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Determinants of Financial Performance in Interest-Free Microfinance Institutions: Evidence from Ethiopia

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Abstract: This study examines the determinants of financial performance in Interest-Free Microfinance Institutions (IMFIs) in Ethiopia. While Islamic finance has been recognized for promoting financial inclusion, limited research has addressed the performance and impact of IMFIs within the Ethiopian context. **A** longitudinal panel data approach was employed, using audited secondary data from three microfinance institutions offering interest-free services from 2012 to 2021. The study applied pooled Ordinary Least Squares (OLS) regression to evaluate the impact of internal and external factors on Return on Assets (ROA) as a performance metric. The empirical results reveal that institutional size has a statistically significant and positive impact on ROA. In contrast, operational efficiency, debt-to-equity ratio, and the number of active borrowers exhibit significant negative effects. Capital-to-asset ratio, institutional age, and GDP were found to be statistically insignificant. Accordingly, the study identifies debt-to-equity ratio, operational efficiency, number of active borrowers, and institutional size as key determinants significantly influencing the performance of interest-free microfinance institutions in Ethiopia. This research contributes to the literature on Islamic finance by providing novel insights into the performance drivers of IMFIs in an underexplored market. The findings offer valuable implications for policymakers and microfinance practitioners seeking to enhance the sustainability and impact of Shariah-compliant financial services in Ethiopia.

Keywords: Ethiopia, financial performance, interest-free microfinance, return-on-asset

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INTRODUCTION

Microfinance institutions (MFIs) offer a wide range of financial services to the poor and marginalized segments of society across various countries (Ali, 2020). While microfinance services are widely recognized as essential tools for poverty alleviation, conventional microfinance products often conflict with Islamic law, rendering them unacceptable to many Muslim communities. Consequently, the conventional financial

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system contributes to financial exclusion among Muslims. In response, some MFIs have begun offering Shariah-compliant financial products tailored to low-income Muslim clients who seek financial services aligned with Islamic principles. This development has led to the emergence and rapid growth of Islamic or interest-free microfinance as a distinct and expanding segment of the financial sector. These institutions now serve as alternative providers of financial services to underserved Muslim populations in several countries. Although Islamic microfinance is increasingly acknowledged for its contribution to promoting financial inclusion, there remains a noticeable gap in empirical research concerning the performance and impact of interest-free microfinance institutions (IMFIs) in the Ethiopian context.

The Islamic financial system is increasingly viewed as a viable solution to the problem of financial exclusion within Muslim communities. Research indicates that exclusion from the formal financial system hampers individuals' ability to make economic decisions that could improve their livelihoods and, on a larger scale, restricts economic development within Muslim societies. According to Hailu et al., (2019) "some findings show the extent of financial exclusion of Ethiopian Muslims due to the absence of alternative financial systems." Many Ethiopian Muslims have historically avoided borrowing from commercial banks due to the interest-based nature of conventional finance, resulting in economic disparities between them and other communities in the country. In response to this challenge, Ethiopian Muslims have long advocated for the establishment of interest-free banking services (Hailu & Bushera, 2020).

This demand culminated in the introduction of interest-free banking in Ethiopia through a window-based scheme in 2011, followed by the establishment of full-fledged Islamic banking institutions in 2019. As Hailu & Nissar, (2021) note, the Islamic finance sector in Ethiopia now comprises Islamic banks, Islamic insurance providers, and Islamic microfinance institutions. Following the regulatory approval granted by the National Bank of Ethiopia, a number of MFIs began offering Shariah-compliant services, particularly in Muslim-majority areas. Institutions such as Somali, Harar, Rays, Sahal, and Dire Dawa microfinance share companies have since launched savings and credit services based on Islamic financial principles.

The performance of microfinance institutions, whether conventional or Islamic, is influenced by a variety of macroeconomic and institutional factors (Al-Azzam & Alawneh, 2023). These variables can have either a positive or negative impact on the financial health of MFIs. Elkhatib, (2020), emphasizes that income from Islamic financial products, operating expenses, and the financing structure are key determinants of performance for both standalone Islamic MFIs and Islamic windows within conventional institutions. Furthermore, product diversification—offering both Islamic and conventional services—has been found to enhance financial performance in window-model IMFIs compared to standalone Islamic MFIs and conventional MFIs. Recent empirical studies have identified cost efficiency, capital adequacy, inflation expectations,

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and gross national product (GNP) per capita as significant positive determinants of Return on Assets (ROA) in Islamic microfinance institutions (Miah & Suzuki, 2022).

Despite these findings, the existing literature on Islamic microfinance reveals a notable research gap concerning the comprehensive factors affecting their performance. Saepul Rohman et al., (2021) argue that studies evaluating the productivity of IMFIs from both financial and social perspectives remain limited, making this a compelling area for further investigation. Therefore, more research is needed to explore and empirically identify the multidimensional factors influencing the performance of Islamic microfinance institutions.

In the Ethiopian context, several empirical studies have investigated the determinants of performance in the broader microfinance sector. Researchers such as Abummar (2019), Abebaw (2014), and Dechasa (2018) have examined various factors affecting the financial performance and profitability of conventional MFIs. Additionally, Ashebir (2017), Zergaw (2015), and Sima (2013) explored similar issues within selected Ethiopian MFIs. However, none of these studies have specifically focused on interest-free microfinance institutions. Given that IMFIs employ distinct Shariah-compliant financing methods, the factors influencing their effectiveness may differ from those affecting conventional MFIs.

Therefore, this study seeks to fill this gap by identifying and analyzing the key determinants that influence the performance of interest-free microfinance institutions in Ethiopia, with particular emphasis on both financial and institutional variables.

LITERATURE REVIEW

Microfinance institutions (MFIs) are widely recognized as a potential solution to poverty, providing microloans to micro and small enterprises. However, conventional MFIs have largely failed to address poverty among Muslim populations due to their reliance on interest-based financial systems, which are prohibited under Islamic law as a form of usury (Saepul Rohman et al., 2021). As a result, interest-free microfinance is increasingly regarded as a strategic tool for poverty alleviation. It promotes financial inclusion and fosters long-term community development. Supporting this perspective, Alaro & Alalubosa, (2019) argue that "the implementation of Islamic financial covenants supports the development of MFIs and encourages financial inclusion in Nigeria."

In the context of Islamic microfinance, Ibrahim, (2014) conducted a study in Malaysia to identify profitability determinants using data from 2006 to 2012. Employing the Least Squares Method, the study examined the impact of five independent variables—cost efficiency, capital ratio, fuel price, gross national income (GNI) per capita, and GDP deflator—on return on assets (ROA). The findings demonstrated both positive and negative correlations between profitability and a mix of institution-specific and macroeconomic variables.

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Empirical research on microfinance performance in Ethiopia also offers relevant insights. (Ertiro, & Mohammed, 2022) assessed internal and external determinants of financial performance, using ROA as the primary metric. Their findings showed that the age of microfinance institutions was positively and significantly associated with ROA, while variables such as capital-to-asset ratio and debt-to-equity ratio were statistically insignificant. Operational efficiency, portfolio quality, and MFI size were also found to have no significant effect. Market concentration, the sole external variable considered, was also insignificant.

Similarly, Abummar, (2019) analysed five years of data (2013–2017) from the Oromia Credit and Saving Share Company (OCSSCO), using quantitative methods. The results indicated that operational efficiency, GDP, and MFI size significantly influenced financial performance, whereas portfolio quality, gearing ratio, capital-to-asset ratio, and market concentration had negative and insignificant effects.

Bekalu et al., (2020) investigated the "Determinants of Financial Performance of Microfinance Institutions in Ethiopia" using ROA and return on equity (ROE) as performance indicators. Independent variables included loan portfolio, portfolio at risk, operating costs, capital adequacy, GDP, market concentration, and inflation. Employing descriptive and random effects regression models, the study concluded that loan portfolio, operating cost ratio, and market concentration were the most significant predictors.

Abebaw, (2014) also examined the determinants of financial performance using internal factors such as capital-to-asset ratio, operational efficiency, and institutional age, along with external variables like GDP and market concentration. The findings revealed that while institutional age had a positive but statistically insignificant effect, other variables, such as capital-to-asset ratio and market concentration, had a negative and non-significant impact.

Based on the above literature, it is evident that both internal and external factors can influence the performance of Shariah-compliant microfinance institutions. In this study, internal factors include the debt-to-equity ratio, capital-to-asset ratio, operational efficiency, number of active borrowers, institutional age, and size. The sole external factor considered is gross domestic product (GDP).

METHOD

This study employed a quantitative research approach to investigate the determinants of the financial performance of Shariah-compliant microfinance institutions (IMFIs) in Ethiopia. A longitudinal panel data design was adopted to analyze performance trends over time and address the research questions. This approach is consistent with prior empirical studies that assume a cause-and-effect relationship between dependent and independent variables.

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Secondary data was required to evaluate the financial performance of IMFIs, particularly focusing on return on assets (ROA) as the dependent variable. The necessary financial data were sourced from the Association of Ethiopian Microfinance Institutions (AEMFI), which annually publishes performance analysis reports. To enhance the robustness and reliability of the econometric analysis, the study utilized audited data from three microfinance institutions that have been offering interest-free services for over a decade (2012–2021).

Both descriptive and econometric techniques were employed to analyze the data. ROA was used as a key measure of financial performance, reflecting management's ability to generate earnings from total assets. It provides insight into how efficiently the institution utilizes its assets to generate profits.

To examine the relationship between ROA and its potential determinants, the study considered seven explanatory variables—six internal and one external. As a result of the preceding logic, this study employed ROA as a measure of financial performance. These internal and external factors are capital-to-asset ratio, operational efficiency, debt-to-equity ratio, MFI size, Age, active borrowers, and country GDP.

To investigate the factors affecting the performance of IMFIs in terms of ROA, the following general multiple linear regression equation was used:

$$ROA_{it} = \alpha_0 + \alpha_1 CAR_{it} + \alpha_2 DER_{it} + \alpha_3 OE_{it} + \alpha_4 NAB_{it} + \alpha_5 AGE_{it} + \alpha_6 SIZE_{it} + \alpha_7 GDP_{it} + \varepsilon_{it}$$

α_0= the constant term
α_1-α_7 = the coefficient of explanatory Variables
CAR_{it}= capital asset ratio for IMFI i at time t
DER_{it}= debt to equity ratio for IMFI i at time t
OE_{it} = Operational efficiency for MFI i at time t
NAB_{it} the number of active borrowers of the IMFI i observed at time t.
AGE_{it}= Age of IMFI i at time t
$SIZE_{it}$ = the natural logarithm of the total asset for MFI i at time t
GDP_t= Gross domestic product of Ethiopia.
ε_{it}= the error term

RESULT

This section presents the regression results from the study of the determinants of the financial performance of Islamic microfinance institutions by considering financial aspects. The regression results and variable coefficients were computed using E-views version 10 software.

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Descriptive statistics

This section presents descriptive statistics for the regression model's dependent variable (return on assets) and the independent variables. The mean, median, standard deviation, minimum, and maximum values are reported.

The most common measure of financial performance, as discussed in the literature and methodology chapters, is return on assets (ROA), which measures how well a microfinance institution uses its total assets. It is also an overall measure of profitability that reflects both the profit margin and the institution's efficiency. ROA denotes the profit made on the total assets (equity and all other liabilities).

Table 1. Descriptive statistics of variables

Date: 11/20/23 Time: 21:46
Sample: 2012 2021

	AGE	CAR	DER	GDP	NAB	OE	ROA
Mean	9.833333	0.260900	3.689867	76.63300	12535.30	0.113643	0.045500
Median	10.00000	0.215000	2.640000	78.03500	8911.000	0.062000	0.030000
Maximum	18.00000	0.620000	15.87000	111.2600	40382.00	0.630000	0.140000
Minimum	1.000000	0.060000	0.610000	43.31000	362.0000	0.010000	0.000000
Std. Dev.	4.449590	0.143358	3.338521	23.10598	10871.08	0.160268	0.041364
Skewness	-0.126511	1.004787	1.978222	0.057423	1.614925	2.459988	0.779882
Kurtosis	2.286981	3.226535	7.157753	1.750209	4.410488	7.840035	2.290019
Jarque-Bera	0.715520	5.112132	41.17544	1.968959	15.52676	55.57079	3.671171
Probability	0.699241	0.077609	0.000000	0.373634	0.000425	0.000000	0.159520
Sum	295.0000	7.827000	110.6960	2298.990	376059.0	3.182000	1.365000
Sum Sq. Dev.	574.1667	0.595993	323.2259	15482.70	3.43E+09	0.693514	0.049618
Observations	30	30	30	30	30	28	30

Source: - E-views version 10 output (2023).

As shown in Table 1, the financial performance of microfinance institutions providing interest-free microfinance services was measured in terms of ROA for the 30 observations, which showed a positive value of 4.55% on average during the study period (2012–2021), with a maximum value of 14% and a minimum value of 0.0%. This means Ethiopian interest-free microfinance institutions earned 0.0455 cents for every 1 birr invested in total assets. A profitable microfinance institution earned 0.14 cents after tax for every 1 birr invested in total assets. On the other hand, a non-profitable microfinance institution makes zero profit for every 1 birr invested in total assets.

Test for heteroscedasticity

Heteroskedasticity occurs when the variance of the residuals is unequal across a range of measured values. One of the Regression model assumptions is that the error variance is constant. This is known as the homoscedasticity assumption. Errors are considered heteroscedastic if their variance is not constant.

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Table 2. Heteroskedasticity Test: ARCH

F-statistic	0.122904	Prob. F (1,27)	0.7286
Obs*R-squared	0.131409	Prob. Chi-Square (1)	0.7170

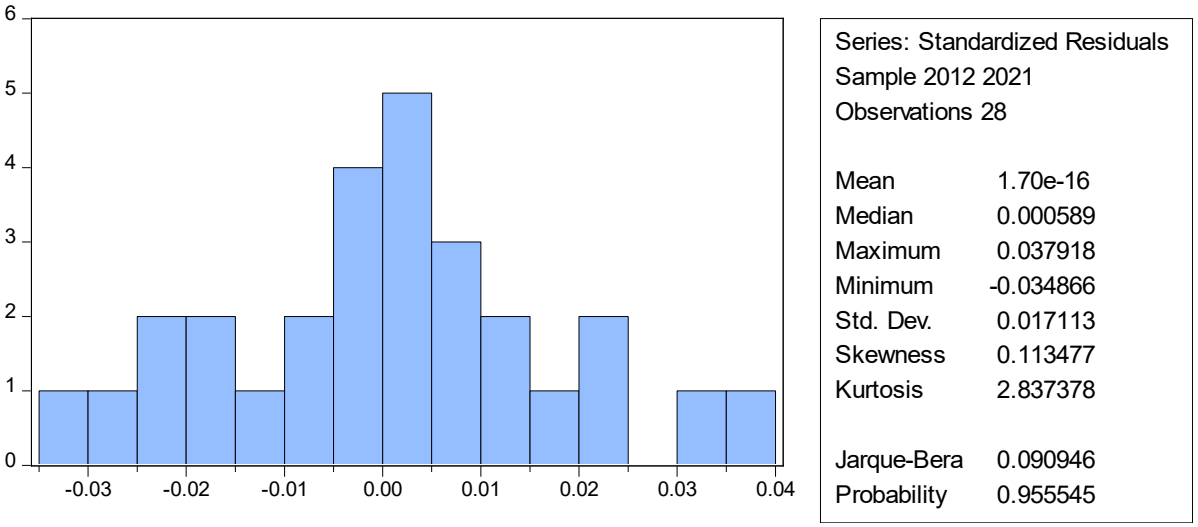
Source: - E-views version 10 output (2023).

In this study, as shown in Table 2, both the F-statistic and chi-square versions of the test statistic led to the same conclusion that there is no evidence of heteroscedasticity because the p-values were greater than 0.05. As a result of these statistics, the researcher is unable to reject the null hypothesis because there is no heteroscedasticity or the errors are homoscedastic for the models.

Test for Normality

A normality test determines whether sample data were drawn from a normally distributed population (within a certain tolerance). Normality can be assessed graphically or numerically.

Figure 1. Normality test



Source: - E-views version 10 output (2023).

According to the normality tests for this study, the Bera-Jarque statistic has a value of 0.091 and a p-value of 0.96, as shown in Figure 1. This demonstrates that the p-value for the model's Bera–Jarque test statistics is greater than 0.05, implying that the errors are normally distributed. As a result, the study failed to reject the null hypothesis of normality at the 5% significance level.

Model Selection-Pooled OLS Versus Fixed Effect Models

The likelihood ratio is used to choose between the pooled OLS and Fixed-effect models. The Pooled OLS model is based on the ordinary least squares (OLS) methodology and is applied to panel data. This model assumes no unobservable entity-specific effects, which

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means that all entities in the data set have the same underlying characteristics. The fixed-effects model is a statistical model in which the levels (or values) of independent variables are assumed to be constant, and only the dependent variable changes in response to the levels of independent variables.

Before evaluating the validity of the fixed-effect method, we must perform a test to determine whether fixed-effect (different constants for each group) should be included in the model. The likelihood ratio test can be used to compare fixed-effect methods with simple common constant or pooled OLS methods. Thus, we test whether

Ho: All the constants are the same (homogeneity), so the pooled OLS is applicable, against

H1: All the constants are not the same (heterogeneity), so the fixed-effect method is applicable.

Therefore, the OLS method is best if we accept the null hypothesis, i.e., the likelihood test is not significant at the 5% level. In contrast, the fixed-effect model is most applicable if the likelihood test is significant, i.e., a P-value less than 0.05.

Table 3. Likelihood ratio test
Redundant Fixed Effects Tests
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.352559	(2,18)	0.0579
Cross-section Chi-square	8.865883	2	0.0119

Source: - E-views version 10 output (2023).

As shown in Table 3, the p-value of the F-test is greater than 0.05, so we accept the null hypothesis of the appropriateness of the pooled-OLS method in this research.

Discussion on Pooled OLS (Regression) Results

According to the regression results in Table 4 below, the R^2 value is 79.9%, and the adjusted R^2 value is 72.8%. This is explained by the fact that 79.9% of the total variation in financial performance, i.e., ROA, is explained by the variation of independent (explanatory) variables (Age, size, capital to asset ratio, debt to equity ratio, operational efficiency, number of active borrowers, and country GDP). The remaining 20.1% of the variation in the dependent variable was explained by other factors not included in this model. The F-statistic value is 0.000009, indicating that the model is a fit.

Moreover, according to the findings in Table 4, among the IMFIs' internal explanatory variables, the debt-to-equity ratio, number of active borrowers, operational efficiency, and size had statistically significant effects on performance, whereas age and capital-to-asset ratio were insignificant. The external macroeconomic factor (GDP) variable, on the other hand, was insignificant. At the 1% significance level, the debt-to-

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equity ratio, the number of active borrowers, and the size are statistically significant variables. Whereas operational efficiency is statistically significant at the 5% level.

The coefficient figures of the independent variables under the coefficient of the two independent variables were positive against ROA. This was indicated by the coefficient values of 4.11 and 0.0615 for age and size, respectively. This indicates a positive relationship between the aforementioned two independent variables and ROA. Thus, increasing these variables will lead to an increase in ROA. On the other hand, GDP, capital-to-asset ratio, debt-to-equity ratio, number of active borrowers, and operational efficiency of the IMFIs were the independent variables that had an inverse relationship with a performance indicator (ROA) with a negative coefficient value of -0.001011, -0.015938, -0.007773, -5.47, and -0.131741, respectively. This revealed that an increase in these variables causes a decrease in the performance indicator (ROA). According to the regression results in Table 4, four of the seven regressors used in this study were significant, while three were insignificant.

Table 4. Pooled OLS (Regression) Results for Interest-free Microfinance Institutions

Dependent Variable: ROA				
Method: Panel Least Squares				
Date: 11/20/23 Time: 21:04				
Sample: 2012 2021				
Periods included: 10				
Cross-sections included: 3				
Total panel (unbalanced) observations: 28				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.942332	0.219103	-4.300866	0.0003
AGE	4.11E-05	0.00365	0.010629	0.9916
CAR	-0.015938	0.060431	-0.263734	0.7947
DER	-0.007773	0.001659	-4.686395	0.0001
NAB	-5.47E-06	1.59E-06	-3.441467	0.0026
OE	-0.131741	0.054822	-2.403077	0.0261
SIZE	0.061507	0.013921	4.418297	0.0003
GDP	-0.001011	0.000694	-1.456371	0.1608
R-squared	0.798812	Mean dependent var		0.043393
Adjusted R-squared	0.728397	S.D. dependent var		0.038153
S.E. of regression	0.019884	Akaike info criterion		-4.762878
Sum squared resid	0.007907	Schwarz criterion		-4.382248
Log-likelihood	74.68030	Hannan-Quinn criterion		-4.646516
F-statistic	11.34423	Durbin-Watson stat		2.659053
Prob(F-statistic)	0.000009			

Source: - E-views version 10 output (2023).

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As a result, the regression equation of the model is formulated as follows:

$$\mathbf{ROA} = -0.94 + 4.12\mathbf{AGE} - 0.016\mathbf{CAR} - 0.008\mathbf{DER} - 5.47\mathbf{NAB} - 0.132\mathbf{OE} + 0.062\mathbf{SIZE} - 0.001\mathbf{GDP} + \boldsymbol{\varepsilon_{it}}$$

DISCUSSION

The analyses were based on the financial reports from three microfinance institutions from 2012 to 2021. The study included internal and external factors that can affect the performance of microfinance institutions. Internal factors include capital-to-asset ratio, debt-to-equity ratio, operational efficiency, number of active borrowers, size, and age of the microfinance institution. The external factor selected was gross domestic product (GDP growth).

Capital to asset ratio: The capital to asset ratio estimates how much capital is needed to cover additional unexpected losses and ensures that the MFI is well capitalized for potential shocks. Based on the regression result in Table 4, the coefficient of the capital-to-asset ratio (CAR) is negative (-0.016) and statistically insignificant (p-value 0.795) even at a 10% significance level. This means that holding all other variables constant, increasing the capital to asset ratio (CAR) by one unit decreases ROA by nearly 0.016 birr. The result of this study is similar to the findings of Abummar, (2019), Ramanaiah & Mangala, (2011), and (Sima, 2013). but inconsistent with the findings of (Ashebir, 2017), Jorgensen, (2012), and (Muriu, 2011).

Debt-to-equity ratio: The debt-to-equity ratio is the most basic and well-known measure of capital adequacy because it measures the institution's overall leverage or the extent to which it relies on debt as a source of financing. The regression result revealed a negative coefficient of -0.0078, which is statistically significant with a p-value of 0.0001, even at the 1% significance level. This finding implies a significant negative relationship between the debt-to-equity ratio and financial performance. These regression results agree with the findings of (Ashebir, 2017) and (Melkamu, 2012). While the outcome contradicts the findings of (Muriu, 2011) and (Dissanayake, 2012). It can be concluded that more debt is not good for the performance of microfinance institutions since it requires high liquidity to cover this debt when requested by the debtors.

Operational Efficiency: The operational efficiency indicator determines how MFI allocates its resources and personnel to provide services. The operational efficiency ratio is calculated as adjusted operating expense divided by the adjusted average gross loan portfolio. Based on the result obtained from regression analysis, the operational efficiency ratio shows a coefficient of -0.13, and it was a statistically significant variable at a 5% significance level because the p-value is 0.0261. Moreover, the result shows that holding all other variables constant, decreasing one unit of operational expense on the gross loan portfolio could cause an increase of ROA by nearly 0.13 cents. The result of the regression shows that there is a negative relationship between operational efficiency and financial performance in terms of ROA. The outcome is in line with X-efficiency

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theory, which says efficient firms (lower cost) tend to earn higher profits. Moreover, the findings were consistent with those of (Dissanayake, 2012) and (Muriu, 2011), and contradicted the findings of (Ertiro, & Mohammed, 2022) and (Jorgensen, 2012).

Number of active borrowers: The number of active borrowers is the number of people who have a loan balance with the MFI or are primarily responsible for repaying any portion of the gross loan portfolio. The regression result revealed a negative coefficient of number of active borrowers at -5.47, which is statistically significant with a p-value of 0.0026 even at the 1% significance level. The regression result shows a negative relationship between the number of active borrowers and financial performance regarding ROA. Moreover, the result shows that holding all other variables constant, an increase of one more borrower could cause a decrease in ROA by nearly 5.47 birr. Whenever the number of borrowers increases, this will increase the outstanding loan, which may not be paid on time. However, an increase in active borrowers indicates that microfinance is reaching out to the poor and financially excluded, which indicates social performance. As a result, an increase in active borrowers is not a negative indicator of the overall performance of an interest-free microfinance institution; rather, it is a positive indicator of social performance.

Size of Microfinance Institutions: It is measured using the natural logarithm of total assets of the IMFIs. The coefficient of size was 0.062, which is statistically significant (0.0003) even at the 1% significance level. The positive sign indicates that holding all other variables constant, an increase of one birr in total assets causes an increase in the financial performance of IMFIs at 0.062 cents, indicating the possibility of economies of scale. The findings in this variable were consistent with those of (Ertiro, & Mohammed, 2022) and (Abummar, 2019), and it contradicts the findings of (Ashebir, 2017), (Sima, 2013), (Ramanaiah & Mangala, 2011), and (Ashenafi & Kingawa, 2018).

Age of IMFIs: The age of MFIs indicates the length of time (duration) the microfinance institutions have provided services. The study's findings show that the Age of IMFIs has a positive coefficient of 4.11, which is statistically insignificant even at a 10% significance level because the p-value is 0.9916. The positive coefficient of IMFI age implies that as IMFIs mature and gain more experience, their chances of achieving their financial performance improve. Holding all other variables constant, increasing age by one year, IMFI increases ROA to 4.11 Birr. The outcome of this study is similar to that of (Ramanaiah & Mangala, 2011). It is also practical where mature microfinance institutions earn higher profits than new MFIs.

Gross domestic product (GDP): a broad measure of a country's economic activity based on the total cash value of all goods and services produced in a given period. GDP is the only external factor used in this study. It had a negative coefficient of -0.0010 and was statistically insignificant even at the 10% significance level due to a p-value of 0.1608. This implies that the improvement in economic conditions, as measured by GDP growth, had no effect on the performance of IMFIs during the study period. This study's

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findings are consistent with those of (Sima, 2013), (Ramanaiah & Mangala, 2011), (Ashebir, 2017), and (Ashenafi & Kingawa, 2018). As a result, the current study discovered that GDP growth is not a key determinant of IMFI performance.

CONCLUSION

This study investigated the determinants of the financial performance of Shariah-compliant microfinance institutions (IMFIs) in Ethiopia, using panel data from three institutions that offered interest-free microfinance services between 2012 and 2021. Motivated by the scarcity of empirical research in this area, the study focused on both internal and external factors affecting the financial performance of IMFIs, measured by Return on Assets (ROA).

The internal variables included capital-to-asset ratio, debt-to-equity ratio, operational efficiency, number of active borrowers, institutional age, and size—factors largely within management control. The external factor assessed was Gross Domestic Product (GDP). Using data sourced from AEMFI performance bulletins and analyzed through pooled OLS regression via EViews 10, the study conducted diagnostic tests to validate the model.

The findings revealed that institutional size had a statistically significant and positive relationship with financial performance, indicating that larger IMFIs tend to be more effective. In contrast, operational efficiency, debt-to-equity ratio, and number of active borrowers were negatively and significantly associated with ROA. Capital-to-asset ratio and institutional age were statistically insignificant, and GDP showed no significant influence on performance during the study period.

Based on these findings, several practical insights emerge. First, improving **operational efficiency** through capacity building and digital tools is essential to reducing costs and enhancing profitability. Second, institutions should maintain a **balanced capital structure**, avoiding excessive reliance on debt to minimize financial vulnerability. Lastly, while expanding outreach remains vital, careful **management of client portfolios** is necessary to avoid over-indebtedness and ensure portfolio quality.

Despite its contributions, this study has certain limitations. The small sample size and missing data from selected institutions may limit the generalizability of the findings. Future research should extend the analysis to include more IMFIs, additional performance indicators such as portfolio quality and market concentration, and explore both financial and social dimensions of performance for a more holistic assessment.

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