables like DR, CPLA and CAR that are linked to the profitability (ROA, ROE) of banks were examined. Based on this study, it is interesting and quite surprising to find out that credit risk indicators have a positive association with profitability of the banks. This means that the banks in Nepal are taking credit risks and earning benefits from interest rates, fee, and commissions etc. The results also reveal that the capital adequacy ratio is positively interlinked with profitability. It can be instrumental in promoting bank soundness and safety to the optimal level and banks should be capitalized to enable them enjoy assess to cheaper sources of funds with subsequent improvements in profit levels. It is also unveil that the banks learned how to tackle the credit risk over the years. Thus, the results do not disclose any major negative association between bank profitability and credit risk variables. However, few minor negative relationships indicate that credit risk improves bank profitability. Hence, Nepalese banks should be confident in minimizing the lending rates, and also decreasing commission and fee charges. It is also important for the borrowers to repay their full loans on time settled in the beginning of the agreement.

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