

## Anti-Corruption and Financial Performance Determinants of Microfinance Institutions in the MENA Region

Jihen Bouhamed <sup>1\*</sup>, BEN HAMAD Salah<sup>2</sup>

<sup>1</sup> University of Sfax, Airport road Km 0.5 P.O.Box 1169. 3029, Sfax, Tunisia, Email: [jihenbouhamed2@gmail.com](mailto:jihenbouhamed2@gmail.com)

<sup>2</sup> University of Tunis El Manar, Farbat Hached University Campus, P.O.Box 248 – El Manar II – 2092, Tunis, Tunisia, Email: [benhamad\\_salab@yahoo.fr](mailto:benhamad_salab@yahoo.fr)

\*Corresponding Author: [jihenbouhamed2@gmail.com](mailto:jihenbouhamed2@gmail.com)

**Citation:** Bouhamed, J. and Salah, B. H. (2026). Anti-Corruption and Financial Performance Determinants of Microfinance Institutions in the MENA Region, *Journal of Cultural Analysis and Social Change*, 11(1), 2635-2644. <https://doi.org/10.64753/jcasc.v11i1.4456>

**Published:** February 06, 2026

### ABSTRACT

The performance of microfinance institutions is always influenced by different factors. It has remained, until recent years, a hot topic among researchers. In our paper, we are particularly interested in studying the determinants of the financial performance of microfinance institutions by taking into consideration the effect of anti-corruption measures. To do this, we selected 29 microfinance institutions distributed across 8 developing countries in the MENA region over the period from 2009 to 2018. We suggest a dynamic panel regression (Generalized Method of Moments: GMM) in which the performance of microfinance institutions is evaluated based on two key measures: return on assets (ROA) and operational self-sufficiency (OSS). Our findings indicate that financial performance of microfinance institutions is positively affected by corruption control and liquidity, while it is negatively influenced by the level of portfolio at risk.

**Keywords:** microfinance institutions, financial performance, corruption control, GMM method, MENA region

### INTRODUCTION

Microfinance is a viable sector as it deals with the problem of poverty. It is increasingly regarded as a solution to socio-economic challenges (Rogaly, 1996). So, it has remained resilient in the market to this day, given the widespread diffusion of their institutions observed mainly in developing region. It provides various services such as credit, savings, money transfers, advisory, and insurance to individuals who lack access to the traditional banking system and have low incomes, with the aim of improving their living conditions. These services also aim to provide financing opportunities to entrepreneurs to help them develop income-generating activities, ultimately leading to wealth creation (Bhandari, 2024).

Thus, financial performance is a key concern for microfinance institutions, which aim to maximize it by reducing costs and risks to ensure sustainability.

However, like all sectors, this sustainability is influenced by illegal activities, most notably corruption. Corruption is spreading increasingly worldwide, especially in poorer countries that need growth and development. Microfinance could help achieve these goals by fighting corruption and operating ethically and transparently, which would improve the effectiveness of institutions (Mohammad et al., 2017). In this regard, recent reports OECD (2025) and the United Nations (2025) confirm that institutional integrity and transparency are essential elements for achieving sustainable development goals, supporting the importance of ethical and sustainable microfinance.

Therefore, Liu and Liu (2025) show that the implementation of integrity and anti-corruption policies tends to improve the quality of institutions and stimulates economic growth. In parallel, Küçükçolak et al. (2025) underlines

that effective control of corruption ensures financial development, facilitating the the sustainability of MFIs and their access to capital.

In this context, the main objective of this study is to examine the effect of anti-corruption measures on the financial performance of microfinance institutions, while also exploring other factors that may impact these organizations.

The structure of this paper is organized as follows: Section 2 reviews the existing literature on financial performance and corruption and outlines the research hypotheses. Section 3 describes the research methodology. Section 4 discusses the results, and finally, the paper concludes with a summary of key findings.

## **FINANCIAL PERFORMANCE AND CORRUPTION: LITERATURE REVIEW AND HYPOTHESES**

### **The financial performance of microfinance institutions**

Financial performance is a major concern in the governance of microfinance institutions (MFIs) aiming to maximize their profitability. Indeed, the financial performance evaluation of MFIs is similar to that of banks or other financial institutions (Daher and Saout, 2013).

According to previous studies, the financial performance of MFIs is generally evaluated by the return on assets (ROA) or return on equity (ROE). More specifically in microfinance, operational self-sufficiency and financial self-sufficiency are indicators of financial performance measurement (Hermes and Hudon, 2019). The Operational self-sufficiency (OSS) indicator is a fundamental measure of financial health in MFIs (Chaudhury et al., 2022). It represents the ability of an MFI to cover its costs from its own income (Ferro-Luzzi and Weber, 2006). OSS is the most commonly used financial performance indicator due to its simplicity compared to other indicators like ROA (return on assets), which require more monitoring and necessary adjustments by the institution (Hartarska and Nadolnyak, 2007).

The evaluation of these financial performance indicators is based on several determinants, whose investigation is necessary.

In fact, Shkodra (2019) considered portfolio yield, institution size, and the age of the MFI as factors influencing the determination of financial performance. He also emphasized macroeconomic variables such as inflation rate and GDP growth rate. In addition, Zineelabidine et al. (2024) performed a study on 95 MFIs in Africa, highlighting that the size of MFI correlate negatively with the efficiency of MFI, while, the decrease of GDP positively influence it.

Aemiro and Mekonnen (2012) used the number of borrowers per staff as a variable to measure MFI productivity.

Fisman et al. (2006) identified four main determinants of financial performance: the interest rate ceiling, the number of clients per loan officer, competitiveness, and the number of days required to obtain a first loan. A high interest rate value in the MFI positively impacts its financial return. Furthermore, a larger number of clients per loan officer has the same positive effect as a higher interest rate for the MFI.

**Hypothesis 1 :** The number of active clients positively and significantly affects the performance of MFIs.

Ngumo et al. (2020) confirmed that liquidity risk and credit risk do not affect the financial performance of MFIs in Kenya because the central bank sets a minimum liquidity ratio and microfinance institutions have low credit risk levels. Liquidity risk occurs when an MFI is unable to satisfy its cash-flow needs or payment obligations on time (Idama et al., 2014).

Add to this, Mucheru and Shukla (2017) analyzed the effect of cash management on the financial performance of commercial banks in Rwanda. The results indicated that increased cash management led to improved financial performance.

Similarly, Mwambui and Koori (2019) found that cash management and financial performance have a positively moderate and significant relationship for microfinance banks in Nairobi City County, Kenya. Although, Yimer (2024) shows that liquidity has a significant impact on the profitability of MFIs and recommends to adopt better liquidity management to maintain the institution's performance.

**Hypothesis 2 :** The liquidity has a positive and significant effect on financial performance of MFI.

Furthermore, it is common for the percentage of non-performing loans, measured by the portfolio at risk (PAR) for each MFI, to have a significant effect on the financial performance of the microfinance institution.

In many jurisdictions and for many businesses, a non-performing loan is defined as a sum of money borrowed where the borrower has not made the required payments for at least 90 days. It, also, represent the portion of the principal or interest that has been in default for a period of 90 days (Dahal, 2023). In microfinance, loans are generally extended for short periods, which explains the use of the PAR 30 days as a proxy for non-performing loans (Mohamed and Elgammal, 2024).

Generally, once the borrower resumes payments on a non-performing loan, it becomes a performing loan, sometimes even if the borrower has not caught up on all missed payments. In a sense, a non-performing loan is either in default or close to it (Cortavarria et al., 2000).

In this regard, Bassem (2012) finds that the portfolio at risk (PAR) negatively and strongly influences the financial performance of MFIs, and a high value of this risk indicator would block good results. The PAR reflects an MFI's ability to recover its loans, with a high value indicating low repayment rates, which causes a problem of financial sustainability (Talel et al., 2024).

Thus, an MFI should focus on improving portfolio quality to ensure its sustainability, which is threatened by an increase in the portfolio at risk (Barry and Tacneng, 2014). Therefore, the problem of loan defaults in MFIs, measured by the PAR, becomes one of the main causes of hardship for lenders since cash operations, lending capacity, financial return, and development capacity will be affected (Twesige et al., 2021).

**Hypothesis 3:** The percentage of PAR has a negative and significant impact on the financial performance of MFIs.

### **Corruption within microfinance institutions in the MENA region**

The Middle East and North Africa (MENA) countries are located between Europe, Asia, and Africa. This region is characterized by diverse cultural traditions, government structures, and levels of economic development. It encompasses high-income, middle-income, and low-income nations (Hongxing et al, 2021). According to the World Bank, the poverty rate in the MENA region has increased in recent years, with a notable rise in extreme poverty, attaining 7.2% of the population in 2018, compared to 2.4% in 2011. Besides, the degree of falling into poverty is significant. As a result, the fragility of socioeconomic situation boosts vulnerability to corruption (Lassoued, 2021). In this area, there are various issues that need to be addressed, such as corruption, which is widespread in several countries, paralysing governance and decision-making (Elidrisy, 2024).

Corruption is defined as the non-compliance with rules for personal gain (Banerjee et al., 2012). It refers to the abuse by a person or organisation for personnel and illegal purposes, it take the form of acts like bribery or fraud (Kervalishvili, 2022). Shleifer et al. (1993) describe the corruption as the sale of public property by government officials for personal gain. In the microfinance sector, it primarily manifests itself in the relationships between loan officers and borrowers (Acclassato et al., 2010). This phenomenon, deeply rooted in institutional structures, harms the performance of microfinance institutions (MFIs) by degrading portfolio quality, liquidity, and client confidence. In this context, Ahlin et al. (2011) find that a decline in corruption is positively associated with development of microfinance institutions. Also, Afrifa et al. (2024) argued that in environments where anti-corruption measures are strictly applied, the loan repayment rates tend to be higher which improve the overall financial performance and sustainability in microfinance institutions.

To address these challenges, an anti-corruption program must be implemented, while keeping in mind that it cannot be completely eradicated (Mohammad et al., 2017). It is essential to establish preventive, punitive and promotional anti-corruption measures (Narasimhan, 1997). Thus, governments play a key role in ensuring the rigorous enforcement of relevant legislation and actively combating corruption. Akuoko and Mahmud (2025) demonstrate that anti-corruption initiatives, a stronger judicial framework and robust economic growth reduce non-performing loans. Moreover, policy improvements encourage to enhance institutional quality and promote measures that ensure sustainable growth.

**Hypothesis 4 :** Anti-corruption has a positive and significant impact on the financial performance of MFIs

## **RESEARCH METHODOLOGY**

### **Data Description**

This work draws on data collected from the Microfinance Information Exchange (MIX) database, which is a global information platform on microfinance that provides reliable and comprehensive financial performance data of microfinance institutions worldwide. This study concerns 29 microfinance companies spread across 8 developing

countries in the MENA region (Egyte, Iraq, Jordan, Lebanon, Marroco, Tunisia, West Bank and Gaza, and Yemen) during the period from 2009 to 2018. We chose these countries based on the availability of the data during the observation period. Our database also contains variables that address the control of corruption index, inflation and GDP for each country for the years 2009 to 2018. These values are extracted from the World Bank website. In table 1, we present a detailed overview of the variables employed in this study.

**Table1** Description of variables

Category	Variable	Definition / Measurement
<b>Dependent Variables</b>	ROA (Return on Assets)	Measures how efficiently MFIs use their assets to generate profit (Bassem, 2012)
	OSS (Operational Self-Sufficiency)	Measures the extent to which operating revenues cover operating costs (Armendariz and Morduch, 2010)
<b>Explanatory Variables</b>	NB (Number of Borrowers)	Total active customers per MFI
	LT (Liquidity)	Evaluate the ability of microfinance institution to cover obligations. This proxy is equal to Total assets/Total liabilities
	PAR30 (Portfolio at Risk)	Rotio of total principal value outstanding of loans that have at least one payment that is more than 30 days overdue (Mohamed and Elgammal, 2024).
<b>Control Variables</b>	CCI (Corruption Control Index)	Institutional quality index (-2.5 to +2.5): higher values = better control (Türedi and Altiner, 2016)
	INF (Inflation Rate)	Annual change in consumer prices (Shkodra, 2019)
	GDP (GDP Growth Rate)	Annual growth in total production of goods and services within a given country (Shkodra, 2019)

The financial performance is our dependent variable in this research assessed through two indicators : Return On Assets (ROA) and Operational Self-Sufficiency (OSS), providing a clear idea about short-term earnings and long-term financial sustainability of microfinance institutions accross different independant variables with tanking into consideration the macroeconomic framework. Table 2, presents an overview of the descriptive statistics for the main variables employed in this analysis.

**Table2** Descriptive statistics

Variables	Mean	Standard deviation	Min.	Max.
ROA	0.0388	0.0646	-0.2672	0.2614
OSS	1.3026	0.4503	0.2517	2.7772
NB	65819.83	90155.16	455	443016
LT	3.152	14.5892	-158.5747	114.7969
PAR	0.0563	0.1161	0	0.9529
CCI	-0.4306	0.4615	-1.7	0.3
INF	5.0886	6.1055	-3.7	29.5
GDP	3.1331	3.1331	-28	13.9

To work out the relationship between the independent variables and to check the absence of multicollinearity which can distort the regression, we present the correlation matrixes in Table3 and Table4. We note that there is no strong correlation between the variables, as all coefficients remain below the accepted benchmark of 0.7. Furthermore, the average Variance Inflation Factor (VIF) between independent variables does not exceed 4, indicating the lack of multicollinearity issue.

**Table3** Correlation matrix for the ROA model

	ROA	NB	LT	PAR	CCI	INF	PIB
ROA	1.000						
NB	0.1311	1.000					
LT	0.1205	-0.0488	1.000				
PAR	-0.2805	-0.1395	-0.0145	1.000			
CCI	0.0233	0.1849	-0.590	0.0793	1.000		
INF	0.2594	0.0739	0.0503	-0.1447	-0.3213	1.000	
PIB	0.0336	0.0229	-0.0169	0.0489	0.2551	-0.0693	1.000

The average VIF is equal to 1.10

**Table4** Correlation matrix for the OSS model

	OSS	NB	LT	PAR	CCI	INF	PIB
OSS	1.000						
NB	0.0200	1.000					
LT	0.1112	-0.0488	1.000				
PAR	-0.0986	-0.1395	-0.0145	1.000			
CCI	-0.0334	0.1849	-0.0590	0.0793	1.000		
INF	0.2134	0.0739	0.0503	-0.1447	-0.3213	1.000	
PIB	0.0983	0.0229	-0.0169	0.0489	0.2551	-0.0693	1.000

The average VIF is equal to 1.10

Before proceeding with the regression analysis, it is important to apply preliminary tests in order to guide the selection of the most appropriate model and to assess the overall relevance of the explanatory variables.

First, we test for the individual effect whether fixed or random via the Hausman test which generate a comparative evaluation of fixed effect and random effect models. The results of this test show p-values of 0.0217 and 0.0034 respectively for model which presents financial performance using ROA, and the second model using OSS. The estimates obtained are less than 5%, so the null hypothesis of no systematic difference between fixed and random effects is rejected. As a result, we confirm the use of an estimator adapted to fixed effects approach.

Second, we test for the heteroscedasticity to both models and we apply the Breusch-Pagan test. The results show a p-value of 0.0000 and 0.4677 respectively for the model using ROA and OSS. These values indicate that we strongly reject the null hypothesis of homoscedasticity indicating the presence of heteroscedasticity in the first model. While, we confirm its absence in the second model as the null hypothesis cannot be rejected.

In light of these diagnostic results, the use of the Generalized Method of Moments (GMM) method is justified for both models, given that it is mainly adequate for panel data with fixed effects and heteroscedasticity.

## METHODOLOGY

In this paper, we adopt a dynamic panel data estimation method proposed by Arellano and Bond (1991) in order to measure the effect of independent variables on the dependent variables. This technique is particularly suitable for the present research, seeing that it deals with the endogeneity, which can bias traditional estimators like fixed effects and pooled Ordinary Least Squares (OLS), by using the lagged dependent variables as instruments.

We estimate our models using first differences with a one-period lag structure and we apply the two-step Generalized Method of Moments (GMM) to ensure more efficient standard error estimates.

This study is based on unbalanced panel dataset including 29 microfinance institutions for the period between 2009 to 2018. The dependent variable is measured by Return On Assets (ROA) and Operational Self-Sufficiency (OSS). The independent variables concern the institutional characteristics and macroeconomic factors.

Thus, the models tested to analyse the effects of determinants of financial performance are presented as follows :

$$ROA_{it} = \alpha ROA_{it-1} + \beta_0 + \beta_1 NB_{it} + \beta_2 LT_{it} + \beta_3 PAR_{it} + \beta_4 CCI_{it} + \beta_5 INF_{it} + \beta_6 GDP_{it} + \varepsilon_{it} \quad (1)$$

$$OSS_{it} = \alpha OSS_{it-1} + \beta_0 + \beta_1 NB_{it} + \beta_2 LT_{it} + \beta_3 PAR_{it} + \beta_4 CCI_{it} + \beta_5 INF_{it} + \beta_6 GDP_{it} + \varepsilon_{it} \quad (2)$$

Where  $ROA_{it}$  and  $OSS_{it}$  represent the financial performance of institution  $i$  at time  $t$ .  $NB_{it}$  is the number of borrowers,  $LT_{it}$  measures liquidity,  $PAR_{it}$  is the portfolio at risk 30 days,  $CCI_{it}$  is the control corruption index,  $INF_{it}$  is the inflation rate of the country, and  $GDP_{it}$  is the gross domestic product of the country.  $\alpha$  is the coefficient of the lagged dependent variable,  $\beta_0$  is the fixed effect, and  $\varepsilon_{it}$  is the error term. The parameters  $\beta_1$  to  $\beta_6$  are coefficients to be estimated.

**RESULTS, ROBUSTNESS CHECKS AND DISCUSSION****RESULTS**

The estimation results using the GMM method are presented in Table5 and 6.

Table5 shows the results provided by model (1). This estimation highlights that the lagged dependent variable L.ROA has a positive and significant effect supporting the dynamic nature of financial performance measured by ROA. Regarding liquidity and control of corruption, they have a positive and significant impact on our dependent variable. While, PAR and GDP indicate a negative relationship with ROA. The number of borrowers, along with inflation, has no significant effect in our model. These empirical findings indicate that a microfinance institution, possessing better liquidity and lower credit risk, can perform when it operates in an environment with less corruption and GDP.

The results of model (2), reported in Table6, converge with those of model (1), with only small differences.

So, the lagged dependent variable L.OSS is not significant reflecting a lack of persistence in OSS across the observed time period. Liquidity and control of corruption positively and significantly affects our dependent variable. But, PAR negatively and significantly influences it. Both the number of borrowers and other macroeconomic variables does not impact the financial performance evaluated by OSS in our research.

The estimation of model (1) and (2) reveal the important role of liquidity, credit risk and control of corruption in determining the financial performance in the MENA region.

**Table5** Generalized Method of Moments (GMM) regression for ROA model

Arellano-Bond dynamic panel-data estimation		Number of observations = 232
Dependent variable: ROA		
Independent variables	Coefficient	P-value
ROA		
L1.	0.1189***	0.000
NB	3.13-08	0.412
LT	0.0003***	0.000
PAR	-0.2839***	0.000
CCI	0.0600***	0.000
INF	0.0003	0.293
PIB	-0.0006***	0.000
_cons	0.0673***	0.000

Note : \*\*\*, \*\* and \* represent the statistical significance at the levels of 1%, 5% and 10%, respectively.

**Table 6** Generalized Method of Moments (GMM) regression for OSS model

Arellano-Bond dynamic panel-data estimation		Number of observations = 232	
Dependent variable: OSS			
Independent variables		Coefficient	P-value
OSS			
L1.		-0.0034	0.791
NB		-2.34 <sup>e-07</sup>	0.669
LT		0.0026 <sup>***</sup>	0.000
PAR		-1.5360 <sup>***</sup>	0.000
CCI		0.1788 <sup>***</sup>	0.000
INF		-0.0020	0.165
PIB		-0.0002	0.850
_cons		1.4174 <sup>***</sup>	0.000

Note : <sup>\*\*\*</sup>, <sup>\*\*</sup> and <sup>\*</sup> represent the statistical significance at the levels of 1%, 5% and 10%, respectively.

### Robustness checks

In order to validate the robustness of our GMM estimations, we conducted two fundamental postsimulation diagnostic tests namely, the Sargan test of overidentifying restrictions and the Arellano-Bond test for autocorrelation in the first-differenced residuals.

The results of the Sargan test demonstrate that our instruments in the ROA and OSS models are valid. Precisely, the chi-squared statistics are 18.29 ( $p=0.9938$ ) for the ROA model and 22.27 ( $p=0.9645$ ) for the OSS model, which clearly exceed the conventional significance levels. So, we accept the null hypothesis, along with, we confirm that the instruments are valid and not correlated with the error term. Accordingly, our models do not suffer from the overidentification problems.

In addition, the Arellano-Bond tests for autocorrelation demonstrate no evidence of second-order serial correlation in the first-differenced residuals, which reflect the reliability of the GMM estimator. Regarding to the ROA model, the z-statistic for AR(2) is -1.4 ( $p=0.1615$ ), and concerning the OSS model it illustrates -0.82 ( $p=0.4135$ ), revealing the absence of autocorrelation at the second order. Nevertheless, the first-order autocorrelation was detected as expected.

Overall, these tests validate the correct and robust specification of our models, supporting the reliability of the estimated coefficients.

## DISCUSSION

In the light of the findings reported by the GMM estimator, we can broadly support our hypotheses.

Specifically, Hypothesis 1 is rejected given that the number of borrowers is not significant in both ROA and OSS estimation. This outcome is inconsistent with the declaration of Fisman et al. (2006) who suggest that the number of clients in microfinance institution improve its financial performance. So, we confirm that the number of active borrowers does not always reflect a better financial performance and it can even deteriorate it, especially when the credit risk is not strictly managed. The significant and positive effect of liquidity on ROA and OSS is in line with the statements findings that the effective regulation of liquidity is a crucial aspect of financial performance of microfinance institutions, enabling them to respond efficiently to their customers' financing needs while minimising their reliance on external debt. Therefore, it is evident that a liquid structure makes the company more profitable and sustainable (Mwambui and Koori, 2019 ; Mucheru and Shukla, 2017). As a result, Hypothesis 2 of our research is confirmed. The results of portfolio at risk are consistent with those established by Bassem (2012). Hence, we can accept Hypothesis 3 as there is a negative link between the portfolio at risk and the financial

performance of microfinance institutions presented by ROA and OSS. However, the findings of the corruption control index show a positive and significant effect aligned with announcement of Ahlin et al. (2011). Thus, we conclude that a healthy institutional environment with low level of corruption and better governance creates a transparent framework to improve financial performance of MFI. Accordingly, Hypothesis 4 of this study is adopted.

The relationship between macroeconomic variables and financial performance is mixed. In this sense, the results reveal that the inflation does not affect the financial performance measured by either ROA or OSS. Our findings are in accordance with the conclusions of Cull et al. (2009) who observed a lack of a coherent link between inflation and MFI returns. This absence is explained with the nature of inflation effect on each country (Ahlin et al., 2011). On the other hand, the GDP growth rate influences negatively and significantly the financial performance presented by ROA, indicating that during periods of economic expansion, the decline of the demand for microcredit and the strong competition of the banking sector can both undermine the profitability of microfinance institutions. Besides, we find no evidence of its impact on OSS. This result is reliable as the OSS largely depends on the internal factors of the MFI such as the institution's management and operational activities. So, this dependence makes the OSS less sensitive to the macroeconomic fluctuations.

## CONCLUSION

This paper aims to investigate the factors that influence the financial performance of microfinance institutions. In order to reach this goal, the study uses a dynamic panel data analysis via the two-step Generalised Method of Moments (GMM) estimator. In this context, we employ a panel of 29 MFIs located in 8 countries of the MENA region, across the period 2009-2018. We adopt ROA and OSS as dependent variables, to evaluate the effects of institutional and macroeconomic factors on financial performance.

Our findings show a negligible effect of the number of borrowers on financial performance, confirming that a large number of customers does not necessarily increase the profitability of MFI. In most cases, the cost of credit exceeds its revenue, especially when borrowers fail to make their payments on time. Therefore, the quality of the borrower portfolio is more important than its size in shaping financial performance of microfinance institution. Yet, liquidity indicate positive and significant relationship with ROA and OSS, highlighting the major role of managing liquidity for sustaining financial performance of MFIs. Moreover, the portfolio at risk (PAR30) has a negative and significant effect confirming the importance of controlling credit risk in ensuring the financial stability of our institutions. Also, we investigate the impact of corruption control index (CCI) on our dependent variables. We find a positive and significant effect, validating the crucial role of the governance frameworks in improving financial performance. Specifically, a better control of corruption associated with higher scores of CCI boost the profitability, reduce portfolio risk, and ensure stronger operational viability.

The macroeconomic variables have a minimal role in our study, as the inflation is not significant aligning with previous studies that confirm the complexity of inflation's impact. Besides, the GDP growth rate show a negative effect with only ROA.

These outcomes highlight the need for microfinance institutions of the MENA region to focus on their internal management practices and liquidity, as well as the necessity of risk control. Add to this, the study emphasizes the important role of institutional frameworks designed to support transparency and strong governance.

## REFERENCES

- Acclassato, D., Aga, L. A., & EGGOH, J. (2010). Microcrédit et corruption : description et analyse théorique.
- Aemiro, T., & Mekonnen, D. (2012). The financial performance and sustainability of microfinance institutions during the current financial crisis: The case of Amhara Credit and Saving Institution (ACSI) in Ethiopia. *International Journal of Business and Public Management*, 2(2), 81-87.
- Afrifa, G. A., Amankwah-Amoah, J., Acquaye, A., Yamoah, F. A., & Mwiti, F. G. (2024). Small sums, big impact: Corruption and microfinance institutions. *Economic and Industrial Democracy*, 45(1), 164-199.
- Ahlin, C., Lin, J., & Maio, M. (2011). Where does microfinance flourish? Microfinance institution performance in macroeconomic context. *Journal of Development economics*, 95(2), 105-120.
- Akuoko-Konadu, E., & Mahmud, A. (2025). Corruption, economic growth, and non-performing loans in Sub-Saharan Africa: An empirical analysis (2011–2019). *Journal of Quantitative Economics*, 23(1), 233-251.
- Armendariz B, Morduch J. (2010). *The Economics of Microfinance*, 2nd edn. MIT Press: Cambridge, MA.
- Banerjee, A., Hanna, R., & Mullainathan, S. (2012). 27. Corruption (pp. 1109-1147). Princeton University Press.
- Barry, T. A., & Tacneng, R. (2014). The impact of governance and institutional quality on MFI outreach and financial performance in Sub-Saharan Africa. *World Development*, 58, 1-20.

- Bassem, B. S. (2012). Social and financial performance of microfinance institutions : Is there a trade-off?. *Journal of Economics and International Finance*, 4(4), 92-100.
- Bhandari, B. P. (2024). Assessing the Impact of Microfinance on the Income Level of Small-Scale Farmers. *Janapriya Journal of Interdisciplinary Studies*, 13(1), 152-164.
- Chaudhury, N. J., Alam, M. M., & Dooty, E. N. (2022). Operational Self Sufficiency of Bangladeshi Micro Finance Institutions: Do The Managerial Factors Matter?. *The Journal of Developing Areas*, 56(1), 233-248.
- Cortavarria, Luis, Claudia Dziobek, Akihiro Kanaya, and Inwon Song. (2000), "Loan review, provisioning, and macroeconomic linkages." *IMF Working Paper No. 00/195*.
- Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic perspectives*, 23(1), 167-192.
- Dahal, P. (2023). Impact of non-performing assets on profitability: A panel regression analysis of commercial banks in Nepal. *Global Journal of Commerce and Management Perspective*, 12(4), 1-9.
- Daher, L., & Le Saout, E. (2013). Microfinance and financial performance. *Strategic Change*, 22(1 - 2), 31-45.
- Elidrissy, A. (2024). Examining the Impact of ESG on Organizational Performance: The Literature Review on Investment Sectors of the Middle East and North Africa (MENA). *American Journal of Economics and Business Innovation*, 3(1), 40-49.
- Ferro-Luzzi, G., & Weber, S. (2006). Measuring the performance of microfinance institutions. Available at SSRN 918750.
- Fisman, R., & Ferro-Luzzi, G., & Weber, S. (2006). Measuring the performance of microfinance institutions. Available at SSRN 918750.
- Fisman, R., & Svensson, J. (2007). Are corruption and taxation really harmful to growth? Firm level evidence. *Journal of development economics*, 83(1), 63-75.
- Hartarska, V., & Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence. *Applied economics*, 39(10), 1207-1222.
- Hermes, N., & Hudon, M. (2019). Determinants of the performance of microfinance institutions: A systematic review. *Contemporary topics in finance: A collection of literature surveys*, 297-330.
- Hongxing, Y., Abban, O. J., Boadi, A. D., & Ankomah-Asare, E. T. (2021). Exploring the relationship between economic growth, energy consumption, urbanization, trade, and CO 2 emissions: A PMG-ARDL panel data analysis on regional classification along 81 BRI economies. *Environmental Science and Pollution Research*, 28, 66366-66388.
- Idama, A., Asongo, A. I., & Nyor, N. (2014). Credit risk portfolio management in microfinance banks: Conceptual and practical insights. *Universal Journal of Applied Science*, 2(6), 111-119.
- Kervalishvili, I. (2022). Negative effects of corruption on the global level. In *World politics and the challenges for international security* (pp. 145-164). IGI Global Scientific Publishing.
- Küçükçolak, R. A., Bozkurt, G., İltar Küçükçolak, N., Ertemel, A. V., & Küçüköğlü, S. (2025). Corruption Control as a Catalyst for Financial Development: A Global Comparative Study. *Journal of Risk and Financial Management*, 18(2), 79.
- Lassoued, M. (2021). Control of corruption, microfinance, and income inequality in MENA countries: Evidence from panel data. *SN Business & Economics*, 1(7), 96.
- Liu, B., & Liu, J. (2025). Did the integrity transition promote economic growth? Empirical research based on the perspective of anti-corruption approaches. *International Review of Economics & Finance*, 104156.
- Mohamed, T. S., & Elgammal, M. M. (2024). Does the extent of branchless banking adoption enhance the social and financial performance of microfinance institutions?. *Applied Economics*, 56(14), 1671-1688.
- Mohammad I. Azim, Kuang Sheng, Meropy Barut, (2017) "Combating corruption in a microfinance institution", *Managerial Auditing Journal*, Vol. 32 Issue : 4/5, pp.445-462, doi: 10.1108/ MAJ-03-2016-1342
- Mucheru, E., & Shukla, J. (2017). Effect of Liquidity Management on Financial Performance of Commercial Banks in Rwanda. A Study of Selected Banks in Rwanda. *European Journal of Business and Social Sciences*, 6 (7), 1-11.
- Mucheru, E., & Shukla, J. (2017). Effect of Liquidity Management on Financial Performance of Commercial Banks in Rwanda. A Study of Selected Banks in Rwanda. *European Journal of Business and Social Sciences*, 6 (7), 1-11.
- Mwambui, M. W., & Koori, J. (2019). Liquidity management and financial performance of microfinance banks in Nairobi City County, Kenya. *International Academic Journal of Economics and Finance*, 3(4), 186-203.
- Mwambui, M. W., & Koori, J. (2019). Liquidity management and financial performance of microfinance banks in Nairobi City County, Kenya. *International Academic Journal of Economics and Finance*, 3(4), 186-203.
- Narasimhan, C. V. (1997). Towards Effective Enforcement. *Corruption in India: Agenda for action*, 251.
- Ngumo, K. O. S., Collins, K. W., & David, S. H. (2020). Determinants of financial performance of microfinance banks in Kenya. *arXiv preprint arXiv : 2010.12569*.

- Organisation de coopération et de développement économiques (OCDE). (2025). Government at a Glance 2025: Integrity and anti-corruption strategies. OCDE. [https://www.oecd.org/en/publications/2025/06/government-at-a-glance-2025\\_70e14c6c/full-report/integrity-and-anti-corruption-strategies\\_9ecb07c9.html](https://www.oecd.org/en/publications/2025/06/government-at-a-glance-2025_70e14c6c/full-report/integrity-and-anti-corruption-strategies_9ecb07c9.html) OECD
- Rogaly, B. (1996). Micro-finance evangelism, 'destitute women', and the hard selling of a new anti-poverty formula. *Development in practice*, 6(2), 100-112.
- Shkodra, J. (2019). Financial performance of microfinance institutions in Kosovo. *Journal of International Studies*, 12(3), 31-37.
- Shleifer, Andrei and Robert W. Vishny. (1993). "Corruption", *Quarterly Journal of Economics*, 108, 599-617
- Talel, L. C., Asienga, I., & Githaiga, P. N. (2024). Income Diversification and Financial Sustainability of Microfinance Institutions in Kenya.
- Türedi, S., & Altner, A. (2016). Economic and Political Factors Affecting Corruption in Developing Countries. *Int. J. Eco. Res*, 7(1), 104-120.
- Twesige, D., Uwamahoro, A., Ndikubwimana, P., Gasheja, F., Misago, I. K., & Hategikimana, U. (2021). Causes of loan defaults within Microfinance institutions: Learning from micro and small business owners in Rwanda: A case of MSEs in Kigali. *Rwanda Journal of Social Sciences, Humanities and Business*, 2(1), 27-49.
- United Nations. (2025). The Sustainable Development Goals Report 2025. United Nations. <https://unstats.un.org/sdgs/report/2025/The-Sustainable-Development-Goals-Report-2025.pdf> UNSD
- Yimer, I. A. (2024). The Effect of Liquidity Management on the Viability of Microfinance Institutions of Ethiopia. *INTERNATIONAL JOURNAL OF MANAGEMENT*, 11(3), 1-8.
- Zineelabidine, M., Nafssi, F., & Ayass, H. (2024). The Determinants of the Efficiency of Microfinance Institutions in Africa. *Journal of Risk and Financial Management*, 17(8), 318.