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Impact of Firm-specific Factors on the Financial Performance of Nepalese Microfinance Institutions

Purna Man Shrestha
Mid-West University, Surkhet, Nepal

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Correspondence:
Purna Man Shrestha
purnaman.skt@gmail.com

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Abstract

Background: Microfinance institutions (MFIs) are established with the aim of providing an opportunity to financially deprived people to make them financially independent and come out of poverty. To provide financial assistance to the targeted people, MFI must be able to improve their financial performance. Thus, the financial manager of MFI needs to identify the major factors that influence their financial performance.

Objectives: This paper aims to analyze the impact of firm-specific factors on the financial performance of Nepalese Microfinance Institutions (MFIs)

Methods: This paper has applied descriptive and causal-comparative research design. The annual panel data of 29 microfinance companies listed in the Nepal stock exchange for the period of 2010/11 to 2020/21 has been used. To identify the impact of firm-specific factors on the financial performance of Nepalese MFIs, an appropriate multivariate regression model is selected based on the result of the Breusch and Pagan Lagrangian multiplier test and the Hausman test.

Results: Using the fixed effect regression model, this paper found the significant influence of firm-specific factors on the financial performance of Nepalese MFIs. Further, this study found a significant positive impact on deposit ratio, management efficiency, and weighted average interest rate spread and a significant negative impact of asset quality on the financial performance of Nepalese MFIs.

Conclusion: This paper concluded that the financial performance of Nepalese MFIs could be improved by increasing the deposit ratio, management efficiency, and weighted average interest rate spread. On the other hand, the study also concluded that Nepalese MFIs should maintain a lower level of non-performing loans to achieve a higher level of financial performance.

Keywords: Financial performance, firm-specific factors, microfinance institutions, Nepal

JEL Classification: C33, G21, G30, L25

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Introduction

The financial services which are provided to low-income individuals or groups who are basically excluded from the banking system are known as microfinance (Morduch, 1999). In other words, it is a type of banking service provided to individuals, groups, or unemployed people who have no other access to financial services (Milana & Ashta, 2020). MFIs are established with the aim of providing an opportunity to financially deprived people to make them financially independent and come out of poverty (Bekalu et al., 2019). To achieve this aim, microfinance institutions provide financial support to make better the financial activities of poor people (Almas & Mukhtar, 2015). Therefore, microfinance also contributes to reducing the poverty of people in any nation (Amanu et al., 2021; Bekalu et al., 2019). It gives an idea to people to develop sustainable self-employment by providing various financial services (Anand & Kanwal, 2011).

Microfinance provides financial services to people who have no collateral for getting a loan from financial institutions, but they have strong willpower and indigenous skills for self-employment and income generation (Dhungana, 2018; Pareek et al., 2022). Thus, microfinance is one of the best ways to create self-employment (Dhungana, 2015; Shrestha, 2009). Empirical results (e. g., Chapagain & Dhungana, 2020; Fersi & Boujelbene, 2016; Mori et al., 2013) showed that MFI plays a significant role in self-employment and income generation, which ultimately help to reduce the poverty of people residing in any nation.

In order to provide the service to the targeted people and groups, MFIs must be financially strong. Financially strong MFI can provide its services to the target people and groups very smoothly and efficiently. These institutions should have profitable operations to improve their stability, sustainability, and growth (Agarwal & Sinha, 2010). Thus, the financial performance of MFIs is important. Empirical evidence (Dissanayake, 2012; Ngumo et al., 2017; Rani et al., 2022; Shkodra, 2019) showed that various internal and external factors have a significant influence on the financial performance of MFIs. Thus, the financial manager of MFI needs to identify the major factors that influence their financial performance. Therefore, this paper aims to identify the factors that have a significant influence on the financial performance of Nepalese MFIs.

The main objective of this paper is to analyze the impact of firm-specific factors on financial performance of Nepalese MFIs. This paper also aims to explain the relationship between firm-specific factors and financial performance of MFIs. Furthermore, this paper examined the explanatory power of firm-specific factors for explaining financial performance of MFIs.

Review of Literature

Literature on finance (e. g. Almansour et al., 2019; Anand & Kanwal, 2011; Bekalu et al., 2019; Ebaid, 2009; Kyereboah-Coleman, 2007; Shkodra, 2019) documented that various internal and external factors have a significant impact on financial performance of microfinance institutions. In this issue Dissanayake (2012) scrutinized the determinants of financial performance of Sri Lankan MFI. The study used return on assets, return on equity, profit margin and operational self-sufficiency ratio as measures of financial performance. Using the regression analysis the author found significant positive impact of operating ratio, cost per borrower and debt equity ratio and not significant positive impact of personal productivity on all measures of financial performance.

Furthermore, Ngumo et al. (2017) investigated the impact of firm-specific factors on financial performance of MFI of Kenya. Based on the annual data of 7 MFI from 2011 to 2015, Ngumo et al. (2017) found a significant positive impact of capital adequacy, operational efficiency, firm size on financial performance whereas the impact of credit risk and liquidity risk found to be not statistically significant negative. On the other hand, Ashenafi and Kingawa (2018) analyzed the effect of internal and external factors on financial performance of MFI of Ethiopia. The author

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used annual data of for the period of 2009 to 2013. Using the regression analysis the study found the significant financial positive impact of age and structure on financial performance. On the other hand, the study found not significant positive impact of gross domestic product and not significant negative impact of size and operational efficiency on financial performance.

Shkodra (2019) investigated the factors affecting financial performance of MFI in Kosovo for the period of 2007 to 2016. The author used return on assets, profit margin, and operational self-sufficiency as financial performance. Based on the annual data of 12 MFIs for ten years, Shkodra (2019) found the significant positive impact of size and yield and negative impact of GDP on all measures of financial performance and positive impact of age and inflation of financial performance measured by return on assets and operational self-sufficiency.

Furthermore, Negash et al. (2020) also analyzed the internal and external determinants financial performance of MFIs in Ethiopia for the period of 2010 to 2018. The author found that size and capital assets ratio has a significant positive impact and earning ability has a significant negative impact, whereas gearing ratio and liquidity do not have a significant negative impact on financial performance. Likewise, the authors have found a significant positive impact of GDP and no significant impact of inflation on financial performance. The significant positive impact of GDP indicates that the financial performance of MFI increases as there is a growth in GDP. On the other hand, the no significant impact of inflation implies that there is a negligible role of inflation for determining the financial performance of MFIs in Ethiopia.

Likewise, in the context of Nepal, Chaulagain and Lamichhane (2022) found the loan lending system, regulatory environment, and information technology as the most influencing factors for demining financial performance. Furthermore, the authors found a positive association between loan lending system, regulatory framework, information technology, loan lending system, employee motivation, management system, effective risk management, and regulatory framework with financial performance.

Above mentioned empirical studies conducted in developed and developing countries suggests that financial performance of MFIs is affected by several internal and external factor but results are inconclusive. In Nepalese context the determinants of financial performance of MFIs are yet to be analyzed. The establishment of Small Farmer Development Project in 1979/80 by Agriculture Development Bank initiated the concept of microfinance in Nepal. Now the numbers of MFIs are increasing rapidly in Nepal and there are 53 microfinance companies listed in NEPSE till mid-July 2021. Nepalese microfinance institutions are providing financial services to low-income people in order to help their self-employment. In this scenario, Nepalese MFIs must have sound financial performance for delivering its service efficiently to the needy group of people. Several internal and external factors affect the financial performance of MFIs. Therefore, the management of MFIs should be able to identify the factors affecting financial performance. Thus, this study aims to analyze the impact of firm-specific factors on financial performance of Nepalese MFIs.

Materials and Methods

In order to fulfill the objectives of the study, this paper has applied descriptive and causal comparative research design. The fact, status, and behavior of the variables under the study have been analyzed using descriptive research design. Similarly, the impact of selected firm-specific variables on financial performance of Nepalese MFIs has been analyzed using the causal comparative research design. Using the causal comparative research design the explanatory power of firm-specific factors for explaining financial performance of Nepalese MFIs has also been assessed.

The entire microfinance companies of Nepal listed on NEPSE till mid-July 2021 are the population of this study. All together 53 microfinance companies are listed on NEPSE till mid-July 2021 (NEPSE, 2021). Those microfinance companies are selected as samples which

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have completed at least four consecutive year of operating till mid-July 2021. Out of these 53 microfinance companies; 29 microfinance companies fulfilled this criterion. Therefore, this study is confined on the 29 Nepalese MFIs.

The impact of firm-specific factors on financial performance of MFIs has been analyzed using secondary source of data. The required data for this study are collected from annual report of sample microfinance companies. This study used unbalanced panel data of 29 microfinance companies of Nepal from 2010/11 to 2020/21. To accomplish the aim of the study, the data related to return on assets (ROA), capital adequacy ratio (CAR), loan ratio (LR) and deposit ratio (DR) and management efficiency (ME) is acquired from the balance sheet and income statement of the selected microfinance companies. Likewise, basic data related to the assets quality (AQ) and weighted average interest rate spread has been collected from the key indicator of the microfinance companies provided in the annual report.

Model Specification

This study has used financial performance of Nepalese MFIs as dependent variable. However, various measures of financial performance can be used, this paper has utilized return on assets (ROA) only as proxy of financial performance. The objective of this study is to identify the impact of firm-specific factors on the financial performance of Nepalese MFIs. Thus, this study used selected firm-specific variables as independent variables. The independent variables used in this paper are capital adequacy ratio (CAR), loan ratio (LR), deposit ratio (DR), management efficiency (ME), assets quality (AQ) and weighted average interest rate spread (IRS). Using these selected firm-specific independent variables and return on assets as dependent variable, this paper has estimated the multivariate regression model as specified below:

$$ROA_{it} = \beta_0 + \beta_1 CAR_{it} + \beta_2 LR_{it} + \beta_3 DR_{it} + \beta_4 ME_{it} + \beta_5 AQ_{it} + \beta_6 IRS_{it} + \varepsilon_{it} \quad (1)$$

Where,

ROA_{it} = the return on assets of the MFI *i* for year *t*,

β_i = the coefficient of firm-specific variable to be estimated,

CAR_{it} = the capital adequacy ratio of MFI i for year t,

LR_{it} = the loan ratio of MFI i for year t,

DRit = the deposit ratio of MFI i for year t,

ME_{it} = the management efficiency of the MFI *i* for year *t*,

AQ_{it} = the assets quality of the MFI *i* for year *t*, and

IRS_{it} = the weighted average interest rate spread of the MFI *i* for year *t*,

ε_{it} = the residual error term.

Methods of Data Analysis

This paper has used STATA 12.0 software to analyze the data collected from 29 Nepalese MFIs for the period of 2010/11 to 2020/21. Using the STATA 12.0 software the result of descriptive statistics, correlation analysis and the result of multivariate regression analysis has been obtained. Since, this study is based on the panel data of 29 Nepalese MFIs, to evaluate the impact of independent variables on dependent variable, the appropriate multivariate regression model is selected from the result of Breusch and Pagan Lagrangian multiplier test and Hausman test. To select the appropriate model between pooled and random effect model Breusch and Pagan Lagrangian multiplier test is applied. Similarly, to select the appropriate model between fixed effect and random effect model Hausman test is applied.

Operational Definition of Variables

This paper has used financial performance of Nepalese MFIs as the dependent variable and firm-specific factors as the independent variables. The operational definitions of these variables are presented in the following paragraphs and Table 1.

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Table 1

Operational Definition of Variables

SN	Variables	Measurement	Type
1	Return on assets (ROA)	ROA_{it} =	Dependent
2	Capital adequacy ratio (CAR)	CAR_{it} =	Independent
3	Loan ratio (LR)	LR_{it} =	
4	Deposit ratio (DR)	DR_{it} =	
5	Management Efficiency (ME)	ME_{it} =	
6	Assets quality (AQ)	AQ_{it} =	
7	Weighted average interest rate spread (IRS)	$IRS_{it} = IRL_{it} - IRD_{it}$	

Return on Assets

Financial performance of firm can be measured by various ratios. One of them widely used measures of financial performance is return on asset (ROA). It measures the ability of the management to generate income by utilizing company assets at their disposal. Further it shows how efficiently the resources of the company are used to generate the income (Khrawish, 2011). Thus, this paper has used ROA as proxy of financial performance of Nepalese MFIs. The ROA is obtained as:

$$ROA_{it} = \frac{NI_{it}}{TA_{it}} \qquad (2)$$

Where, ROA_{it} is the return on assets of the MFI *i* at year end *t*. NI_{it} is the net income after tax of the MFI *i* at year end *t* and TA_{it} is the total assets of the MFI *i* at year end *t*.

This study has used firm-specific factors such as capital adequacy ratio (CAR), loan ratio (LR), deposit ratio (DR), management efficiency (ME), and weighted average interest rate spread (IRS) as explanatory variables. The definitions of these variables are presented in the following paragraphs.

Capital Adequacy Ratio

Total assets of the firm can be financed by debt and equity capital. How the assets of the firm is financed is important matter for the concern parties and it has significant impact on profitability. Capital adequacy ratio (CAR) shows the financing pattern of the total assets of the firm. It is simply the ratio of equity capital to total assets. Afriyie and Akotey (2012) and Kurawa and Garba (2014) found a significant positive relationship between capital adequacy ratio and financial performance. On the other hand, Alshatti (2015) and Ndoka and Islami (2016) found a negative association between capital adequacy ratio and financial performance. Therefore, in this paper has used CAR as one of the important explanatory variable. It is calculated as follows:

$$CAR_{it} = \frac{TE_{it}}{TA_{it}} \qquad (3)$$

Where, CAR_{it} is the capital adequacy ratio of the MFI *i* at year end *t*. TE_{it} is the total equity of the MFI *i* at year end *t*, and TA_{it} is the total assets of the MFI *i* at year end *t*.

Loan Ratio

Another important firm-specific factor that determines the financial performance is loan ratio. Loan is the principal source of income of banks and is expected to have a positive impact on profitability. Loan ratio (LR) is the ratio of total loans to total assets. Other things remain constant, more deposits are transformed into loans which results the higher the interest margin and profitability. Alshatti (2015) found a negative effect of leverage ratio on banks financial

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performance. Therefore, this paper has also used loan ratio as one of the independent variable which is calculated as follows:

$$LR_{it} = \frac{TL_{it}}{TA_{it}} \quad (4)$$

Where, LR_{it} is the loan ratio of the MFI *i* at year end *t*. TL_{it} is the total loan and advance of the MFI *i* at year end *t,* and TA_{it} is the total assets of the MFI *i* at year end *t.*

Deposit Ratio

Deposit ratio (DR) is the ratio of total deposits to total assets. DR measures liquidity position of a bank. It is also considered to measure as a liability of bank toward its depositors. Deposits are the principal source of bank funding. The more deposits are transformed into more bank loans at the higher interest margin which helps to increase the bank profitability. DR is considered as an explanatory variable to measure bank profitability and deposits are expected to have positive impact on the profitability. It is obtained as follows:

$$DR_{it} = \frac{TD_{it}}{TA_{it}} \quad (5)$$

Where, DR_{it} is the deposit ratio of the MFI *i* at year end *t*. TD_{it} is the total deposit of the MFI *i* at year end *t,* and TA_{it} is the total assets of the MFI *i* at year end *t.*

Management Efficiency

The management team of any organization has to create value of the firm. The efficiency of the management can be evaluated through how efficiently the management team of an organization has created output relative to capital. Thus, management efficiency (ME) is one of the major factors that affect the financial performance of the any organization. In this study the ratio of net income to total revenue is used to measure management efficiency, which is obtained as follows:

$$ME_{it} = \frac{NI_{it}}{TR_{it}} \quad (6)$$

Where, ME_{it} is the management efficiency of the MFI *i* at year end *t*. NI_{it} is the net income of the MFI *i* at year end *t,* TR_{it} is the total revenue of the MFI *i* at year end *t.*

Assets Quality

Assets quality is another important firm-specific factor that makes significant impact on financial performance of the MFIs. The assets of MFIs comprised of fixed assets, current assets, investments and portfolio of loan. Out of these assets of the portfolio of loan is the major earning assets of bank. Thus, assets quality of the bank is considered as the quality of earning assets i.e. portfolio of loan. The bad quality of loan has higher probability of becoming non-performing loan. Therefore, the ratio of non-performing loan to total loan is the best measures of assets quality of bank. Aduda and Gitonga (2011), Ndoka and Islami (2016) found an inverse impact of non-performing loans on the profitability whereas Afriyie and Akotey (2012), and Alshatti (2015) found a positive effect of non-performing loans on financial performance. Thus, it is considered a major determinant of the financial performance of Nepalese MFIs. It is measured as follows:

$$AQ_{it} = \frac{NPL_{it}}{TL_{it}} \quad (7)$$

Where, AQ_{it} is the assets quality of the MFI *i* at year end *t*. NPL_t is the non-performing loan of the MFI *i* at year end *t,* and LT_{it} is the total loan of the MFI *i* at year end *t.*

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Weighted Average Interest Rate Spread

The difference between average yield (interest rate) of a financial institution that is received from the loan and average interest rate that is paid by the financial institution on its deposit and borrowing is known as weighted average interest rate spread (IRS). It is the major determinant of financial performance of any financial institution (Kalsoom et al., 2016). Musah et al. (2018) and Karki (2020) found a significant positive impact of IRS on financial performance. Thus, this paper has also considered IRS as one of the major determinants of financial performance of MFI. It is obtained as follows:

$$IRS_{it} = IRL_{it} - IRD_{it} \quad (8)$$

Where, IRS_{it} is the weighted average interest rate spread of MIF *i* at year end *t*. IRL_{it} is the weighted average interest rate on loan of the MFI *i* at year end *t*, and IRD_{it} is weighted average interest rate on deposit and borrowing of the MFI *i* at year end *t*.

Results and Discussion

In this section, the impact of firm-specific variables on financial performance of Nepalese MFIs has been analyzed. At the first part the descriptive statistics has been calculated. In the second part the relationship between firm-specific variables and financial performance has been identified through the correlation analysis. Finally, the impact of selected independent variables on dependent variable has been evaluated through the estimation of regression model.

Descriptive Statistics

The descriptive statistics of the variables under the study has been calculated using STATA 12.0 software. This study also aims to analyze the facts of the variables under the study; therefore, descriptive research design has been followed. Under this section the descriptive statistics, i.e., mean, standard deviation, minimum and maximum values of sample MFIs are calculated. The result of descriptive statistics is presented in Table 2.

Table 2

Descriptive Statistics

Indicators	Mean	Std. Deviation	Minimum	Maximum
ROA	1.962	1.577	-5.301	8.874
CAR	15.915	12.146	3.363	135.351
LR	82.656	16.113	5.850	197.562
DR	26.984	14.499	0.000	17.540
ME	13.890	12.808	-67.154	39.973
AQ	1.694	1.886	0.000	12.324
IRS	8.394	3.037	0.000	17.210

Source: Calculation based on data collected by the author from the annual report of the sample MFIs.

As the result depicted in Table 2 very wide range of financial performance of Nepalese MFIs measured by ROA is observed. It ranges from minimum -5.30 percent to maximum 8.87 percent with average value of 1.9618 percent. This indicates that there exit a wide variation in financial performance of Nepalese MFI.

Similarly, the result presented in Table 2 also documents a wide range of all independent variables under the study. The minimum and maximum value of capital adequacy ratio (CAR) is 3.36 percent and 135.35 percent respectively. Another independent variable of the study, i.e., loan ratio (LR) has minimum value of 5.85 percent and maximum value of 197.56 percent with average value of 52.6565 percent. This also indicates that the loan of Nepalese MFI also quite

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varies.

Likewise, deposit ratio (DR) shows the minimum value of 0 and maximum value of 17.54 percent with average value of 26.9843 percent. In the same way, a large variation in management efficiency, i.e., the ratio of net income to total revenue has been observed. It ranges from minimum value of -223.86 percent of maximum value of 39.97 percent.

On the other hand, another determinant of financial performance of MFI taken in the study, i.e., assets quality (AQ) shows the minimum and maximum value of 0 and 12.32 percent respectively and weighted average interest rate spread shows the minimum and maximum value of 0 and 17.21 percent respectively. This also indicates that there is wide variation in interest rate of Nepalese MFIs.

Correlation Analysis

The relationship between financial performance of Nepalese MFIs and firm-specific variables has been analyzed through the correlation analysis. In this section correlation of ROA with firm-specific factors of the study, i.e., CAR, LR, DR, ME, AQ and IRS is estimated. The result of correlation analysis is presented in Table 3.

Table 3

Correlation Results

Indicators	ROA	CAR	LR	DR	ME	AQ	IRS
ROA	1.000						
CAR	-0.167	1.000					
LR	0.167	-0.273	1.000				
DR	0.250	-0.287	0.097	1.000			
ME	0.662	-0.053	0.233	-0.095	1.000		
AQ	-0.133	0.001	0.062	0.058	0.001	1.000	
IRS	0.406	-0.157	-0.070	0.341	0.305	0.063	1.000

Source: Calculation based on data collected by the author from the annual report of the sample MFIs.

The result presented in Table 3 illustrates that there is a positive relationship of return on assets (ROA) with LR, DR, ME and IRS and negative relationship with CAR and AQ. This relationship indicates that as the LR, DR, ME and IRS increases the financial performance of Nepalese MFIs also increases whereas the financial performance of Nepalese MFIs decreases as the CAR and AQ decreases. Similarly, CAR shows positive relationship with AQ and negative relationship with LR, DR, ME and IRS. Another independent variable LR shows positive relationship with DR, ME and AQ and negative relationship with IRS. Likewise, DR shows the negative relationship with ME and positive relationship with AQ and IRS. Furthermore, ME shows positive relationship with AQ and IRS and AQ shows positive relationship with IRS.

Model Estimation

Since, this study is based on panel data of 29 Nepalese MFIs listed in Nepal Stock Exchange (NEPSE) from 2010/11 to 2020/21, the model has been estimated selecting the appropriate model among the pooled, fixed effect or random effect model. To select the appropriate model between pooled or panel regression model, Breusch and Pagan Lagrangian multiplier test for random effects is applied. Table 4 shows the result of the Breusch and Pagan Lagrangian multiplier test for random effects.

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Table 4

Result of Breusch and Pagan Lagrangian Multiplier Test for Random Effects

Indicators	Var	SD = sqrt (Var)
ROA	2.4994	1.5809
E	0.7385	0.8594
U	0.3544	0.5953
Test: Var(u) = 0	$chibar^2(01) = 67.95$	Prob > $chibar^2 = 0.0000$

Source: Calculation based on data collected by the author from the annual report of the sample MFIs.

The result shown in Table 4 shows the $chibar^2$ value of 67.95 significant at 1 percent level of significance (probability value of 0.000). The significant $chibar^2$ value rejects the null hypothesis that the pooled regression model is appropriate. Therefore, the result of Breusch and Pagan Lagrangian multiplier test suggest that the given set of data should be analyzed by applying fixed or random effect model. Thus, the paper further used Hausman test to select the appropriate model between the fixed effect and the random model. Table 5 shows the result of Hausman test.

Table 5

Result of Hausman Test

Indicators	(b)Fixed Effect	(B)Random Effect	(b-B) Difference	sqrt(di-ag(V_b-V_B))
CAR	0.0027	0.0002	0.0025	0.0011
LR	-0.0067	-0.0041	-0.0026	0.0011
DR	0.0515	0.0389	0.0126	0.0056
ME	0.0527	0.0521	0.0006	0.0012
AQ	-0.0826	-0.1011	0.0185	0.0158
IRS	0.0787	0.0639	0.0147	0.0089
$\chi^2(5) = 14.12$		Prob> $\chi^2 = 0.0283$		

Source: Calculation based on data collected by the author from the annual report of the sample MFIs.

The result of Table 5 shows the value of χ^2 14.12 significant at 5 percent level of significance (probability value of 0.0283). The significant value of χ^2 rejects the null hypothesis, i.e., random effect model is appropriate and accepts the alternative hypothesis, i.e., fixed effect model is appropriate. Based on the result of Hausman test, this paper has estimated the regression model using fixed effect model and analyzed the impact of firm-specific variables on financial performance of Nepalese MFI. The result of fixed effect model is presented in Table 6.

Table 6

Average Slope Coefficients and Corresponding t-Value from Fixed-effects (within) Regression

Variable	Coefficient	Std. Error	t-statistics	p-value
CAR	.0026828	.004636	0.58	0.564
LR	-.0067223	.0044371	-1.52	0.131
DR	.0515479	.008965	5.75	0.000
ME	.0527772	.0039389	13.40	0.000
AQ	-.0825725	.0416945	-1.98	0.049
IRS	.0786981	.0274691	2.86	0.005

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Cons.	-.1251443	.498451	-0.25	0.802
R^2: within = 0.6007	F(6, 183) = 45.89		Prob > F = 0.0000	
F test that all ui=0:	F (29, 183) = 4.56		Prob > F = 0.0000	

Source: Calculation based on data collected by the author from the annual report of the sample MFIs.

As per the result presented in Table 6, it is observed that capital adequacy ratio (CAR), deposit ratio (DR), management efficiency (ME), and weighted average interest spread rate (IRS) have positive and loan ratio (LR) and assets quality (AQ) has negative impact on financial performance measured by return on assets (ROA) of Nepalese MFIs. Likewise, the coefficients of all independent variables expect CAR and LR are found to be significant. It indicates that there is a significant impact of firm-specific variables (Except CAR and LR) on the financial performance of Nepalese MFIs. The insignificant influence of CAR and LR contradict with the findings of Afriyie and Akotey (2012), Kurawa and Garba (2014), Alshatti (2015) and Islami (2016).

Furthermore, the coefficients of DR, ME ad IRS are found to be positive and significant at 1 percent level of significance and coefficient of AQ is found to be negative and significant at 5 percent level of significant. It is, therefore, can be concluded that there is a significant positive influence of deposit ratio, management efficiency and weighted average interest rate spreads and significant negative influence of assets quality on financial performance of Nepalese MFIs. The positive influence of IRS is corroborating with the findings of Musah, Anokye and Gakpetor (2018) and Karki (2020). Likewise, the negative influence of AQ is similar with the findings of Aduda and Gitonga (2011), Ndoka and Islami (2016) and contradict with the findings of Afriyie and Akotey (2012), and Alshatti (2015).

The significant positive influence of deposit ratio, management efficiency and weighted average interest rate spreads indicates that Nepalese MFIs should improve these firm-specific factors to achieve higher financial performance. Likewise, the significant negative influence of assets quality, i.e., the ratio of non-performing loan to total loan indicates that Nepalese MFIs should maintain the lower level non-performing loan as far as possible to have a better of financial performance. The finding of this paper is similar with the findings of Dissanayake (2012), Ngumo, et al. (2017), and Shkodra (2019).

Finally, the value of R^2 (within) 0.6007 indicates that the independent variables selected in this paper have 60.07 percent influences on the dependent variable, i.e., the financial performance of Nepalese MFSs. Likewise, the value of F (6, 183) 45.89 (p-value of 0.000) indicates that the estimated model is the best fitted model. Furthermore, the value of F test that all *ui* is equal to zero, i.e., F (29, 183), 4.56 (p-value of 0.000) indicates that there is significant difference between at least some individual Nepalese MFIs.

Conclusion and Recommendation

With the aim of analyzing the impact of firm-specific factors on financial performance of Nepalese MFIs this study has been carried out. For this purpose, six selected firm-specific factors namely capital adequacy ratio (CAR), loan ratio (LR), deposit ratio (DR), management efficiency (ME), and weighted average interest rate spread (IRS) has been considered as the explanatory variables and return on assets (ROA) is used as the measures of financial performance of Nepalese MFIs. From the analysis this study concludes that firm-specific factors plays significant role for explaining the financial performance of Nepalese MFIs.

The major conclusion of this paper is that among the six firm-specific factors selected in this study deposit ratio (DR), management efficiency (ME), assets quality (AQ) and weighted average interest rate (IRS) has significant impact on financial performance of Nepalese MFI. Further, this paper concludes that there is a significant positive impact of deposit ratio, management efficiency and weighted average interest rate spread and significant negative impact of assets

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quality on financial performance of Nepalese MFIs. Thus, Nepalese MFIs should improve their deposit ratio, management efficiency and weighted average interest rate spread for better financial performance. Similarly they should be able to maintain lower level of non-performing loan to increase the financial performance.

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