An Analysis of Financial Performance among National Level Microfinance Institutions in Nepal

Prakash Kumar Bipin, Liu Pingfeng, Rajeev Kumar Shah, Wiraj Udara Wickramaarachchi and Kiran Thapa

***Abstract*—Nepalese banking sector has seen the vast change in the sector over the last few years. The sector has seen the relatively more aggressive strategy of the financial institutions in recent years. Today due to the concept of globalization banking sector has become more liberalized and systematic over the years. With the arrival of private banks and joint venture banks, Nepalese banking sector has been able to cater the competition in the sector which has increased the bargaining power of the customers. Making finance accessible to the poor is not an easy task for the creation of wealth in developing economies where there exists a huge unmet demand for financial services. So far, access to financial services by the poor from financial mainstream institutions is very limited, mainly due to their inability to meet the eligibility criteria, including collateral.**

The Study shows the sampled Microfinance Institutions (MFIs) have good loan portfolios which are also indicated by the negative percentage of change in Non-Performing Assets (NPA) except Swabalamban Laghubitta Bikas Bank Limited (SWBBL). As compared to the quality of loan portfolio, SWBBL has the below good loan than other considered three MFIs. MFIs profit per employee is also good.

***Index Terms*—Banking Sector, Microfinance Institutions, Nepal, Non-Performing Assets**

I. Introduction

Microfinance institutions in Nepal are operated to make benefits to the people which have low-income. Therefore, the major objective of these institutions is to provide financial assistance to the poor people. So, these institutions borrow funds in low-interest rates and invest in higher interest rate with no collateral. The study has evaluated the financial position of national level MFIs of Nepal. Also provides the information and justifications of the operations of those institutions are in terms of return given to their shareholders. The study has focused on the ratio analysis. So, the outcome of the study can be used by these institutions management to develop the corporate strategy. The management of these institutions can get awareness of their financial performance in different ratios which will help them to take decisions on the areas to improve. Since the used data are secondary data, they could be used for trend analysis method to make and implement ongoing financial plans and, when necessary, make course corrections to short-term financial plans. This study will also help different investors to decide on which MFIs to invest and what percentage of return to expect from those MFIs.

Currently, the shares of MFIs is priced very high in Nepalese share market. However, there has been no study conducted whether the financial performance of MFIs justify their share price or not. So, the study will help investors to look for investment based on the intrinsic value of the share rather than focusing on the market share price.

The previous researches done on the performance of microfinance institutions found that the microfinance institutions are unable to obtain the good performance compared to commercial banks.

To the best of researcher knowledge, there have been very few studies made in the context of Nepal. Use of CAMEL model analysis in comparing the financial performance of microfinance institutions helps to understand the performance of sampled institutions and compared them. Therefore, this study mainly focused on the comparative financial performance analysis of sampled national level MFIs of Nepal and give recommendations.

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II. Survey of Literature

According to Grameen Bank and Accion International, Microfinance is the financial service such as savings, credit and payment products to low-income clients. It is the supply of loans and savings services to the poor. By its name, microfinance means an extension of small amounts of credit to small entrepreneurs, particularly to the poor to ease financial constraints on production and income raising activities [1]. It is one of the best alternatives to generate self-employment. It provides services to the communities who have no collateral to offer against the loans they take but have indigenous skills and strong desire to undertake

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economic activities for self-employment and income generation [2].

Yeron [3] discussed that the two most important objectives for a rural financial institution to be successful are financial self-sustainability and more outreach to the target rural population. Financial self-sustainability is said to be achieved when the return on equity, net of any subsidy received, equals or exceeds the opportunity cost of funds. Economic viability relates to meeting the economic cost of funds (opportunity cost) used for credit and other operations with the income it generates from its lending activities [4]. Meyer [5] noted that the poor needed to have access to financial service on a long-term basis rather than just a onetime financial support. The short-term loan would worsen the welfare of the poor. The financial un-sustainability in the MFI arises due to low repayment rate or un-materialization of funds promised by donors or governments. Measuring financial sustainability requires that MFIs maintain good financial accounts and follow recognized accounting practices that provide full transparency for income, expenses, loan recovery, and potential losses.

Abdelkader and Salem [6] made an attempt to study the performance analysis of microfinance institutions in the Middle East and North Africa (MENA) countries. They focused on the performance analysis of the comparison of the conventional and Islamic type of microfinance institutions in their study.

They used total assets, number of employee and operating expenses as factors of analysis and measured the financial performance: financial revenue (FR) and a social performance indicator measuring depth and breadth of outreach which is number of active borrowers, %percentage of female borrowers. They used descriptive statistics for the analysis of the data. In their data analysis, they used Data envelopment analysis (DEA) model for comparing the financial performance of conventional and Islamic microfinance institutions. They calculated by using a non-parametric DEA model for the period 2005-2010. The study used different statistical tools like chi-square test, p-value test, mean, average and standard deviations for the analysis. The study showed no significant differences in the efficiency of the two groups. Hence, they concluded that the religion and more specifically the use of Sharia-compliant products do not affect the efficiency of MFI in the MENA region.

Channaveera, Ananda and Arun [7] made an attempt to analyze the performance of banks in India by using the CAMEL framework. The study took a sample of Public sector, Private sector, and Foreign banks. For the purpose of profitability analysis, 26 Public Sector, 18 Private Sector, and 15 Foreign banks were taken into consideration. For the purpose of ranking, CAMEL analysis technique was used. The study used Descriptive Research. The main objective of the study was to understand the financial performance of Public Sector, Private Sector, & Foreign banks in India, to describe the CAMELS model of banking, and rating range for the same. Other objectives were to analyze the bank's performance through CAMEL model and to give suggestions for improvement if necessary. The study collected the secondary data from annual reports of the respective banks. The study used different standard financial ratios for the comparative analysis of financial performance of the banks. The study used one-way ANOVA and weighted average ratios for the research. The study used 5% level of significance for the acceptance and rejection of the hypothesis set. The study concluded that it is significantly different between the capital adequacy, management ability, earning quality and liquidity of public, private and foreign banks in India.

Islam and et-al [8] conducted a comparative performance evaluation of banking sector in Bangladesh. The broader objectives of the study were to known the banking sector and its current trends, to study the category wise performance of all banks operating in Bangladesh on the basis of selected CAMEL ratio, to examine the profitability of banks and to analyze how the correlation of different ratios affects the net interest income of banks. The study used secondary data from annual reports of the sampled banks along with journals, publication and so on.

III. Research Methodology

The study covered data from 2004 to 2011 period of time. The study compared the 4 types of bank's time series performance on the basis of selected CAMEL ratios. For the comparison between the groups, some statistical tests were used according to the nature and objectives of the study. The collected information was analyzed by ANOVA test.

A. Data Collection Procedure

To fulfill the objectives of this study, only secondary data have been used. The study is focused on the analysis of financial performance of national level MFIs only. So, the MFIs each of two having the same level of paid-up capital were taken for analysis. Data and information that have been used in this study were collected from following sources Nepal Rastra Bank - Banking and Financial Statistics, Annual reports of the MFIs, Periodical magazines, newspapers and websites.

B. Analysis Plan

In this research, only quantitative research methodology has been used. Under this methodology, the descriptive tool was used. To achieve the objectives of the study, various financial, statistical and accounting tools were used in this study. The analysis of data was done according to the pattern of data available. With the help of CAMEL Analysis and Statistical Analytical tools such as correlation and financial accounting tools were adopted in this study.

CAMEL analysis is the tool which helps to find out the financial performance of the firms and make a comparative analysis of those. Under the CAMEL analysis, there are five types of major indicators which help to know the financial performance of the institutions namely Capital Adequacy, Assets quality, Management, Earning and liquidity. Using these indicators, the researcher has analyzed and compared the financial performance of different national level microfinance institutions.

The various calculated results obtained through financial, accounting and statistical tools tabulated under different

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heading are compared with each other. The empirical analysis of the secondary data to understand the impacts of various variables in financial performance and a comparative study of the financial performances of four microfinance institutions.

The analysis includes two sections. The first section examines and discusses the findings of descriptive statistics of the observations and makes a comparative study of the variables of the national level MFIs. Likewise, the second section presents and discusses the results of the correlation analysis.

IV. CAMEL Analysis

A. Capital Adequacy

As per Table I, Sana Kisan Bikas Bank Limited (SKBBL) has the average capital adequacy ratio of 13.16 which is very high compared to the statutory requirement of Nepal Rastra Bank (NRB) directives. Thereafter, Nirdhan Utthan Bank Limited (NUBL) has the better capital adequacy ratio followed by Chhimek Laghubitta Bikas Bank Limited (CLBBL) and Swabalamban Laghubitta Bikas Bank Limited (SWBBL). From above analysis, the most volatile capital adequacy ratio is SKBBL which shows that the company has a highly dispersed ratio which indicates the company is yet to settle well. Since, the minimum NRB requirement is 8%, so all institutions are in good position. But SKBBL and NUBL have very high level of capital adequacy which may hamper the profitability of the company.

TABLE I
Capital Adequacy Ratio

	Mean	Std. Deviation	Variance	Rank
NUBL	10.56	0.55	0.31	2
CLBBL	10.17	1.52	2.32	3
SWBBL	9.77	0.59	0.35	4
SKBBL	13.16	1.56	2.43	1

B. Asset Quality

Non Performing Assets(NPA)

Table II depicts that NPA level of the institutions is very low compared to other class of financial institutions operating in Nepal. This shows that the microfinance institutions are able to recover their loan efficiently. In above analysis, SKBBL has the lowest NPA i.e. 0.25% followed by CLBBL which has 0.34% NPA. It means that the major loan of the institutions is performing and giving good returns to the company. The highest NPA is of SWBBL i.e. 1.24% followed by 0.53 of NUBL.

TABLE II
Non-Performing Assets

	Mean	Std. Deviation	Variance	Rank
NUBL	0.53	0.30	0.09	3
CLBBL	0.34	0.17	0.02	2
SWBBL	1.14	0.49	0.24	4
SKBBL	0.25	0.26	0.07	1

Percentage Change in Non-Performing Assets

Table III depicts that average rate of change in NPA of NUBL, CLBBL and SKBBL is negative which means that these financial institutions have lowered their NPA over the last four years. However the average rate of change in NPA of SWBBL is positive which means that SBBL is still struggling with recovering the non- performing loans over the last four years. Hence, compared to the performance among these four financial institutions SWBBL is only the one whose non- performing loans have increased over last four years.

TABLE III
Percentage Change in Non-Performing Assets

	Mean	Std. Deviation	Variance	Rank
NUBL	(0.22)	0.74	0.55	3
CLBBL	(0.46)	0.55	0.30	2
SWBBL	0.379	1.64	2.70	4
SKBBL	(0.87)	0.73	0.53	1

C. Management

Net Profit per Employee

The Table IV shows that maximum profit per employee is of SKBBL followed by SWBBL, CLBBL and then NUBL. SKBBL's average profit per employee is 1.76 million which shows that the management has a best human resource which is generating maximum profit for the organization and shows that SKBBL management is able to get best out of the available human resources. There is positive standard deviation of all institutions which shows that per employee profit is lies on increasing trend of all MFIs.

TABLE IV
Net Profit per Employee (in millions)

	Mean	Std. Deviation	Variance	Rank
NUBL	0.31	0.11	14,285.12	4
CLBBL	0.32	0.16	27,109.15	3
SWBBL	0.35	0.17	31,430.10	2
SKBBL	1.76	0.70	496,082.80	1

Percentage Change in Networth

The Table V shows that highest average positive percentage change in net worth is of CLBBL followed by NUBL and SWBBL. However, the average change in net worth of SKBBL is negative. This shows that the management of SKBBL is not doing better on average than other institutions.

TABLE V
Percentage Change in Networth

	Mean	Std. Deviation	Variance	Rank
NUBL	0.33	0.03	0.00	2
CLBBL	0.40	0.20	0.04	1
SWBBL	0.29	0.04	0.00	3
SKBBL	(0.14)	0.10	0.01	4

D. Earning Quality

Operating Income to Interest Income

Higher the ratio better is the performance of the company. In Table VI, SKBBL has the highest level followed by CLBBL, NUBL and then SWBBL. This indicates that SKBBL's interest income contributes around 85% of

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operating income of the company which is a regular activity of the company so it shows its strength. Whereas, other institutions interest income contributions is from 45-60%. It shows that the institution's interest expense is high compared to SKBBL.

TABLE VI
OPERATING INCOME TO INTEREST INCOME (%)

	Mean	Std. Deviation	Variance	Rank
NUBL	0.50	0.09	0.00	3
CLBBL	0.59	0.08	0.00	2
SWBBL	0.46	0.14	0.01	4
SKBBL	0.85	0.36	0.13	1

Earning Per Share (EPS)

Table VII shows that SWBBL has the highest average EPS followed by CLBBL, NUBL and then SKBBL. This suggests that SWBBL has been able to provide highest returns to its shareholders over the past four years. In 2073, EPS of SBBL stood at 103.48 which means it has been able to give Rs.1.34 more than its par value of Rs.100. It shows it has been able to give good returns to its shareholders. Since EPS depends on the level of profit the company is earning and the number of outstanding shares, higher the level of profit higher will be EPS. Such type of company's share is valued high than the others having relatively low EPS.

TABLE VII
EARNING PER SHARE (EPS)

	Mean	Std. Deviation	Variance	Rank
NUBL	57.61	9.15	83.83	3
CLBBL	77.67	17.44	304.47	2
SWBBL	94.76	31.83	1,013.37	1
SKBBL	52.56	9.85	97.15	4

E. Liquidity

Cash Reserve Ratio

In Table VIII, NUBL has the highest level of CRR and SKBBL has the least ratio. These cash reserve ratio can be useful when the company is unable to serve interest to its depositors. When a company is on the stage of liquidation these funds are utilized to liquidate. Hence, higher CRR is beneficial for MFIs.

TABLE VIII
CASH RESERVE RATIO

	Mean	Std. Deviation	Variance	Rank
NUBL	2.36	0.04	0.00	1
CLBBL	2.31	0.47	0.22	2
SWBBL	0.55	0.02	0.00	3
SKBBL	0.54	0.05	0.00	4

V. CORRELATION ANALYSIS

The Table IX depicts the correlation matrix of the variables. The correlation of ROE with CAR, NPA, NETNPA, Employee, NETWORTH, OITT, CRR and EPS are 0.58, -0.29, 0.50, 0.33, -0.19, 0.53, 0.10 and 0.10 respectively. As considering the eight independent variables, ROE has significant relationship with NETNPA, Employee, NETWORTH, OITT and CRR since p-value of these variables are less than 0.05 at 5% significance level while testing the two tailed t-paired test. Similarly, the correlation of ROA with CAR, NPA, NETNPA, Employee, NETWORTH, OITT, CRR and EPS are 0.000, 0.004, 0.000, 0.058, 0.002, 0.017, 0.048 and 0.000. So, ROA is significantly related to CAR, NPA, NETNPA, NETWORTH, OITT, CRR, and EPS.

VI. FINDINGS OF THE STUDY AND RECOMMENDATIONS

This study was motivated by the desire to perform the assessment of financial performance and do a comparative financial performance of national level MFIs. The sample size was four national level MFIs of Nepal operating for more than five consecutive years. CAMEL model was used for the comparative performance analysis of the MFIs. The variables were as per the CAMEL model indicators for financial performance.

The financial performance comparison between the four national level MFIs was made using descriptive statistics and trend analysis. The data taken were from 2013 to 2016. CAMEL model was used to analyze the financial performance and compare them. CAMEL indicators were used to analyze the financial performance of the MFIs. In terms of the capital adequacy ratio, all the national level MFIs are in good position. All of them have met the minimum capital adequacy requirement of NRB directives. Also, NPA level of the sampled MFIs is very low. This shows that the sampled MFIs have good loan portfolios which are also indicative of the negative percentage change in NPA except for SWBBL. As compared to the quality of loan portfolio SWBBL has the below good loan than other three MFIs. MFIs profit per employee is also good. Despite having few numbers of employees, MFIs are able to earn the good level of profit. It shows the management efficiency in optimum utilization of the human resources. The efficiency and capability of the MFIs are also evident from the increasing net worth level of sampled institutions except for the SKBBL. The only SKBBL has the negative mean networth which indicates that either it has to increase the capital or to maintain the good asset. The earnings of MFIs are also good as they have good EPS and operating income to interest income ratio. In terms of liquidity, NUBL and CLBBL have maintained the adequate level of CRR whereas SWBBL and SKBBL have not maintained as per the NRB directives. However, there should be a proper inspection from NRB so that MFIs will maintain required CRR.

Based on the major findings and conclusion drawn, some recommendations are provided as given below:

- The negative relationship between ROE and % change in NPA indicates that MFIs should invest on good loan and address on the recovery of overdue strictly. Lower the % change in NPA higher will be the ROE.
- The negative relationship between ROE and profit per employee indicates that MFIs should manage the human resource and hire educated, task-oriented and self-

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motivated employee and also provide training and development program

- As there exists a negative relation between ROA with the other variables except for profit per employee the MFIs should focus on building quality assets that add value on generating maximum income. This includes reducing NPA level, reducing operational costs and appropriate mobilization of capital.
- Since the MFIs are established with the objective of providing financial access to the poor, so they should also meet the objective with good financial performance as financial performance will decide the sustainability and outreach of MFIs.
- The future researcher can do a survey to find out the relationship between MFIs and share price. Researchers can also study the financial sustainability and outreach of MFIs in case of Nepal.

VII. Conclusion

This study examined the financial performance of Nepalese national level MFIs. Empirical data for four MFIs consisting of data from the period 2013 – 2016, provided the basis for the statistical analysis using CAMEL model. In terms of capital adequacy, SKBBL is ranked 1st among four MFIs followed by NUBL, CLBBL, and SWBBL. NPA level of the MFIs was less than 1% on NUBL, SKBBL, and CLBBL however; it was greater than 1.14 on SWBBL. CLBBL has the highest level of the percentage change in networth that is by 0.40% than the other three MFIs. Considering EPS and CRR, SWBBL has topped other three MFIs as mean EPS is 94.76% and mean CRR is 0.55% of SWBBL. Only the one which has not topped on any test is NUBL, however looking at the data calculated, this MFIs is performing average than other MFIs and is growing steadily adding value to the economy. This study has been a success in analyzing and comparing the financial performance of national level MFIs. It has been drawn that the all sample MFIs are performing well. One MFI is better in terms of one indicator and another in terms of other indicator.

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TABLE IX
Correlation Analysis

		CAR	NPA	Net NPA	Employee	Networth	OITT	CRR	EPS
ROE	Pearson Correlation	0.58	-0.29	0.50	0.33	-0.19	0.53	0.10	0.10
	Sig. (2-tailed)	0.08	0.12	0.04*	0.04*	0.04*	0.045*	0.049*	0.19
	N	4	4	4	4	4	4	4	4
ROA	Pearson Correlation	-0.94	0.61	0.81	-0.97	0.92	-0.98	0.50	0.57
	Sig. (2-tailed)	0.000*	0.004*	0.000*	0.058	0.002*	0.017*	0.048*	0.000*
	N	4	4	4	4	4	4	4	4

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