Factors Affecting For the Deposit Mobilization in Nepalese Commercial Banks

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Abstract

This study examines the factors affecting for the deposit mobilization in Nepalese commercial banks. Return on assets and return on equity are the dependable variables. The selected independent variables are bank size, capital adequacy ratio, credit to deposit ratio, loan loss provision, non-performing loan. The study is based on data of 19 Nepalese commercial banks for the period from 2016/17 to 2021/22. Secondary data are used to extract the information from factors affecting for the deposit mobilization in Nepalese commercial banks. The regression models are estimated to test the significance and importance of factors affecting for the deposit mobilization in Nepalese commercial banks.

The study showed that there are negative impact of non-performing loan and capital adequacy ratio on return on equity. It indicates that increase in non-performing loan and capital adequacy ratio leads to decrease in return on equity. Similarly, there are positive impact of non-performing loan and capital adequacy ratio on return on assets. It indicates that increase in non-performing loan and capital adequacy ratio leads to increase in return on assets. The result shows that there is a positive impact of credit to deposit ratio on return on assets and return on equity. It indicates that increase in credit to deposit ratio leads to increase in return on assets and return on equity. Likewise, loan loss provision and bank size have a positive impact on return on equity. It indicates that increase in loan loss provision and bank size leads to increase in return on assets. It indicates that increase in loan loss provision and bank size have a negative impact on return on assets. It indicates that increase in loan loss provision and bank size leads to decrease in return on assets.

Keywords: bank size, capital adequacy ratio, credit to deposit ratio, loan loss provision, non-performing loan, and Return on assets, return on equity.

1. Introduction

Credit plays a prominent role in the financing of economic activities all over the world. Credits are granted to finance various production, investment and consumption activities, across various sectors of the economy. Credits therefore constitute critical tools for economic growth (Ugoani, 2013).

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Credit management is an important issue in any organization and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. Myers and Brealey (2003) described credit management as methods and strategies adopted by a firm to ensure that they maintain an optimal level of credit and its effective management. It is an aspect of financial management involving credit analysis, credit rating, credit classification and credit reporting. Nelson (2002) stated that credit management as simply the means by which an entity manages its credit sales. It is a prerequisite for any entity dealing with credit transactions since it is impossible to have a zero credit or default risk.

Deposit mobilization is one of the important functions of banking all over the world.it serves as a significant source of the bank's labor fund and, together with other factors, is essential to boosting the sources of banks' operating capital (Bakare, 2011). Venkati (2016) argued that in the public domain that banks have not been performing effectively to improve capital formation to guarantee a sound financial system.

Garo (2015) revealed that the factors contributing to the growth of deposits are branch expansion, growth in per capita income of the population, the impact of changing of awareness of the society and the money supplied to the economy. Assefa Madebo (2014) stated that branch expansion has positive and significant effect on total deposit of commercial banks. Similarly, Town (2015) found that awareness creation and branch expansion, and Service level & Technology used has positively influenced deposit mobilization. Gebreyohannes (2016) concluded that the key factors for deposit growth are employee's skill and capabilities, top management cooperation, government rule and regulation, population, exchange rate and nominal GDP. Further, Tarekegn (2018) showed that deposit mobilization of the bank can be improved by giving more attention on the identified bank specific factors such as loan to deposit ratio, loan loss provision, ROA, capital adequacy and branch expansion. Also, Tabor (2017) indicated that liquidity has a positive and statistically significant effect on time deposit.

Deneke (2017) found that opening new branches and giving extensive training for the staff about deposit mobilization which results in service excellence have positive and almost significant relationship with deposit.

Similarly, Kahssay (2016) discovered that the branch expansion had positive and significant effect on total deposit whereas inflation rate has a negative and insignificant effect on total deposit. In addition, Hambissa (2014) revealed that branch expansion and exchange rate are strongly significant in affecting deposit mobilization. Moreover, Tesfahunegn (2015) found that banks should provide special services for corporate depositor in order to retain and attract the big depositors.

Tun (2019) discovered that the adopting appropriate deposit rates are important to stimulate people to save more money and then enhance mobilizing of deposits. Banke & Yitayaw (2022) concluded the country has to ensure its political stability to increase the activities of commercial banks as well as to boost its deposit mobilization effort. Islam & Wafik (2019) stated that company size and broad money supply growth rate significantly affect the deposit mobilization. Vuong *et al.* (2020) found that the form of promotion, income, bank brand, quality of service, interest rate policy, and employee knowledge and attitude impact the deposit decision. Ayene (2020) revealed that customer specific variables trust and saving habit of depositors' are found to be significant for deposit mobilization.

Abebe (2019) stated that bank liquidity has positive and statically significant effect on commercial bank deposit. Kassu (2020) stated that banks liquidity, credit risk and exchange rate are found to be positive opportunities for commercial banks to mobilize more deposits. Even though banks liquidity is insignificant the other two have significant effect on deposit mobilization. In addition, Bogale *et al.* (2021) discovered that the commercial banks can mobilize more deposit when they have convenient office, good transportation access, hardworking employees and society who are aware of the banking system. Further, Tran *et al.* (2020) revealed that legal provisions of the Central bank, policies and mechanisms of bank (Policy), and products of bank positively affecting the deposit collection. Belete (2021) concluded that the marketing strategy needs special assessment attached with another variable that could contribute for deposit mobilization.

In the context of Nepal, Upadhya (2021) stated that the loan and advance has positive and significant relationship with both net profit and total deposit mobilization. Similarly, Bhattarai (2020) explained that the fluctuations in the

interest rate of the commercial banks slightly affect the deposit mobilization. Baniya (2020) discovered that there is a positive relationship between interest rates and total deposit. Further, Timsina (2016) stated that commercial banks' lending is mostly determined by the gross domestic product of the country and liquidity ratio to be maintained by the commercial banks. Mohan (2012) stated that mobilization of deposits is one of the important functions of banking business. Mobilization of deposit plays an important role in providing satisfactory services to different sectors of the economy. The success of the micro-finance banking greatly lies on the deposit mobilization. According to Kazi (2012), in banking sector, deposit mobilization is a scheme intended to encourage customers to deposit more cash with the bank and this money in turn will be used by the bank to disburse more loans and generate additional revenue for them. The more the loans the banks disburse the more profit they make. According to Laura et al. (2009), to mobilize more deposits, financial institutions offer a range of savings products that are tailored to their particular clientele. The simple and transparent design of the savings products also enables staff to administer them with ease, reducing administrative costs.

Manandhar (2014) found that liquidity has positive impact on profitability. Likewise, Bhattarai (2015) found that total assets and liquidity position have positive relationship with the performance measure (ROA and NIM). Capital ratio is negatively related to net interest margin, but positively related to return on assets. Marahatta (2016) indicated that higher the quality of assets, bank size and liquidity of bank higher would be return on assets. Capital regulation is effective in the sense that it influences bank behavior and the regulatory framework needs to be designed to encourage individual banks to maintain higher capital ratios in order to reflect their differential risks profiles. Bam (2015) revealed that profitability (ROA) is positively related to asset composition or assets size.

Mamo (2017) indicated that loan provision, branch expansion and number of customers are found to have significant positive impact to induce deposit mobilization. The study fails to carry out all the necessary residuals test to fulfil regression assumption before running the regression. Ogar and Oka (2017) examined the impact of financial deepening on capital formation in Nigeria. The study found that financial deepening has a positive impact on capital formation. However, the study failed to capture total deposit liability

and lending rate and this could affect the validity of the study. Likewise, Arikpo & Adebisi (2017) examined the effects of deposit money banks financing on real sector output in Nigeria. The study found that the deposit money banks financing has a long run significant effect on trade sector output but an insignificant long run effect on agricultural sector output in Nigeria. However, the study failed to document various diagnostic tests such as normality test model specification test, serial auto correlation test among others.

The above discussion shows that the empirical evidences vary greatly across the factors affecting for the deposit mobilization in commercial banks. Though there are above mentioned empirical evidences the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to analyze the factors affecting for the deposit mobilization in Nepalese commercial banks. Specifically, it examines the factor of bank size, capital adequacy ratio, credit to deposit ratio, loan loss provision, non-performing loan, and Return on assets and return on equity of Nepalese commercial banks.

The remainder of this study is organized as follows: section two describes the sample, data, and methodology. Section three presents the empirical results and final section draws the conclusion and discuss the implication of the study findings.

2. Methodological aspects

This study is based on secondary data which were gathered from 19 commercial banks in Nepal from 2016/17 to 2021/22, leading to a total of 114 observations. Secondary data are used to extract the information from factors affecting for the deposit mobilization in Nepalese commercial banks. Table 1 shows the number of commercial banks selected for the study along with the study period and number of observations.

List of commercial banks selected for the study along with the study period

S. N.	Name of the banks	Study period	Observations
1.	Agricultural Development Bank	2016/17 to 2021/22	6
2.	Everest Bank Ltd.	2016/17 to 2021/22	6
3.	Kumari Bank Ltd.	2016/17 to 2021/22	6
4.	Laxmi Bank Ltd.	2016/17 to 2021/22	6
5.	Machhapuchhre Bank Ltd.	2016/17 to 2021/22	6
6.	Nepal Bank Ltd.	2016/17 to 2021/22	6
7.	Nepal SBI Bank Ltd.	2016/17 to 2021/22	6
8.	NICA Bank Ltd.	2016/17 to 2021/22	6
9.	NMB Bank Ltd.	2016/17 to 2021/22	6
10.	Prime Commercial Bank Ltd.	2016/17 to 2021/22	6
11.	Rastriya Banijya Bank Ltd.	2016/17 to 2021/22	6
12.	Sanima Bank Ltd.	2016/17 to 2021/22	6
13.	Standard Chartered Bank Nepal Ltd	2016/17 to 2021/22	6
14.	Sunrise Bank Ltd.	2016/17 to 2021/22	6
15.	Siddhartha Bank Ltd.	2016/17 to 2021/22	6
16.	Citizen Bank Ltd.	2016/17 to 2021/22	6
17.	Himalayan Bank Limited	2016/17 to 2021/22	6
18.	Global IME Bank	2016/17 to 2021/22	6
19	Nepal Investment Mega Bank	2016/17 to 2021/22	6
Total	number of observations	114	

Thus the study is based on 114 observations

The model

The econometric models employed in this study tries to analyze that factors affecting for the deposit mobilization in Nepalese commercial banks. The dependent variables selected for the study are return on assets and return on equity. Similarly, the selected independent variables are non-performing loans, loan loss provision, capital adequacy ratios, credit to deposit ratio and bank size. Therefore, the model takes the following form:

$$ROA = f(CAR, NPL, LLP, CDR, BS)$$

$$ROE = f(CAR, NPL, LLP, CDR, BS)$$

More specifically, the given model has been segmented into the following models:

$$ROA = \beta_0 + \beta_1 CAR + \beta_2 NPL + \beta_3 LLP + \beta_4 CDR + \beta_5 BS + e_{it}$$

$$ROE = \beta_0 + \beta_1 CAR + \beta_2 NPL + \beta_3 LLP + \beta_4 CDR + \beta_5 BS + e_{it}$$
 Where,

- ROA = Return on assets as measured by the ratio of net income to total assets, in percentage.
- ROE = Return on equity as measured by the ratio of net income to total equity, in percentage.
- CDR = Credit to deposit ratio as measured by the ratio of total loans to total deposits in percentage
- CAR = Capital adequacy ratio as measured by the ratio of total capital to total risk weighted exposure, in percentage.
- LLP = Loan loss provision is measured by an income statement expense set aside as an allowance for uncollected loans and loan payments, in percentage.
- NPI = Non-performing loans as measured by the ratio of non-performing loans to total loans, in percentage
- BS = Bank size as measured by total assets, Rs. in billion.

The following section describes the independent variables used in this study along with the hypothesis formulation:

Non-performing loan ratio

Non-performing loan ratio (NPLR) revealed that the bank's credit quality and is considered as an indicator of credit risk management. Gizaw *et al.* (2015) asserted that non- performing loan ratio (NPLR) is the major indicator of commercial banks' credit risk. Likewise, Jha and Hui (2012) found negative association between PL ratio and ROA but the coefficient is statistically insignificant. The study found that occurrence of non-performing loans is negatively associated with the level of profitability in commercial banks in Tanzania (Kingu *et al.*, 2018). Based on it, this study develops the following hypothesis:

H₁: There is a negative relationship between non-performing loan ratio and Profitability.

Loan loss provision

The proxy used for this variable as loan-loss provisions over total loans. It is a measure of capital risk, as well as credit quality of banks. Naceur (2011)

found that bank loans have a positive and significant impact on profitability. Likewise, Ahmad and riff (2007) stated the key determinants of credit risk of commercial banks on emerging economy banking systems compared with the developed economies. Mustafa (2012) concluded that banks with less loan loss provision are perceived to have more safety and such an advantage can be translated into higher profitability. Ahmed (1999) found that loan loss provision has a significant positive influence on non-performing loans. Therefore, an increase in loan loss provision indicates an increase in credit risk and deterioration in the quality of loans consequently affecting bank performance adversely. Similarly, Miller and Noulas (1997) stated the negative relationship between credit risk and profitability. The study showed that whenever there is negative relationship between them, then it signifies that greater risk linked with loans, higher the level of loan loss supplies which thereby and create a trouble at the profit-maximizing strength of a bank. Based on it, this study develops the following hypothesis:

H₂: There is a negative relationship between loan loss provision and profitability.

Credit to deposit ratio

This ratio is calculated dividing loan and advances by total deposits. It refers to the ratio of total credit disbursement to total deposit. It is used for assessing a bank's credit risk (Maudas and Guevara, 2004). The credit to deposit ratio (CDR) is a major tool to examine the liquidity of a bank and measures the ratio of fund that a bank has utilized in credit out of the deposit total collected. Higher the CDR more the effectiveness of the bank to utilize the fund it collected (Jha & Hui, 2012). This ratio measures the ability of the management to use the assets in offering loans which ultimately creates high profitability (Ibrahim, 2014). Bhattarai (2019) found that credit to deposit ratio has no significant impact on the financial performance of the commercial banks in Nepal. Further, Pradhan (2016) found that credit to deposit ratio positively related to return on assets meaning higher the credit to total deposit ratio, higher would be the return on assets. Based on it, this study develops the following hypothesis:

H₃: There is positive relationship between credit to deposit ratio and profitability.

Capital adequacy ratio

Capital adequacy refers as a percentage of bank's capital to its risk

weighted assets. Capital provides buffer against losses and thus it ensures safety and soundness of the financial institutions. Bourke (1989) found that there is a positive relationship between the financial performance and capital ratio and concluded that higher the capital ratio more the bank will be profitable. Further, Chortareas *et al.* (2012) found positive relation between capital adequacy and the financial performance of commercial banks. Likewise, Abiola and Olausi (2014) revealed that credit risk management has a significant impact on the profitability of commercial banks' in Nigeria. However, Alshatti (2015) found no effect of the capital adequacy ratio on the financial performance of banks. Based on it, this study develops the following hypothesis:

H₄: There is positive relationship between capital adequacy ratio and profitability.

Bank size

Bank size as measured by total assets is one of the control variables used in examining performance of the bank system (Smirlock, 1985). Bank size is normally used to capture potential economies or diseconomies of scale in the banking sector. The effect of bank size on profitability is generally expected to be positive (Smirlock, 1985). A positive relationship between size and bank profitability could be found if there are significant economies of scale (Akhavein *et al.*, 1997). Based on it, this study develops the following hypothesis:

H₅: There is a positive relationship between bank size and profitability.

3. Results and discussion

Descriptive statistics

The descriptive statistics used in the study consists of minimum, maximum, mean and the standard deviation associated with variables under consideration. Therefore, descriptive statistics enables to present the data in a more meaningful way, which allows simpler interpretation of the data. Table 1 summarizes the descriptive statistics for the Nepalese commercial banks used in this study during the period 2016/17 to 2021/22 for 19 commercial banks of Nepal.

Table 2

Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 19

Nepalese commercial banks for the study of 2016/17 to 2021/22. Dependent variable is ROE (Return on equity) and ROA (Return on assets). Independent variables are NPL (Nonperforming loan), CDR (Credit to deposit ratio), LLP (Loan loss provision), CAR (Capital adequacy ratio) and BS (Bank size).

Variables	Variables Minimum		Mean	SD	
ROE	6.26	24.67	15.7503	4.48270	
ROA	0.32	2.78	1.5265	0.48759	
NPL	0.03	113.00	2.122	10.43	
CDR	56.75	98.26	84.0332	8.08	
LLP	0.73	21.35	12.55	3.266	
CAR	11.27	22.99	14.17	2.217	
BS	48.01	512.11	162.74	81.07	

Correlation analysis

Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate together. It is used for checking directional relationship between variables. Having indicated the descriptive statistics, Pearson correlation coefficients are computed and the results are presented in Table 2. More specifically, it shows the correlation coefficients of dependent and independent variables for selected Nepalese commercial banks.

Table 3

Pearson's correlation coefficients matrix

This table shows the Pearson's correlation coefficients of dependent and independent variables of 15 Nepalese commercial banks for the study period from 2016/17 to 2021/22. Dependent variable is ROE (Return on equity) and ROA (Return on assets). Independent variables are NPL (Non-performing loan), CDR (Credit to deposit ratio), LLP (Loan loss provision), CAR (Capital adequacy ratio) and BS (Bank size).

Variables	ROE	ROA	NPL	CDR	LLP	CAR	BS
ROE	1						
ROA	0.006	1					
NPL	-0.103	0.025	1				
CDR	-0.005	0.172	-0.107	1			
LLP	0.129	0.324**	-0.031	-0.214*	1		
CAR	0.283**	0.354**	0.26	-0.166	-0.428**	1	
BS	0.155	0.419**	-0.54	-0.020	0.090	-0.147	1

Note: The asterisk signs (**) and (*) indicate that the result are significant at one percent and five percent levels respectively.

Table 3 shows Person's correlation coefficients of dependent and independent variables. The study indicates that non-performing loan is negatively correlated to return on equity. It indicates that higher the non-performing loan, lower would be the return on equity. The study indicates that credit to deposit ratio is negatively correlated to the return on equity. It indicates that higher the credit to deposit ratio, lower would be the return on equity. Likewise, loan loss provision is positively correlated to return on equity. This implies that the increase in the loan loss provision leads to increase in return on equity. Similarly, capital adequacy ratio is positively correlated to return on equity. It indicates that higher the capital adequacy ratio, higher would be the return on equity. However, bank size has a positive relationship with return on equity. This implies that increased in bank size leads to increase in return on equity.

Similarly, the results show that the study also shows that non-performing loan is positively related to return on assets. It reveals that higher the non-performing loan, higher would be the return on assets. Similarly, credit to deposit ratio is positively correlated to return on assets. It indicates that increase in credit to deposit ratio leads to increase in return on assets. There is a positive relationship between loan loss provision and return on assets. It indicates that increase in loan loss provision leads to increase in return on assets. The study also shows that capital adequacy ratio is positively related to return on assets. It reveals that higher the capital adequacy ratio, higher would be the return on assets. However, the bank size is positively correlated to return on assets. It indicates that increase in bank size leads to increase in return on assets.

Regression analysis

Regression analysis is a statistical process for estimating the relationships among variables. The regression results were estimated where non-performing loan, loan loss provision, credit to deposit ratio, capital adequacy ratio, Bank size are used as independent variables and dependent variables is return on assets. The regression result of where non-performing loan, loan loss provision, credit to deposit ratio, capital adequacy ratio, bank size ratio on profitability of Nepalese commercial banks is shown in table 3.

Table 4

Estimated regression results of bank size, non-performing loan, capital adequacy ratio, credit to deposit ratio and loan loss provision with return on equity of Nepal commercial banks

The results are based on the responses gathered from 19 commercials banks with 114 observations for the period of 2016/17-2021/22 by using linear regression model. The model is ROE = $\beta_0 + \beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5 + e$ where ROE (Return on equity) is the dependent variable. The independent variables NPL (non-performing loan), CDR (credit to deposit), LLP (loan loss provision), CAR (credit adequacy ratio) and BS (bank size).

Model	Intomont	Regression coefficients of					Adj.	SEE	F-value
	Intercept	NPL	CDR	LLP	CAR	BS	R_bar2	SEL	r-value
1	15.844	-0.044					0.002	4.478	1.203
-	(37.164) 15.531	(1.097)	(0.003)				0.002	1.170	1.203
2			(0.049)				0.009	4.502	0.002
3	(3.462) 13.538		(0.015)	0.176			0.008	4.465	1.904
	(8.171) 24.407			(1.380)	-0.614		0.000	1.105	1.501
4	(8.756)				(3.138)**		0.072	4.318	9.849
5	14.347				(21120)	8.589	0.016	4.447	2.796
3	(15.322)	0.044	0.004			(1.672)	0.010	7.77/	2.770
6	(3.578)	-0.044 (1.093)	-0.004 (0.075)				-0.007	4.498	0.599
7	12.467	-0.041	0.013	0.179			0.001	4.481	1.019
/	(2.367) 26.628	(1.015) -0.042	(0.243) -0.021	(1.360) -0.015			0.001	4.401	1.019
8					-0.626		0.057	4.353	2.720
	(3.678) 24.901	(1.059) -0.039	(0.387) -0.018	(0.105)	(2.764)	6.446	0.05		
9	(3.390)	(0.987)	(0.324)	(0.128)	(2.628)	(1.272)	0.062	4.341	2.512

Notes:

- 1. Figures in parentheses are t-value.
- 2. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
- 3. Return on equity is the dependent variable.

The regression results show that the beta coefficients for non-performing loan are negatively related with the return on equity. It indicates that non-performing loan has a negative impact on return on equity. This finding is consistent with the findings Belete (2021). The beta coefficients for credit to deposit ratio are positively correlated with the return on equity. It indicates that credit to deposit ratio has a positive impact on return on equity. This result is consistent with the findings of Kahssay (2016). Likewise, the beta coefficients for loan loss provision has a positively related to the return on equity. It indicates that loan loss provision has a positive impact on the return on equity. This finding is consistent with the findings of Alsahawneh (2016). In addition, the beta coefficients for capital adequacy ratio are negative with return on equity. It indicates that capital adequacy ratio has negative impact on return on equity. This finding is consistent with the findings of Tadele (2019). Further, Moreover, the beta coefficient for bank size is positive with the return on equity which indicates that bank size has a positive impact on

return on equity. This result is consistent with the findings of Deneke (2017). Table 5

Estimated regression results of bank size, non-performing loan, capital adequacy ratio, credit to deposit ratio and loan loss provision with return on assets of Nepal commercial banks

The results are based on the responses gathered from 19 commercials banks with 114 observations for the period of 2016/17-2021/22 by using linear regression model. The model is ROA = $\beta_0 + \beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5 + e$ where ROA (Return on assets) is the dependent variable. The independent variables NPL (non-performing loan), CDR (credit to deposit), LLP (loan loss provision), CAR (credit adequacy ratio) and BS (bank size).

Model	Intercept	Regression coefficients of					Adj.	SEE	F-value
		NPL	CDR	LLP	CAR	BS	R_bar2	SEE	r-value
1	1.524 (32,849) 2.396	0.001 (0.264)					-0.008	0.489	0.070
2	(5.100) 2.134	, ,	(0.010) (1.860)				0.021	0.482	3.458
3	(12.441) 0.424		` ,	-0.048 (3.660)			0.097	0.463	13.39
4	(1.536)			, í	0.078 (4.037)		0.117	0.458	16.29
5	(20.837)					-2.518 (4.923)	0.168	0.444	24.23
6	(5.029)	0.000 (0.069) -0.001	-0.010 (1.833) -0.015				0.012	0.484	1.716
7	3.526' (6.834) 2.443	(0.163) 0.000	-0.015 (2.857) -0.012	-0.057 (4.284) -0.042			0.144	0.451	7.438
8	(3.317)	(0.124)	(2.177)	(2.828)	0.044 (2.034) 0.032		0.167	0.444	6.769
9	(4.480)	(0.400)	-0.013 (2.596)	(3.033)	(1.595)	-2.22 (4.808)	0.305	0.406	11.11

Notes:

- 1. Figures in parentheses are t-value.
- 2. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
- 3. Return on assets is the dependent variable.

Table 5 shows that the beta coefficients non-performing loan are positively related with return on assets. It indicates that non-performing loan has a positive impact on the return on assets. This finding is consistent with the findings of of Irawati & Maksum (2018). Likewise, the beta coefficients for credit to deposits ratio has a positively correlated with return on assets. It indicates that credit to deposits ratio has a positive impact on the return on assets. This finding is consistent with the finding of Arimi (2012). Further, the beta coefficients for loan loss provision are negative with the return on assets. It indicates that loan loss provision are negative impact on return on assets. This finding is consistent with the findings of Hambissa (2014). Moreover, the

beta coefficient for capital adequacy ratio is positive with the return on assets which indicates that capital adequacy ratio has a positive impact return on assets. This result is consistent with the findings of Belete (2021). In addition, the beta coefficients for bank size are negatively related with the return on assets. It indicates that bank size has a negative impact on return on assets. This result is consistent with the findings of Ayene (2020).

4. Summary and conclusion

Deposit mobilization is one of the important functions of banking all over the world. It is crucial service to numerous economic areas. Deposit mobilization is an indispensable factor to increase the sources of the banks to serve effectively. Mobilization of deposit plays an important role in providing satisfactory service to different sectors of the economy. The successful functioning of commercial banks depends on the extent of funds mobilized. Deposits are the lifeblood of banking companies. Deposits constitute a vital source of funds required for banking business. The relationship between the mobilization of bank deposits, the financing of bank credit and the formation of capital is through the activities of the banking industry such as mobilization of deposits and creation of credits. This is made possible through improving their services, initiating modern technological banking system processes, locating the banks at strategic places where their services are needed, adopting appropriate promotion strategy and imposing a considerable interest rate on loans.

This study attempts to analyze the factors affecting for the deposit mobilization in Nepalese commercial banks. This study is based on secondary data of 19 commercial banks with 114 observation for the period of 2016/17 to 2021/22.

The major conclusion of this study is that non-performing loan and capital adequacy ratio have a negative impact on return on equity. Similarly, there are positive impact of non-performing loan and capital adequacy ratio on return on assets. Credit to deposit ratio has a positive impact on return on assets and return on equity. Likewise, loan loss provision and bank size have a negative impact on return on assets. Similarly, loan loss provision and bank size have a positive impact on return on equity. Similarly, the study also concluded that bank size followed by non-performing loan is the most influencing factor that explains the changes in return on equity in context of Nepalese commercial banks.

References

- Abiola, I., and A. S. Olausi, 2014. The impact of credit risk management on the commercial banks performance in Nigeria. *International Journal of Management and Sustainability* 3(5), 295-306.
- Ahmad, N. H., and M. Ariff, 2007. Multi-country study of bank credit risk determinants. *International Journal of Banking and Finance* 5(1), 135-152.
- Ahmed, A. S., C. Takeda, and S. Thomas, 1999. Bank loan loss provisions: A reexamination of capital management, earnings management and signalling effects. *Journal of Accounting and Economics* 28(1), 1-25.
- Ajayi, L. B., and F. I. Ajavi, 2017. Effects of credit risk management on performance of deposit money banks in Nigeria. *International Journal of Research in Management & Business Studies* 4(3), 50-55.
- Akhavein, J. D., A. N. Berger, & D. B. Humphrey, 1997. The effects of megamergers on efficiency and prices: Evidence from a bank profit function. *Review of Industrial Organization* 12(1), 95-139.
- Akuma, J., L. Doku, & N. Alver, 2017. Credit risk, deposit mobilization and profitability of Ghanaian banks. *International Journal of Economics and Financial Issues* 7(5), 394-399.
- Alabi, C. K., 2007. A synthesis of the critical factors affecting performance of the Nigerian Banking System. *European Journal of Economic and Administrative Sciences* 17(4), 50-87.
- Alfawaerah, N. H., 1987. The relationship between the EPS & the market stock return (Case Study: Industrial Sector-Jordan). *Accounting Research* 3(11), 49-67.
- Al-Khalayleh, M., 2001. The association between markets-based performance measures and accounting performance measures in the long run. *Journal of Dirasat* 28(1), 93-110.
- Alshatti, A. S., 2015. The effect of credit risk management on financial performance of the Jordanian commercial banks. *Investment Management and Financial Innovations* 12(1), 338-345.
- Arimi, M., 2012. Analyze of influence factors banking profitability: Study of public banking listed at Indonesian Stock Exchange during 2007-2010. *Diponegoro Journal of Management* 1(4), 80-91.
- Audu, M. A., A. S. Oghoyone, and M. G. Gulani, 2015. The impact of target deposit mobilization on the banking industry: A study of selected banks in Maiduguri Metropolis. *Journal of Business and Management (TOSRJBM)* 17(5), 36-52.
- Ayene, G. Y., 2020. Determinants of deposit mobilization in the case of commercial

- bank of Ethiopia selected branches. Eur J Bus Manag 12(13), 39-50.
- Bagh, T., Khan, M. A., Azad, T., Saddique, S., and M. A. Khan, 2017. The corporate social responsibility and firms' financial performance: evidence from financial sector of Pakistan. *International Journal of Economics and Financial Issues* 7(2), 301-308.
- Bakare, A. S., 2011. A theoretical analysis of capital formation and growth in Nigeria. *Far East Journal of Psychology and Business* 3(2), 11-24.
- Banke, N. K., and M. K. Yitayaw, 2022. Deposit mobilization and its determinants: evidence from commercial banks in Ethiopia. *Future Business Journal* 8(1), 32-50.
- Bashir, A. H. M., 2003. Determinants of profitability in Islamic banks: Some evidence from the Middle East. *Islamic Economic Studies* 11(1), 1-24.
- Bello, G. B., 2013. An assessment of the contribution of commercial banks to the growth of small and medium scale enterprises in Nigeria. *International Journal of Research in Social Sciences* 2(4), 47-55.
- Bhattarai, B. P., 2019. Effect of credit risk management on financial performance of commercial banks in Nepal. *European Journal of Accounting, Auditing and Finance Research* 7(5), 87-103.
- Bhattarai, Y. R., 2015. Effect of credit risk on the performance of Nepalese commercial banks. *NRB Economic Review* 28(1), 41-64.
- Bourke, P., 1989. Concentration and other determinants of bank profitability in Europe, North America and Australia. *Journal of Banking & Finance* 13(1), 65-79.
- Chortareas, G. E., C. Girardone, and A. Ventouri, 2012. Bank supervision, regulation, and efficiency: Evidence from the European Union. *Journal of Financial Stability* 8(4), 292-302.
- Elser, L., 1999. Strict dollarization and economic performance: An empirical investigation. *Journal of Money, Credit & Banking, Eschborn, Washington DC* 1(1), 1-19.
- Emery, G. W., 1971. A pure financial explanation for trade credit. *Journal of Financial and Quantitative Analysis* 19(3), 271–285.
- Gizaw, M., M., Kebede, and S. Selvaraj, 2015. The impact of credit risk on profitability performance of commercial banks in Ethiopia. *African Journal of Business Management* 9(2), 59-66.
- Ibrahim, M., 2014. A comparative performance of two banks in United Arab Emirates. *Research Journal of Finance and Accounting* 5(21), 24-29.
- Irawati, N., and A. Maksum, 2018. The impact of risk management and bank size

- on profitability of commercial banking in Indonesia. *Economics and Business International Conference 2017* 46(1), 38-41.
- Islam, S. N., M. J. Ali, and A. Wafik, 2019. Determinants of deposit mobilization of private commercial banks: evidence from Bangladesh. *International Journal of Business and Management Invention (IJBMI)* 8(10), 26-33.
- Jha, S., and X. Hui, 2012. A comparison of financial performance of commercial banks: A case study of Nepal. *African Journal of Business Management* 6(25), 7601-7611.
- Kazi, A. M., 2012. Promoting deposit mobilization and financial inclusion. *Journal of Marketing* 5(1), 65-72.
- Kingu, P. S., S. Macha, and R. Gwahula, 2018. Impact of non-performing loans on bank's profitability: Empirical evidence from commercial banks in Tanzania. *International Journal of Scientific Research and Management* 6(1), 71-79.
- Mamo, E. A., 2017. An investigation of determinants of deposit mobilization in commercial banks of Ethopia. *Research on Humanities and Social Sciences* 1(1), 1-8.
- Manandhar, A., A. Kane, A. Basnet, B. Khanal, and B. Panta, 2014. Determinants of credit risks in Nepalese commercial banks. *Nepalese Journal of Finance* 2(1), 1-8.
- Marahatta, S., S. Devkota, P. Sumit, and B. Sushan, 2015. Impact of corporate governance on capital structure of a firm: A study of Nepalese commercial banks. *Nepalese Journal of Business* 1(1), 29-38.
- Maudos, J., and J. F. De Guevara, 2004. Factors explaining the interest margin in the banking sectors of the European Union. *Journal of Banking & Finance* 28(9), 2259-2281.
- Miller, S. M., & A. G. Noulas, 1997. Portfolio mix and large-bank profitability in the USA. *Applied Economics* 29(4), 505-512.
- Mordi, C. N. O., 2004. Institutional framework for the regulation and supervision of financial sector. *Central Bank of Nigeria Bullion* 28(1), 25-36.
- Mustafa, A. R., R. H. Ansari, and M. U. Younis, 2012. Does the loan loss provision affect the banking profitability in case of Pakistan? *Asian Economic and Financial Review* 2(7), 772-779.
- Naceur, S. B., and M. Omran, 2011. The effects of bank regulations, competition, and financial reforms on banks' performance. *Emerging Markets Review* 12(1), 1-20.
- Oduro, R., M. A. Asiedu, and S. G. Gadzo, 2019. Impact of credit risk on corporate financial performance: Evidence from listed banks on the Ghana stock

- exchange. Journal of Economics and International Finance 11(1), 1-14.
- Ogar, A. and F. Oba, 2017. Impact of financial deepening on capital formation in Nigeria. *International Journal of Research in Management & Social Sciences* 5(11), 2322-2329.
- Olusoji, M.O., 2003. Determinants of private savings in Nigeria: An error correction approach. NDIC *Quaeterly* 13(3), 29-38.
- Pradhan R.S., 2016. Bank specific and macroeconomic determinants of bank profitability: A case of Nepal. *Nepalese Journal Finance* 1(1), 1-12
- Septiani, R., and P. V. Lestari, 2016. Pengaruh NPL Dan LDR Terhadap Profitabilitas Dengan CAR Sebagai Variabel Mediasi Pada PT BPR Pasarraya Kuta. *E-Journal Management University Udayana* 5(1), 293–324.
- Smirlock, M., 1985. Evidence on the relationship between concentration and profitability in banking. *Journal of Money, Credit and Banking* 17(1), 69-83.
- Tahir, S. H., F., Ahmad, and B. Aziz, 2014. Impact of loan loss provision on bank profitability in Pakistan. *TIJ's Research Journal of Social Science & Management* 3(12), 34-41.
- Tarekegn, G., 2018. Determinants of deposit mobilization in Ethiopian commercial banks. *Horn of African Journal of Business and Economics (HAJBE)* 1(1), 67-76.
- Timsina, N., 2016. Determinants of bank lending in Nepal. NRB Economic Review 28(2), 19-42.
- Tran, Q. T., M. U. Tran, and X. T. LE, 2020. Factors Affecting Satisfaction of Customers' Savings Deposit in the Context of COVID-19: Evidence from Vietnamese Commercial Banks. *The Journal of Asian Finance, Economics* and Business 7(10), 369-376.
- Tun, N. N., 2019. An empirical analysis of macroeconomic factors affecting on the deposit mobilization of private commercial banks in Myanmar. *International Journal on Recent Trends in Business and Tourism (IJRTBT)* 3(2), 38-47.
- Venkati, P., 2016. Impact of banks deposit mobilization and credit financing on capital formation. *International Research Journal of Marketing And Economics* 3(6), 67-87.
- Vuong, B. N., D. Duy Tung, H. N. K. Giao, N. T.Dat, and T. N. Quan, 2020. Factors Affecting Savings Deposit Decision of Individual Customers: Empirical Evidence from Vietnamese Commercial Banks. *Journal of Asian Finance*, *Economics and Business* 7(7), 116-173.