
Performance of Microfinance Institutions: Do Risk Management Regulations Really Matter?

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Abstract

The study was conducted to assess the impact of risk management regulations on the financial performance of Microfinance Institutions (MFIs) in Tanzania. Specifically, the study was guided by a descriptive research design. The target population of this study included Microfinance Institutions (Tier 1 Microfinance Institutions) in Tanzania where all three (3) MFIs were selected. The study employed secondary data collected from the MFIs yearly annual reports from 2019 to 2022 and Bank of Tanzania (BOT) published statistics on MFIs. The study used a panel data random effect model to establish the relationship between risk management regulations and MFIs financial performance. The study found capital adequacy ratio requirements (CAR) to statistically positively influence the financial performance of the MFIs while the cash reserve requirements (CRR) statistically negatively influence the financial performance of the MFIs and liquidity ratio requirements (LRR) do not significantly influence the financial performance of the MFIs. The study concluded that MFIs should continue adhering to the available policy and regulations so as to evade exposed risks. Moreover, in terms of capital adequacy and cash reserve requirements, the BOT should set minimum capital depending on the risk capabilities of the MFIs. Furthermore, our study recommended that BOT should ensure that all MFIs adhere to the written policy and procedures to mitigate the operational, financial, and strategic risks among the MFIs.

Keywords: Microfinance Institutions, Bank of Tanzania, Risk Management Regulations, Financial performance, Developing economies.

JEL Classification: G24, P37

1. Introduction

The microfinance sector provides credit and money to a large portion of the population who would not otherwise have access to it. While this has had a significant economic

impact, the sector has become vulnerable to financial irregularities and a target for fraudsters and money launderers due to a lack of regulation. Although Tanzania has been one of the most robust microfinance sectors in Sub-Saharan Africa, with a range of institutional forms and excellent infrastructure to assist the poor, but microfinance activities were not highly regulated until the Microfinance Act was passed in 2018. The rapid growth of microfinance has brought increasing calls for regulation, but complying with prudential regulations and the associated supervision can be especially costly for microfinance institutions. Since regulation remains a precondition for deposit taking in many countries, more MFIs seek to transform into regulated entities to access cheap and local currency deposits. Regulation also opens the door to a variety of funding opportunities and helps to reduce the overreliance on subsidies. The objectives of the regulations were to reduce risks that affected the MFI's performance namely, operational and financial risks. The regulations were intended to accomplish this by providing an enabling environment in the country for an efficient and successful microfinance sub-sector that serves the requirements of low-income persons, households, and businesses, thereby contributing to economic growth, job creation, and poverty reduction (Hossain, 2018). In December 2018, the parliament of the United Republic of Tanzania enacted a Microfinance Act which seeks to clarify the framework under which microfinance institutions are governed, regulated, and operate. The Act provides for licensing, regulation and supervision of a highly segmented microfinance sector in Tanzania Mainland and Zanzibar. It concretized a commitment made by the Ministry of Finance and BOT to transform the microfinance sector through better integration and regulation. The 2018 Microfinance Act was enacted "in order to operationalize National Microfinance Policy 2017" whose main objective was to create an enabling environment for the microfinance sub sector to contribute to poverty reduction.

Microfinance Institutions like any other financial institution are however faced with risks that serve as a threat to their financial performance. These risks can be financial risks such as financial reporting risks, liquidity risks, and also, operational risks which include transaction risks, fraud and integrity risks, and legal and compliance (Kaaya, 2015). To evade these risks, the BOT enacted the risk management regulations to be adopted by the MFIs in the country which helps to ensure an MFI's financial stability, lowering the likelihood of collapse and increasing the public's faith in these financial institutions (BOT Report, 2018). However, regulations encompass drawbacks for the industry and its customers. Regulations raise expenses, limit operations, and limit MFIs' viable scope. Increased expenses and limits may result in higher interest rates, greater fees, less competition, and fewer services. These outcomes serve to increase the cost of financial services or make them unavailable to the poor. Though the regulation is

frequently beneficial to customers and markets, it is vital to question both its positive and negative impacts on the financial performance of MFIs.

Several studies have been carried out to analyze the relationship between regulation and MFIs performance. The findings from these studies yield mixed conclusions. While those from Ledgerwood (1999), Woller and Woodworth (2001), Hubka and Zaida (2005) revealed a positive or conditional effect of regulations on MFIs performance, those of Fouda-Owoundi (2010); Smith (2011); Yu et al. (2014) revealed a negative relationship between some regulatory instruments and MFIs' performance. Others among which are Hartarska and Nadolnyak (2007), Mersland and Strøm (2009), Ndambu (2011) observed no significant relationship between regulations and microfinance institutions performance. Based on the above, raising a need to assess the impact of risk management regulations on the financial performance of Microfinance institutions in Tanzania. This study consists of five sections with the introduction as section one. The second section is the literature review. The third section discusses the research methodology. The fourth section discusses the research findings. In this section, all the research findings have been analyzed in terms of figures and tables. The final section is section five which provides the conclusions and recommendations based on the findings of the study.

2. Literature Review

The risk management behavior of MFI management in relation to operational risks was studied using agency theory. Agency theory, often known as principal-agent theory, involves one person acting as the principal and another acting as an agent on behalf of the main (Jensen and Meckling, 1976). An agency connection arises when two (or more) individuals enter into a relationship in which one individual, known as the principal, chooses the other individual, known as the agent, to act on his behalf or represent him in areas of decision-making (Jensen and Meckling, 1976).

The agency theory applies to MFIs in a variety of contexts, from macro-level issues like regulatory legislation to micro-level phenomena like blame, impression management, lying, and other self-interest expressions (Yadav 2021). In MFIs the Agent Principal relations could be between managers and staff, shareholders and managers, or senior staff and junior staff. If the agency relationship among them is strong and positive then it will help reduce operational risks that may occur due to misconduct. Conversely, if the agency relations are negative then it will increase the level of operational risks facing MFIs (Yadav, 2021). The principal and agent may not have the same attitudes to risk; therefore, each may prefer different risk actions. According to Kothari (2014), branch managers of MFIs are inclined to pursue self-interest at the expense of the institution's goal. The manager is required to make

decisions that maximize shareholder value while serving as the shareholders' or principals' agent, even if it is in the manager's best interest to grow their own wealth (Kothari, 2014). Furthermore, Njekwa (2018) stated that the theory clarifies a potential conflict of interest between shareholders, management, and debt holders as a result of earnings distribution asymmetries, which can lead to the company taking an unacceptable risk or not participating in positive net value projects. Hence, the risk management regulations aim at reducing operational risks and solving agency problem in the MFIs by laying down a structure that would protect the MFI stakeholders' interests and guide them into better performance. This can be drawn from different laid down regulations on the board members and other operational restrictions towards the MFIs (Yadav 2021).

Mersland and Strøm (2009) used an endogenous equation approach to find that regulation (measured by a regulation dummy variable) does not have a significant impact on financial or social performance. Ndambu (2011) assessed the impact of regulation on microfinance performance (Operational Self Sufficiency) in a multivariate analysis using 2008 cross section data from 192 institutions in 32 Sub-Saharan African countries. The results obtained did not show sufficient evidence that the regulatory status increases the sustainability of MFIs nor does the deposit intermediation. Fouda-Owoundi (2010) examined the effect of some prudential ratios on the performance of some 180 MFIs of the CamCCUL network (Cameroon) during the period 2007-2008. Using the Ordinary Least squares and panel data techniques of estimations, he discovered that regulation negatively affects these MFIs performance. Woller and Woodworth (2001) cited many impact studies and conclude that governments must "create a macroeconomic environment characterized by stable growth, low inflation, and fiscal discipline". They further suggested that poor macroeconomic, regulatory and trade policies will undermine the viability of small business owners and the MFIs that support them. Hubka and Zaida (2005) found that governments can help market-based microfinance by eliminating unfair competition from public institutions; undertaking overall regulatory reform; and improving the overall business environment.

Yu et al. (2014) used the two Stage Least Squares (2SLS) model on data collected from the MIX market2 dataset and the World Bank dataset to analyze the indirect impact of traditional prudential regulation, as proxied by the Capital Adequacy Ratio (CAR) requirements, on the sustainability and profitability of MFIs on one hand; the causal relationship between MFI outreach, represented by percentage of active female borrowers, and the MFIs profitability on the other hand. Their findings associate more stringent prudential regulation with increases in MFI profitability and decreases in outreach. Furthermore, the 2SLS results demonstrate a negative causal relationship

between MFI outreach and profitability. The study therefore recommends that, when imposing regulation on MFIs, emerging market policy makers should look beyond standard balance sheet items, and account for metrics such as MFIs percentage of women borrowers.

Based on the theory and knowledge gap from empirical studies, the following hypotheses were to be tested to ascertain if there is no statistically significant relationship between capital adequacy ratio requirements and MFI financial performance. Secondly, to know if there is no statistically significant relationship between liquidity ratio requirements and MFI financial performance. And lastly to know if there is no statistically significant relationship between cash reserve requirements and MFI financial performance.

3. Methodology

A descriptive research study was used in the investigation. This design's purpose was to find the relationship between independent and dependent variables after the action or event had already occurred. It allowed for the collection of quantitative data, which can be analyzed quantitatively with descriptive and inferential statistics.

The 2018 Microfinance Act provides for the categorization of microfinance service providers into four tiers as follows: Tier 1, comprising deposit-taking microfinance service institutions; Tier 2, comprising non-deposit taking microfinance service providers such as individual money lenders; Tier 3, comprising Savings and Credit Cooperative Organizations (SACCOS); and, Tier 4, comprising community microfinance groups. According to the latest information made available by BOT, there are in Tanzania 3 microfinance banks, (Tier 1 microfinance institutions), and 1,541 Tier 2 microfinance service providers as at 14th December 2023.

The study population comprises all three (3) microfinance institutions in Tanzania. The selected population of registered microfinance banks in Tanzania as per the BOT statistics of 2023 fall in the category of MFIs guided and operated under the risk management regulations laid down rule. Since the purpose of the study is to assess the impact of these regulations on the MFIs' financial performance, the data analysed is based on MFI financial statistics from 2019 to 2022.

The study's objectives included secondary data collection methods. In this regard, required data was gathered regarding articles on statistics from the MFIs and BOT-published statistics on MFIs.

The quantitative data were analyzed by STATA 15 economic software. The regression model used was of the form: -

$$ROE = \alpha + \beta_1 CAR + \beta_2 LRR + \beta_3 CRR + e \dots\dots\dots 1$$

Where *ROE* is the return on equity (MFI financial performance), α is the Constant term, β_1 , β_2 and β_3 , are regression coefficients, *CAR*= capital adequacy ratio requirements, *LRR*= liquidity ratio requirements, *CRR*= cash reserve requirements, *e* represented the error margin for other variables that may not have been captured.

The study uses panel data random effect model to establish the relationship between risk management regulations and MFIs financial performance after considering Hausman test and all other pre-tests for regression assumptions. The significance of the regression model was determined at a 95% confidence interval and a 5% level of significance. In this study, all data that were collected and analyzed portrayed a clear relationship between risk management regulations guiding MFIs and MFIs' financial performance. Hence, the data collected is reliable for this study and fill the gap of previous researchers.

4. Results

This section is divided into two parts where by the first part covers descriptive statistics while the second part covers regression results and discussions.

Descriptive Analysis

The study was conducted to examine the relationship between risk management regulations guiding MFIs and MFIs' financial performance. The study used descriptive statistics analysis to establish statistical distributions of the study variables whereby mean, median, coefficients of variation, standard deviation, skewness, kurtosis and Jarque-Bera tests were employed. Findings of the study according to table 1 indicates summary of the descriptive statistics on study variables. Findings of the study indicating *ROE* has a mean of 21% with maximum of 106 % and minimum of 1%. This means that the financial performance of Microfinance Institutions in Tanzania is average and a little below commercial bank. The *CAR* has a mean of 19% with maximum of 47% and minimum of 9%. This means the MFIs are maintaining their capital adequacy ratio. Moreover, the *CRR* has a mean of 12% with maximum of 22% and minimum of 7%, this suggest that MFIs are in better position of maintaining their cash reserve requirements. From the observation of descriptive statistics, the *LRR* has a mean of 1.82 with maximum of 278% and minimum of 69%, this indicates that the MFIs held liquid assets above the required threshold.

Furthermore, the *CAR*, *CRR* and *LRR* are independent variables that have little to do with volatility, as their standard deviation are smaller than their means, this indicates some level of stability.

Table 1: Descriptive Analysis Results

Statistics	ROE	CAR	LRR	CRR
Mean	0.21	0.19	1.82	0.12
Maximum	1.06	0.47	2.78	0.22
Minimum	0.01	0.09	0.69	0.07
Std. Dev.	0.23	0.19	1.17	0.06
Skewness	0.13	0.02	0.03	0.00
Kurtosis	2.17	0.04	0.12	0.01
Observations	12	12	12	12

Source: Author's Computation

Using panel data regression (random effect model), the MFIs were analyzed and their data regressed, in regards to the return on equity which was regressed with the independent variables of capital adequacy ratio requirements, liquidity ratio requirements as well as the cash reserve requirements. In terms of the CAR, it was found to be significant due to the p -value of 0.01 being within the 5% significant level. As the results show, there is an increasing influence of CAR as evidenced by the coefficient result being 0.63 showing that when there is a unit increase in the CAR on the MFIs across time, it impacts a positive increase of 63% in the financial performance of the MFIs. The study's findings are consistent with those of Ledgerwood (1999), Woller and Woodworth (2001), Hubka and Zaida (2005) that revealed a positive or conditional effect of regulations on MFIs performance. Therefore, the null hypothesis is rejected.

The LRR of the MFIs was found to be insignificant as seen through the p -value of 0.18 which is not within the 5% significant level, thus still as the results show there is an increasing influence of liquidity ratio as evidenced by the coefficient result being 0.04 showing that when there is a unit increase in the liquidity ratio on the MFIs across time, it impacts a positive increase of 4% in the financial performance of the MFIs. The study's findings are consistent with those of Hartarska and Nadolnyak (2007), Mersland and Strøm (2009), Ndambu (2011) Therefore, the null hypothesis is accepted.

Moreover, in terms of the cash reserve requirement, this variable was found to be significant due to the p -value of 0.03 being within the 5% significant level, as the results show there is an increasing influence of the CRR evidenced by the coefficient results being -0.12 showing that when there is a unit percentage increase in reserve requirement on MFIs across time, it impacts a decrease of 12% in the financial performance of the financial institutions. The study's findings are consistent with those

of Fouda-Owoundi (2010); Smith (2011); Yu et al. (2014). Therefore, the null hypothesis is rejected.

Table 2: Random- Effects GLS Regression Results

Variable	Coefficient	Std. Error	z-Statistic	Prob.
CAR	0.63	0.15	3.68	0.01
LRR	0.04	0.03	1.35	0.18
CRR	-0.12	0.10	2.32	0.03
C	-10.15	3.55	-2.86	0.00
R-squared	0.62	Adjusted R-squared		0.54
Wald chi2(3)	18.52	Prob>chi2		0.00

Source: Author's Computation

5. Conclusions and Recommendations.

The study investigated the impact of the risk regulations on MFIs financial performance. Our study analyzed three (3) MFIs with data acquired from the institutions' reports as well as their BOT reports. Both descriptive and inferential analysis (regression analysis) were analyzed from 2019 to 2022. The results found that both CAR and CRR have significant effects on MFIs financial performance, the CAR has a positive effect and CRR has a negative effect, on the other hand, the LRR has no significant effect on MFIs financial performance. Thus, this shows that both the capital adequacy ratio requirements and cash reserve requirement have a great impact on the MFIs financial performance, this can be regarded that the model is valid in predicting the financial performance of the financial institutions.

The study recommended that all MFIs should continue practicing effective operational, credit, and strategic risk management such as the use of credit info or credit bureau, and the use of internal and external auditors towards management of the operational management of their businesses. Furthermore, the study recommended that BOT should ensure that all MFIs adhere to the written policy and procedures to mitigate the operational, financial, and strategic risks among the MFIs. The BOT should further ensure that macro-economic variables are geared towards growth and in favor of the MFIs. Thus, in terms of the capital adequacy ratio, the BOT should set minimum capital depending on the risk capabilities of the MFIs, that is, strategies should be put forward to ensure that the MFIs have capital requirements that are set to a minimum so that all MFIs can meet these requirements without financial constraints.

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