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Internal determinants of profitability in Nepali commercial banks

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Abstract

Bank is the financial institutions, which collects the deposit from the general public and institutions and provides loan to mobilize the resources in the economy that support to develop the stable economy in the country. The stable economy of the country depends on the successful operation and better financial performance of the banking industry. The stability and growth of the bank have direct relationship with its profitability. There are several internal and external determinants of measuring profitability of the bank. The main objective of this study is to examine the relationship between internal determinants and profitability (i.e. return on assets) and to analyze the impact of internal determinants on profitability position of Nepalese commercial banks. This study considered twenty commercial banks out of twenty-seven commercial banks operating in Nepal till fiscal year 2075/076. The sample size depends on the operation of 10 years in Nepalese banking industry. This study was based on the secondary data of commercial banks and collected data from the period of fiscal year 2071/072 to 2075/076 through their website. The study used the multiple regression analysis through SPSS software to measure the banks' profitability in terms of Return on Asset (ROA) as a dependent variable and to analyze the impact of size of bank, employee efficiency, operating efficiency, management efficiency, interest cost and liquidity risk. The study found that the bank size, interest cost, management efficiency, liquidity risks and operational efficiency have negative relationship with ROA. On the other hand, employee efficiency has a positive and

statistically significant relationship with banks' profitability. However, the impact of operational efficiency and interest cost is statistically insignificant and other internal determinants are statistically significant against the banks' profitability. The study suggests that the banking sectors should take into the consideration of the key internal factors in their operation to overcome their liquidity crisis and operational issues and to improve the profitability position of the commercial banks in Nepal. This study also opens the floor of the study in other banking financial institutions to analyze the determinants of profitability. The researchers can also study the external determinants of banks' profitability in the future.

Keywords: deposit, current liabilities, profitability determinants, efficiency, firm size and liquidity.

Introduction

Financial markets and banking system are more efficiently managed in developed countries whereas weak and undersized in developing countries like Nepal. So, they have several opportunities to fill the gap between borrowers and depositors and to earn more profit and secure depositors' funds. Savings and investments are the most important determinants of economic growth and sound financial health of the national economy. Banks are the financial institutions, which mobilize, allocate and invest the huge amount of deposit collected as savings from their clients and satisfy to their shareholders in terms of financial rewards i.e. wealth maximization and dividends. Wealth maximization and dividends are the major interests of the shareholders to measure the financial performance of any companies. Accordingly, banks also measure and evaluate their performance based on allocation of capital, expansion and growth and economic development as well. Therefore, efficiency and profitability of banks are evaluated through the sound financial system in the utilization of the funds collected from depositors to granting loan to borrowers. Due to better quality services for customers and efficient operation and fund mobilization, they improve their profitability and flow of funds. Similarly, leverage and working capital have negative effect on profitability (Asimakopoulos, Samitas & Papadogonas, 2009). On the other hand, age and size of the company have an inverse effect on its profitability (Salman & Yazdanfar, 2012).

Aburime (2007) explained the profitability as reflection of sound operation and performance of the banks. More precisely, it reflects the quality of management, efficiency,

capability of risk management and competitive strategies of the banks and behaviours of shareholders. Profits is an indicator of the financial strength of the bank for external investors. Firm size, growth and fixed asset ratio have statistically significant and positive effect on profitability whereas, liquidity, leverage and operating cost have a negative and statistically significant effect on the profitability position of manufacturing companies (Agegneu & Gujral, 2022). Healthy and sustainable profitability is important to maintain the stability of the banking system and contributes the financial system in the country (Bashar & Islam, 2014). Both internal and external environment of the organization affect the profitability of the banking sectors. But this study tries to analyze only the internal determinants of profitability of Nepalese commercial banks. Internal factors affect the performance of bank that is basically measured by its profitability. Krakah and Ameyaw (2010) analyzed the performance of the bank in terms of financial variables presented in the financial statements. Besides, they also investigated the effect of management decisions on operating results and found a direct effect on the operating results and performance of banks.

Statement of Problem

Financial system plays an important role for the sustainable economic development of a country. It does not only transfer funds from depositors to investors but also ensures the depositors for their savings, investments in productive sectors, mobilization of resources of the country and increasing savings. Chijoriga (1997) found that the performance of commercial banks depends on profitability which is the prerequisite condition for the efficiency of commercial banks. When they have better profitability position, they can minimize their risks and uncertainty. High competition, risky investment, high level of liquidity provision, poor asset quality, low efficiency, high level of non-performing loans, and threats of new technologies, high competition have negative effect on the profitability of banks that show low performance. Firm size, firm growth, and electricity crisis have positive effect on profitability whereas, firm age, financial leverage and productivity have negative effect on profitability (Yazdanfar, 2013; Fareed et al. 2016). Nepalese financial sector is dominated by banks due to establishment of 27 commercial banks even 24 development banks, 22 finance companies, 90 micro credit development banks, 25 insurance companies, Provident Fund, Citizen Investment Trust have been operating in the country till fiscal year 2076/077. They have satisfactory performance in terms of profitability, capital adequacy, growth and expansion and customer service. The stability of

commercial banks depends in the national economy on their profitability position.

All these issues of Nepalese banking sector with respect to measuring performance are key internal determinants of profitability and not studied in the past. Therefore, this study investigates to fill the gap by providing full information about the internal factors that affects profitability of commercial banks operated in the country considering 5 years data. The following are the research questions of the study:

Is there any relationship between internal factors and profitability position of Nepalese commercial banks?

What is the impact of internal determinants on profitability position that affect the performance of Nepalese commercial banks?

Objectives of the Study

Internal, industrial and macro-economic factors affect the profitability of commercial banks. This study considers only internal determinants of profitability of Nepalese commercial banks. These include the bank size, capital adequacy, liquidity risk, operating efficiency, management efficiency, employee efficiency and interest cost. Therefore, this study is expected to provide empirical evidence on the profitability and to analyze the internal factors that influence profitability of Nepalese commercial banks.

To assess the current status of internal determinants and profitability position of Nepalese commercial banks.

To examine the relationship between internal determinants and profitability position of Nepalese commercial banks.

To analyze the impact of internal determinants on profitability of Nepalese commercial banks.

Research hypotheses:

Review of Literature

The existence, growth and successful operation of a business organization mainly depend upon earning profit. The profitability of the organization will contribute for the economic development of the country by providing additional employment and tax revenue to government. It is true that profitability also increases the value of shareholders. The term 'profitability' refers to the ability of the business organization to maintain

its profit year after year. Smirlock (1985) conducted the empirical study on efficiency to examine the relationship between market concentration and bank profitability and found significant negative relationship with the profitability. Bashir (2003) examined the relationship between high capital-to-asset and loan-to-asset ratios and profitability of the company and found strong relationship of these factors with profitability. The regulatory burden could also negatively affect the performance of the banks (Saunders & Cornett, 2008). Heffernan and Fu (2008) conducted the study of ten bank-specific internal determinants and three macroeconomic determinants and analyzed their effects on performance of South Asian banks taking 76 banks as sample. Among the results obtained are cost to income ratio is negatively signed and significant to profitability. The best dependent variables are Economic Value Added (EVA) and the Net Interest Margin (NIM), as against Return on Assets (ROA) or Return on Equity (ROE). According to the study of Samad (2015), bank specific factors such as loan-deposit ratio, loan-loss provision to total assets, equity capital to total assets, and operating expenses to total assets are significant factors of bank's profitability whereas bank sizes and macroeconomic variable have no impact on profits. Debt ratio has negative effect on financial performance, whereas the firm size has positive effect on ROE (Onaolapo & Kajola, 2010). Firm size, capital structure, and asset structure have positive effect on return on equity whereas, inflation have negative effect whereas no any effect of business growth rate, current solvency, economic growth rate on return on equity (Kanwal & Nadeem, 2013). Capital strength, loan intensity and bank size have a positive and significant impact on ROA whereas inflation has a negative and significant impact on ROA and ROE (Rahman, Hamid & Khan, 2015). The study of Raza, Saeed & Hena (2019) found that the bank loan has positive impact on bank performance whereas the size of asset has negative and significant impact on profitability. Deposit does not have the prominent impact on profitability of banks in Pakistan. The study of Petriaa, Capraru & Ihnatov (2015) showed that credit and liquidity risk, management efficiency, the diversification of business, the market concentration and the economic growth have impact on profitability of banks (i.e. ROAA and ROAE).

Limitation of the Study

There are several internal and external variables that affect the profitability of the organization. But this study will focus only seven internal factors such as bank size, capital adequacy, liquidity risk, operating efficiency, management efficiency, employee efficiency,

interest cost that affect profitability position of the commercial banks but other external factors such as inflation rate, industry competition, globalization effect, gross domestic product growth, foreign currency exchange rate, spread interest rate etc. are not included in this study. Only financial ratios, descriptive statistics, co-relation co-efficient, test of multicollinearity and regression are used for analysis based on 5-years' data in this study.

Research Methodology

In order to examine the relationship between internal determinants and the profitability position (i.e. return on assets) and to analyze the causal impact of internal determinants on return on assets, this study was based on causal comparative research design. In this study, profitability of the banks is a dependent variable and size of the bank, capital adequacy, liquidity risk, operating efficiency, management efficiency, employee efficiency, interest cost are independent variables. There were 27 commercial banks at the time of selection of sample of the study. Out of these 27 banks, only 20 banks were selected as sample for this study, which have more than 10 years of operation in Nepal before 2019. So, the selection of the sample banks for the study was based on their operation of ten years in Nepal. Websites and annual reports of the banks are used to collect the data. Test of multicollinearity, Regression, correlation co-efficient, descriptive statistics are used for the interpretation of data of these banks. The collected data are analyzed using descriptive statistics, correlations and multiple linear regression to achieve the broad objectives of the study.

For the test of multicollinearity, variance inflation factor ($VIF < 10$) and tolerance level (over 0.10) are used and under descriptive statistics, mean, median, standard deviation, maximum and minimum are used to analyze the general trends of the data collected from the sample banks for five years from fiscal year 2071/072 to 2075/76. Correlation matrix is used to examine the relationship between the dependent variable and explanatory variables. Besides, multiple linear regression and t-statics are used to analyze the relative effect of internal determinants on profitability of the sample banks. For this study, ordinary least square (OLS) method has been used to examine the relationship between profitability and its determinants with the help of SPSS 22 software package. The regression model is as follows: s

$$ROA_{it} = \alpha + \beta_1(Size) + \beta_2(CaAR) + \beta_3(LRR) + \beta_4(OER) + \beta_5(MER) + \beta_6(EER) + \beta_7(ICR) + \mu_{it}$$

Where,

β : Coefficient for the respective explanatory variables,

ROA	: Return on assets	= Net profit/ Total assets
Size	: Size of bank	= Natural log of total assets
CaAR	: Capital adequacy ratio	= Equity/ Total assets ratio
LRR	: Liquidity risk ratio	= Current liability/Total assets
OER	: Operating efficiency ratio	= Total cost/Total income ratio
MER	: Management efficiency ratio	= Operating expense/operating income
EER	: Employee efficiency ratio	= Staff expenses/Total assets
ICR	: Interest cost ratio	= Interest expense/Total Deposit

Results and Discussion

Test for Multicollinearity

Ordinary Least Square (OLS) estimation method is used in this study, which assumes no co-relation with one another explanatory variable. How much correlation causes multicollinearity however, is not clearly defined. Correlation coefficient above 0.9 could cause a serious multicollinearity problem and model does not efficiently estimate with less reliable results (Hair et al., 2006). It means that there is no serious multicollinearity among the explanatory variables if correlation coefficient is below 0.9.

Table 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701 ^a	.492	.453	.003874
a. Predictors: (Constant), LnTA, MER, LRR, EER, CaAR, OER, ICR				

Table 2

Co-efficient and Collinearity Diagnostic Statistics

B	Unstandardized Coefficients		Collinearity Statistics	
	Std. Error	Tolerance	VIF	
1 (Constant)	-.014	.027		
CaAR	.051	.019	.425	2.350
LRR	.011	.010	.600	1.666
OER	.002	.007	.280	3.570
MER	-.033	.008	.253	3.947
EER	.362	.099	.593	1.687
ICR	.058	.055	.120	8.361
LnTA	.001	.001	.821	1.218

a. Dependent Variable: Return on assets

Source: SPSS 22 result

Table 1 Model summary shows co-relation among the independent variables i.e.701. Collinearity statistics column of above table 2 shows tolerance level above 0.10 and VIF value below 10. So, there is no issue of multicollinearity among seven independent variables. P-values of LRR, OER, ICR and LnTA are above 0.10. So, they are insignificant. But only three remaining variables are significant and F-statistics shows significant at 0.05 even four variables are not statistically significant, the regression model is the best fit for the analysis of internal determinants of profitability in Nepalese commercial banks.

Descriptive Statistics of the Data

The following Table 4 presents the outcomes of the descriptive statistics for main variables involved in the regression model generated to show the overall description about data used in the model. Mean, median, standard deviation, minimum and maximum value of dependent variable, ROA and independent variables such as size of bank, capital adequacy, liquidity risk, operating efficiency, management efficiency, employee efficiency and interest cost are presented in the following table.

Table 3

Descriptive Statistics

		ROA	CaAR	LRR	OER	MER	EER	ICR	LnTA
N	Valid	100	100	100	100	100	100	100	100
	Missing	0	0	0	0	0	0	0	0
Mean		.01766	.11320	.87564	.38026	.64212	.01019	.04531	25.24165

Median	.01700	.10850	.88500	.35700	.64650	.00900	.04150	25.26600
Std. Deviation	.005238	.030640	.050097	.106535	.101493	.005120	.020299	.446917
Minimum	.005	.043	.515	.231	.401	.004	.010	24.122
Maximum	.036	.195	.957	.990	.868	.028	.089	26.146

Source: SPSS 22 result

According to table 4, all variables comprised 100 observations and ROA is used as the profitability measure in this study; which indicates that Nepalese commercial banks earned positive net profit after tax (NPAT) during the study period. For the total sample, the mean of ROA 0.01766 i.e. 1.766% with a minimum of 0.5% and a maximum of 3.6% which means the most profitable bank earn NPAT Rs. 3.6 from the investment of every Rs.100 in the assets of the banks among the sample banks. On the other hand, the least profitable bank among sample banks, earn NPAT Rs. 0.5 from the investment of every Rs. 100 in the assets of the banks. The standard deviation statistics for ROA is 0.005238 that indicates variation in profitability between the selected banks was very small. It is found that sample banks need more efforts to utilize their assets to increase ROA.

Similarly, average capital adequacy ratio (CaAR) is 11.32%, with a minimum of 4.3% and a maximum of 19.5%. Nepalese commercial banks have lower capital adequacy position in an average. There is direct relationship between capital adequacy and profitability. Average liquidity risks ratio (LRR) is 87.564%, with a minimum of 51.5% and a maximum of 95.7%. There is inverse relationship between liquidity and profitability. LRR of Nepalese commercial banks have higher liquidity position in an average.

Furthermore, OER is in the range between 23.1% and 99%. The mean OER is 38.03% and standard deviation of 10.654%. The most efficient bank has a quite substantial cost advantage compared to the least efficient bank. MER ranges from 0.401 to 0.868 with average efficiency ratio of 0.64212. The most efficient bank can get more advantage from the management efficiency in comparison to the least efficient bank due to maximum MER (0.868) and average MER is 0.64212. EER is in the range between 0.004 and 0.028 with the average efficiency ratio of 0.01019. Banks have less role of employees' efficiency. EER can be deviated by .005120 from its mean, which is the least value among the independent variables. So, there is less fluctuation in the ratio from the mean.

On the other hand, the size of bank which is measured by natural log of total asset

has the highest standard deviation (0.4469) and the most deviated variable from its mean. Similarly, the standard deviation of ICR is 0.020299, comparatively lower and average ICR is 0.04531. ICR ranges from 0.010 to 0.089. So, the most efficient bank has a quite substantial cost advantage by 0.010 (1%) on deposit in comparison to the least efficient bank in diversifying their source of revenue.

Correlation analysis

Correlation is an index which measures the relationship or association between two or more variables to each other. Pearson’s co-relation coefficient is used in this study to develop the relationship between the variables that ranges from +1 (i.e. perfect positive relationship) to -1 (i.e. perfect negative relationship). Sample size is the key element in co-relation analysis to decide the correlation coefficient is different from zero or statistically significant. The correlation coefficient above 0.20 is significant at 5% level of significance when the sample size is more than 100 (Meyers et al., 2006). The sample size of this study is 100 observations and above justification for significance of the correlation coefficient can be used in this study. The following table 4 (Correlation Matrix) shows the correlation coefficient between the dependent variable and independent variables.

Table 4

Correlation matrix

	ROA	CaAR	LRR	OER	MER	EER	ICR	LnTA
ROA	1							
CaAR	.356**	1						
LRR	-.130	-.624**	1					
OER	.172	-.163	.175	1				
MER	-.417**	.094	-.096	-.276**	1			
EER	.384**	.244*	-.100	.394**	.133	1		
ICR	-.164	.421**	-.334**	-.674**	.741**	.022	1	
LnTA	.278**	.069	-.066	.081	-.036	.351**	.053	1

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS 22 result

Above table 4 shows, MER of sample banks is the most negatively correlated variable with

ROA (-0.417). It clearly shows that profitability and management efficiency have inverse relationship. Similarly, there is also negative association between ROA and LRR (-0.130), OER (0.172), ICR (-0.164). On the other hand, the EER is positively correlated with the profitability measure (0.384). Similarly, there is positive correlation between ROA and CaAR (0.356) and Bank size (0.278) respectively.

Results of regression analysis

Table 5 shows the regression outputs calculated using SPSS software and shows the most of the beta coefficient negative. These coefficients explain the influence level of each independent variables on the dependent variable (ROA). P-value (Sig. value) indicates the percentage of each variable for significant. R² indicates the explanatory power of the regression model and adjusted R² is used to measure the loss of degrees of freedom associated due to addition of extra variables to analyze the explanatory powers of the models. The regression model used in this study to identify the influence level of determinants on the profitability of Nepalese commercial banks is as follows:

$$ROA_{it} = \alpha + \beta_1(Size) + \beta_2(CaAR) + \beta_3(LRR) + \beta_4(OER) + \beta_5(MER) + \beta_6(EER) + \beta_7(ICR) + \mu_{it}$$

$$ROA = - 0.014 + 0.051(CaAR) + 0.011(LRR) + 0.002(OER) - 0.033(MER) + 0.362(EER) + 0.058(ICR) + 0.001(Size)$$

Table 5

Co-efficient Statistics

Model	Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics	
				Tolerance	VIF
B	Std. Error	Beta	T	Tolerance	VIF
1 (Constant)	-.014	.027	-.526	.600	
CaAR	.051	.019	.300	2.631	.010
LRR	.011	.010	.108	1.127	.263
OER	.002	.007	.031	.218	.828
MER	-.033	.008	-.638	-4.320	.000
EER	.362	.099	.353	3.660	.000
ICR	.058	.055	.226	1.053	.295
LnTA	.001	.001	.103	1.257	.212

a. Dependent Variable: Return on assets

Source: SPSS 22 result

Besides, table 5 shows that the coefficients of capital adequacy, liquidity risk, operational efficiency, employee efficiency, interest cost and size of bank against ROA are positive with coefficients of these variables are 0.051, 0.011, 0.002, 0.362, 0.058 and 0.001 respectively. This indicates that there is a positive impact of these aforementioned variables on ROA. Thus, it is found that one unit increase in these three variables will lead to increase in ROA by 0.051, 0.011, 0.002, 0.362, 0.058 and 0.001 respectively. But the coefficient of management efficiency against ROA is negative with the coefficients of these variables are - 0.033 respectively. This indicates that there is an inverse impact of management efficiency on ROA. Thus, it is found that one unit increase in management efficiency will lead to decrease in ROA by 0.033 respectively. Finally, as per the regression results presented in table 5, only three variables, CaAR, MER and EER among seven independent variables used in this study are strongly significant at 1% level of significance.

Analysis of Model (R²)

The following table 6 shows R-squared statistics and the adjusted-R squared statistics of the model, which are 70.4% and 49.6% respectively. The result indicates that 49.2% of total variations in dependent variables is accounted by the changes in independent variables i.e. size of banks, capital adequacy, liquidity risks, operational efficiency, management efficiency, employees' efficiency and interest cost. These variables collectively explain 49.2% of total changes in ROA. The remaining 50.8% of total variations is explained by other factors. They may be some bank specific factors and external factors which are not included in the model. Therefore, these independent variables collectively are good explanatory variables for the profitability of Nepalese commercial banks.

Table 6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701 ^a	.492	.453	.003874
a. Predictors: (Constant), LnTA, MER, LRR, EER, CaAR, OER, ICR				

Source: SPSS 22 result

Analysis of Variance (ANOVA)

The following table 7 shows the overall test of significance of the model that tests the acceptance of null hypothesis. Null hypothesis (H_0): R^2 is equal to zero is rejected at 1% level of significance as the p-value is sufficiently low (0.000). F value is 12.709 with p-value 0.000 indicates strong statistical significance, which supports the reliability and validity of the model. So, R^2 is not zero. Thus, among the significant variables, capital adequacy, management efficiency and employees' efficiency have statistically significant impact on profitability of banks at 1% level of significance since their p-values are 0.010, 0.000 and 0.000 respectively. But, operating efficiency, interest cost and size of banks have no statistically significant impact on profitability of banks at 10% level of significance since their p-values are 0.263, 0.828, 0.295 and 0.212 respectively.

Table 7

F-Statistics (ANOVA^a)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.001	7	.000	12.709	.000 ^b
Residual	.001 92 .000				
Total	.003	99			
a. Dependent Variable: Return on assets					
b. Predictors: (Constant), LnTA, MER, LRR, EER, CaAR, OER, ICR					

Source: SPSS 22 result

Major Findings of the Study

The analysis is based on the theoretical framework and the data collected through the data collection instruments. The data were analyzed in light of internal determinants of profitability as research questions and hypotheses stated. Hence, the analysis mainly focuses on the results of the regression analysis based on secondary data relating to internal determinants of banks' profitability of the selected Nepalese commercial banks of Nepal. Based on the study of selected factors such as size of bank, liquidity risk, employee efficiency, operational efficiency, management efficiency, interest cost. After testing multicollinearity among the internal determinants as independent variables, capital adequacy ratio was eliminated from the model.

Equity to total assets ratio was used as a proxy variable in the model to measure the capital adequacy of Nepalese commercial banks. The coefficient of Capital adequacy is 0.051 and the impact of management efficiency on profitability is positive and statistically strong significant at 1% (with p-value = 0.010) and correlation coefficient between capital adequacy and ROA is 0.356. Moreover, the significant parameter indicates that the capital adequacy affects the profitability of Nepalese commercial banks.

Size of banks in term of the natural logarithm of total asset (Size) was used as proxy in the regression model. It is found that size of banks has positive effect on banks' profitability and statistically insignificant impact on banks' profitability. The result shows that larger size of bank leads higher profitability of the bank. It could mean that higher size banks enjoy higher profit than lower size banks of Nepal because they are getting the benefit of economies to scale.

Based on the liquidity risk, the regression result of this study implies that the relationship between liquidity risk and ROA is negative and coefficient (0.011) is insignificant at 10% significance level (p-value = 0.263). The variable, Current liability to total assets ratio was used as a proxy to measure the liquidity risks of Nepalese commercial banks in the model. The result indicates that the liquidity risk variable has a significantly positive influence (0.011) on bank profitability. This implies that increase in one unit of liquidity risk leads to increase lower ROA by 0.011 in an average.

Based on operational efficiency ratio, the coefficient of operational efficiency ratio of total cost to total income is 0.002. So, the co-efficient was positive and statistically insignificant at 10% significance level (p-value=0.828) having negligible influence on ROA and correlation coefficient between operational efficiency and ROA is 0.172. Moreover, the insignificant parameter indicates that the structure does not affect the profitability of Nepalese commercial banks. This result shows that increasing total cost of Nepalese commercial banks would certainly improve the banks' profitability by negligible rate by 0.002. So, operational efficiency and banks' profitability are negatively correlated (0.172) and insignificant impact on ROA (i.e. banks' profitability). The results imply that an increase/decrease in these total cost increases/decreases the profits Nepalese banks.

Operating expense to operating income ratio was used as a proxy variable in the model to measure the management efficiency of Nepalese commercial banks. The coefficient of management efficiency is -0.033 and the impact of management efficiency

on profitability is positive and statistically strong significant at 1% (with p-value = 0.000) and correlation coefficient between management efficiency and ROA is -0.417. Moreover, the significant parameter indicates that the management efficiency affects the profitability of Nepalese commercial banks.

Based on employee efficiency ratio, the variable, staff expenses to total assets ratio was used as a proxy in the model to measure the effect of employee efficiency on profitability of Nepalese commercial banks. The coefficient of employee efficiency is 0.362 and the impact of employee efficiency on profitability is positive and statistically strong significant at 1% (with p-value = 0.000) and correlation coefficient between employee efficiency and ROA is 0.384. Moreover, the significant parameter indicates that employee efficiency positively affects the profitability of Nepalese commercial banks. Thus, the alternative hypothesis that states there is a significant relationship between employee efficiency and profitability may be accepted. Thus, the study found that the employee efficiency variable to be significant in determining profitability in the long-run. The result also shows that the Nepalese commercial banks may truly be benefited from staff efficiency.

Based on interest cost ratio, the variable, interest expenses to total deposit ratio was used as a proxy in the model to measure the effect of interest cost ratio on profitability of Nepalese commercial banks. The coefficient of interest cost is 0.058 and the impact of interest cost on profitability is positive and statistically insignificant at 10% (with p-value = 0.295) and correlation coefficient between interest cost ratio and ROA is -0.164. Moreover, the insignificant parameter indicates that interest cost negatively affects the profitability of Nepalese commercial banks.

Conclusion

There are several factors that affect the profitability position of the organization. Some of them are internal determinants and some are external determinants of the organization. This study basically focused on the internal determinants of profitability of Nepalese commercial banks. This study aimed to examine the relationship between internal determinants and profitability position (i.e. return on assets) of Nepalese commercial banks and to analyze the impact of internal determinants on banks' profitability. The internal determinants refer to the factors that originated from bank accounts (income statement and balance sheet). Therefore, they could be termed as micro or bank-specific determinants of

profitability. The profitability of banks may also be affected by the external determinants that are not considered in this study because internal factors explain a large proportion of banks' profitability; nevertheless, external factors have also an impact on their performance. Seven explanatory variables were used as internal determinants of banks' profitability in this study such as size of bank (natural log of total assets), capital adequacy, liquidity risk, operating efficiency, management efficiency, employee efficiency and interest cost. To fulfil the objective of this study, an appropriate econometric methodology, Ordinary Least Square (OLS) model, was used to estimate the coefficient, to measure the influence level and develop the relationship between profitability and its determinants using SPSS 22 software package. Quantitative data were mainly used from secondary sources for the time period of 2014/015 to 2019/020 in order to analyze the internal determinants of profitability in Nepalese Commercial Banks.

The study found that the management efficiency has a negative impact on ROA with coefficient of -0.033 which is statistically strong significant. There is a positive impact of all six independent variables on ROA except management efficiency with statistical significance even capital adequacy ratio, management efficiency ratio and employees' efficiency ratio are only significant at 1% level of significance. This shows that as increasing operating costs of commercial banks would certainly improve the banks' profitability and increasing interest of deposit would also improve the banks' profitability. In the Nepalese banking industry, there is higher liquidity risks ratio shown as per the result of descriptive statistics.

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