FINANCIAL RISKS AND FINANCIAL PERFORMANCE OF MICRO FINANCIAL INSTITUTIONS IN KENYA

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ABSTRACT

Micro Finance Institutions (MFIs) were established in Kenya with the intention of supporting low-income individuals in obtaining credit, which they successfully achieve thanks to their accessibility and extensive network when contrasted with commercial banks. The majority of Kenya's Micro Finance firms have suffered losses ever since the country's Central Bank awarded a license to the country's first institution in 2009. Consequently, this study tried to look at the impact of financial risks on financial performance of Micro Financial Institutions in Kenya. The study emphasized the influence of operational risk, credit risk, liquidity risk and market risk on the financial performance. The study was guided by new institutional economics theory, adverse selection theory, shiftability theory and extreme value theory. The study assumed a descriptive research design to give detailed description of the link amongst the variables. The thirteen microfinance institutions in Kenya as of December 31, 2021, as listed on the Central Bank of Kenya portal, made up the population of this research. Since the sample population is limited, a census of 13 microfinance organizations was conducted. The study utilized secondary data obtained utilizing a secondary data collecting sheet from the MFIs fiscal financial statements published of the Central bank of Kenya. Quantitative data was evaluated via descriptive statistics including mean and standard deviation. With the assistance of a panel regression analysis model was utilized to ascertain the influence of financial MFIs' financial risk on performance. Diagnostic tests were performed to improve the precision of the

model's output. The F- test explained the significance of the connection between the variables at a 5% level of significance. Tables and figures were utilized to display the analyzed data. The inferential statistics revealed that financial risks from operational risk have а statistically significant impact on the financial performance of microfinance institutions (p=0.001<0.05). Credit risk was observed to have a statistically significant impact on financial performance of microfinance institutions (p=0.000<0.05). The findings show that liquidity risk was statistically significant on financial performance of microfinance institutions (p=0.012<0.05). However, market risk was established to be statistically insignificant with financial performance of microfinance institutions (p=0.778>0.05). The study recommends that microfinance institutions should ensure putting in place the right policies, regulations and systems that will reduces business losses but realize smooth business operations that will enhance improved financial performance. It also recommends that microfinance institutions should first consider understanding their customers' ability to honour the financial obligations at hand. This will reduce default rates and enhance improved financial performance. Finally, the study advocates MFIs need to work on the modalities that will see working capital management being optimal to be able to take care of short-term financial obligations that may fall due with ease.

Key words: Financial Risk, Operating Risk, Market Risk, Credit Risk, Liquidity Risk, Financial Performance

INTRODUCTION

The performance of the global financial system has been impacted by catastrophes such as the unforeseen Covid-19 epidemic, which occurred in 2019 and led to a global economic slowdown. Financial institutions' overly aggressive inclinations for risk were blamed for the recent global economic crisis, which occurred in 2008–200 (Andrade & Kaplan, 2018). The crisis caused investor confidence in public companies' capacity to successfully manage risks to decline. Muriithi (2016), observed that risk carries the potential for both positive surprises and unfavorable business outcomes, supporting the basic idea that the amount of risk taken directly affects the potential return. Risks taken by a firm's management have been connected to how successfully or poorly it succeeds. As liberalization, globalization, and the rapid growth of technological advances give new commercial prospects, economic and financial entities are vulnerable to risks that are extra complicated and more varied than previously, according to Bagh, Khan, and Sadaf (2017). The importance of risk assessment, analysis, and management in organizational and strategic management has never been greater. Al-Tamimi &Al-Mazrooei (2017), asserts that financial risk is one of the most serious challenges encountered by many financial institutions and stems from the possibility of stock market falls due to asset volatility. This is frequently linked to debt, with the possibility that obligations and duties will not be able to be balanced against present assets.

Ahmad and Ariff (2017), observed that Pakistan draws financiers and investors from all over the world, making it more vulnerable to political, economic, and financial stability. However, Pakistan is dealing with a number of developments, including extending its markets to rivals worldwide and the rising its lending rates Al-Khouri (2019) notes that Pakistan's financial institutions need to significantly improve in this area. Therefore, it is very crucial for the banking institutions working in Pakistan to effectively manage financial risks. The author also demonstrates how poor risk management procedures have an adverse effect on a financial institution's performance, which can result in failure and bankruptcy. Therefore, risk poses a serious threat to financial institutions in Pakistan.

Okere, Isaka, and Ogunlowore (2018), asserted that registered Nigerian Deposit Money Banks (DMBs) are adequately funded to sustain the risk presented by risk-weighted assets; however, these financial institutions should broaden their source of revenue because financial institutions with substantial capital adequacy ratios are more inclined to experience growth in shareholder equity. According to Aruwa and Musa (2019) Instead of concentrating solely on credit risk, which exposes other risk factors, Deposit Money Banks in Nigeria diversified the handling of those other risk factors by, for example, minimizing frauds. This will be possible when the Central Bank and the Deposit Money Banks strengthen the execution of current measures to prevent bank frauds.

Akong'a (2019), assert that the banking industry in Kenya is vulnerable to a variety of hazards that come from both the internal and external environment. There have been incidences of defaulted loans and nonperforming loans, in addition to significant credit advancement and organized lending, which financial institutions in Kenya have occasionally permitted. According to Ongore and Kusa (2020), policies to reduce the adverse effects have concentrated on bank mergers and successful

financial practices but strict loaning, evaluation of legislation to ensure compliance with international norms, banks with adequate capital that are seen as being financially stable, banks with sufficient liquidity to satisfy their depository institutions' criteria, and maintaining necessary cash levels with the central bank, which reduces the sum of funds that are accessible for lending.

Statement of the Problem

Micro-Finance Institutions (MFIs) were established in Kenya with the intention of supporting people with little income in getting a loan, which they successfully achieve thanks to their accessibility and extensive network when contrasted with financial institutions. Since the initial institution was given a license by the CBK in 2009, the most of microfinance organizations in Kenya have experienced losses. The recent global financial predicament, which lasted from the middle of 2007 to the beginning of 2009, highlighted the necessity of MFI regulations to protect against significant risks linked to MFI imbalances. According to the Central Bank Supervision Report of 2019, a large number of MFIs in Kenya failed due to inadequate credit risk management, as evidenced by the substantial amount of delinquent loans.

There was a decrease in 2016 to ROA and ROE of -0.5percent and -3.2percent correspondingly. In 2017, ROA further reduced to -0.9percent and ROE to -5.5percent. It became worse in 2018, whereby ROA was -2percent and ROE was -13.8percent when they made a small improvement to ROA of -0.4percent and ROE of -3percent in 2019 before drastically lowering to ROA of -3percent and ROE of -28percent in 2020 (CBK, 2021). The financial performance of MFIs continues to plummet and fluctuate unpredictably notwithstanding measures to gap financial risk as confirmed over a six-year period spanning 2015 to 2020. As a result, it is uncertain if financial risk has a major impact on MFIs' financial success.

Omondi (2019) asserted that foreign currency exchange and creditworthiness was discovered to have an adverse and considerable impact on the financial health of financial institutions in Kenya. However, the study has a circumstantial gap. Since the prior studies prioritized financial institutions and the current study would concentrate on Micro Financial Institutions in Kenya, there is a knowledge gap in the study. In a study undertaken by Kioko, Olweny, & Ochieng (2019), the impact of financial risk on the financial performance of financial institutions listed on the NSE was examined. It was discovered that this impact, as assessed by the four variables, was undesirable and substantial. However, the study used purposive method in selecting the respondents thus resulting in a fundamental gap. The current study will use census method. Ali and Oudat (2020) study evaluated the connection amongst financial risk and the financial health of Bahrain Bourse-listed financial institutions and investment banks and the results show a strong correlation amongst bank performance and capital risk. However, the analysis was carried out in investment banks in Bahrain Bourse hence it's possible that the conclusions won't be relevant in the Kenyan situation. Consequently, the aim of this research is to deduce how financial risks affect Kenyan microfinance institutions' financial performance.

Objectives of the study

To determine how financial risks affect Kenyan micro financial institutions' financial performance. **Specific objectives**

- i. To determine the effect of operational risk on the financial performance of Kenyan Micro Financial Institutions.
- ii. To ascertain the effect of credit risk on the financial performance of Kenyan Micro Financial Institutions.
- iii. To determine the effect of liquidity risk on the financial performance of Kenyan Micro Financial Institutions.
- iv. To ascertain the effect of market risk on the financial performance of Kenyan Micro Financial Institutions.

THEORETICAL REVIEW

New Institutional Economics Theory

Williamsons (1998) asserts that this theory assumes that organizations or established practices within a market or industry might have an effect on risk management strategies. Additionally, the theory connects safeguards to the acquisition of particular assets, suggesting that risk management can be fundamental in contracts that connect individuals and prohibit the use of diversity, like detailed financing agreements or tight cooperation among the distribution chain participants. Companies in sectors with regulations give senior management minimal options for preference in choices about business financing and investment.

Regulation has a crucial role in setting a business's corporate finance policy, as demonstrated by Smith and Watts (1992). As a result, if regulated companies are subject to tougher regulations and possess cheaper contracting fees, they have a lower propensity to use derivatives to control business risk. Froot and Stein (2003) claim that a company may benefit from adopting derivatives if using external sources of funding is more expensive than using domestically generated cash. For instance, businesses can protect their cash flow to prevent a liquidity shortage that might necessitate an expensive trip to the capital markets. Derivatives are also favorably correlated with measurements of investment opportunities offered by the company established proxies. Given that it explains the operational risk variable, this theory was pertinent to the investigation.

Adverse Selection Theory

According to Pagano and Jappelli's (1993) theory of adverse selection, information exchange results in more borrowers, fewer defaults, and low interest rates. Additionally, there is now more money available for lending. Nevertheless, when a financial institution operates in a hegemonic approach, in certain circumstances, loans is always declined. This is due to the fact that the exchange of information resulted in higher in loaning to both groups of borrowers who appears to be at risk and individuals who appears to be secure debtors, nonetheless the growth in borrowing to individuals who seem to be secure debtors is insufficient to counteract the decline in the proportion of riskier debtors. When loan markets are dynamic, loan sectors are more inclined to expand: Competitions make it easier for financial institutions to collect rent from their clients, and as a result, information exchange increases competition among these financial institutions (Jappelli & Pagano, 2003).

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A second consequences of adverse selection theory is that sharing information lowers interest rates and default rates while encouraging borrowing. This is made possible by credit bureaus, which encourage competitiveness by limiting information on rent or needing customer participation. The possibility of lending in marketplaces where credit is not offered may arise in certain circumstances as a result of the knowledge exchange. In these circumstances, banks have figured out how to improve Pareto by raising customer satisfaction while raising sales (Pagano, 2001).

The relevant of this theory to this research is that major credit risk in the MFI is a result of the creditor and lender not exchanging accurate information, which causes unacceptably many defualted loans, negatively impacting the MFI's performance. Adverse selection is when an MFI decides to go farther and grant credit to agents despite their lack of worthiness. The theory was used to support credit risk variable.

Shiftability Theory

Moulton developed the shiftability theory of bank liquidity (1918). The underlying premise of this idea is that assets under bank management will either be leased to other investors or financiers or to a central bank. If there are assets that can be sold, a financial institution will be able to meet the liquidity needs. According to Moulton (1918), financial institutions do not need to rely on expiration if they own a significant quantity of assets that may be transferred to other financial institutions for money without experiencing a meaningful loss in an emergency. This viewpoint claims that in order for an asset to be properly transferable when the need for liquidity occurs, it must be instantaneously transferable without suffering a capital loss.

This theory postulates that, assets should be retained in both bills that self-liquidate and other transferable open-market assets, like state-issued securities. The core idea of the shiftability theory is that a bank's liquidity depends on how well it can sell its assets to another party for a known price. So, for instance, a bank's asset portfolio could absolutely accommodate short-term open market investments (Belém & Gartner, 2016). According to the principle, a bank's assets must be marketable, shiftable, or transferable in order to maintain liquidity. Additionally, according to this view, highly marketable securities held by banks become good sources of liquidity.

According to the shiftability idea, possessing cash-generating short-term assets helps to ensure the liquidity of microfinancial institutions. Theoretically, a bank with little cash on hand could sell its assets to a bank with higher liquidity. Therefore, the idea contends that a bank system functions better with less capital or long-term portfolio securities (Namazi, 2013). According to Osuka and Osadume (2013), by letting banks sell continuously at levels that are advantageous to them, the financial system attempts to avert liquidity crises. Hence, marketable assets held by banks are not expected to be devalued for conversion. The theory underpinning this study suggests that financial institutions reduce their exposure to risk by having liquid assets that are in high demand, which has an impact on their financial success. The theory was used to support liquidity risk variable.

Extreme Value Theory

This theory was invented by Fisher, Tippet, &Von Misses in the 1920s and further enhanced by Gnedenkoh in 1943. The extreme value theorem in calculus says that an actual function f must be as high and as low as possible, each at least once, if f is constant on the finite interval [a, b]. Extreme departures from the median probability distribution are the subject of the theory. It's a comprehensive theory for extreme values that is applied to risk management (Coles, 2001). According to Avdulajh(2011), The EVT is a more accurate method of estimating market risk since it highlights the magnitude of losses brought on by market risk variables. Assessing severe occurrences that have an impact on financial performance is a component of financial risk management. The market risk factors that occasionally affect the MFIs' portfolios must always be identified. EVT is employed in the estimate of VaR for extreme events, typically for unexpected times, and entails significant and uncommon hazards. EVT is crucial for assessing the likelihood of improbable and extreme events in risk control for financial portfolios.

The theory, according to Gilli and Kellezi (2016), describes how to calculate the extent of exceptional gains or losses that are brought on by a number of macroeconomic aspects that affect the performance of a business. Risky stockholders typically evaluate the extreme scenario's variability for potential rewards and losses based depending on how much risk they're willing to take. Singh, Allen, and Robert (2013), who emphasized that the theory is important to modeling methodologies of calculation of extreme market risk, are some EVT proponents.

In this study's context, MFI specializes in the financial industry, which is susceptible to market risk's impacts. This theory is essential because the EVT model can determine the loss arising from changes in the financial income that MFIs earn. The company must determine how market risk affects it and implement the relevant risk management procedures. The idea also applies to estimating the size of potential gains and losses from risk effects as well as to determining whether portfolio returns and value have increased or decreased. The market risk variable was explained by this theory.

Empirical literature Review

Operational Risk and Financial Performance

Fadun & Oye (2020) studied how operational risk management impacted the financial performance of Nigerian financial institutions. The study utilised a 10-year (2008–2017) supplementary dataset that was gathered from a select Nigerian financial institutions' audited financial statements. The linear multiple regression model was used to analyze the data. The conclusions demonstrated a favorable correlation amongst operational risk management and bank financial performance. The outcomes showed that good operational risk management procedures had a constructive influence on banks' financial performance. The current research period ran from 2017 to 2021, whereas the previous study period ran from 2008 to 2017.

Muia's (2016) assessed the operational risk management strategies' implications on the financial performance of Kenyan insurance. On this study, a descriptive research approach was employed. The study utilized a census survey of each of Kenya's 47 recognized insurance businesses. Descriptive statistics were utilized in the investigation. While the returns were examined using a

regression and correlation analysis model, the data were examined qualitatively. As per the study's findings, the majority of insurance businesses have a risk and compliance department. It was anticipated that effective operational risk management had a substantial impact on how well and efficiently a firm operates. The study's original setting, however, was insurance companies in Kenya; in contrast, the present study's environment is micro-finance institutions in Kenya.

Credit Risk and Financial Performance

Ekinci and Poyraz (2019) looked at how credit risk affected Turkish deposit banks' financial performance. 26 commercial banks that were active in Turkey between 2005 and 2017 are included in the dataset. The secondary information was gathered from the Banks Association of Turkey's statistics report. To evaluate banks based on ownership structures, three panels' worth of data are taken into consideration: data from Government-run banks, data from privately-run banks, and data from international banks. Defaulted Loans were utilized as credit risk factors whereas ROA and ROE were employed as stand-ins for monetary performance measures. The estimation outcomes demonstrated that Credit risk has an adverse connection with both ROA and ROE. However, the study context was deposit banks in Turkey but the current study context was Micro finance institutions in Kenya.

A study by Masinde (2017) explored the influence of credit risk on financial performance of Financial Institutions in Kenya. The research design was causal research design. The study populace comprised all financial institutions in Kenya. There were 42 banks operating in Kenya as of the close of 2016 (CBK 2016). The study solely utilsed secondary data, which was compiled from financial institutions' yearly reports and accounting records for the years 2012 through 2016. So as to determine the association amongst bank credit risk and performance, regression analysis was utilized. Correlation results established a positive correlation between credit risk and financial performance of Kenyan financial institutions financial performance. However, the study utilized causal research design but the current study employed descriptive research design.

Liquidity Risk and Financial Performance

Otieno's (2020) evaluated the impact of liquidity risk on the financial performance of agronomic enterprises traded on the NSE, Kenya. This study employed a longitudinal research approach. Utilizing a census methodology, the survey included everyone who worked for the six mentioned companies. The secondary data was gathered from the ten-year listed agricultural firms audited financial records. Using inferential statistics, which involves testing hypotheses, panel data was studied. Multiple linear regression analysis and correlation analysis were both employed in inferential analysis. Additionally, a descriptive analysis that included mean and standard error was employed. The results showed that performance is negatively but negligibly impacted by liquidity risk. Although this study utilized a longitudinal research methodology, the current study used a descriptive research approach.

Laminfoday (2018) analyzed the impacts of managing liquidity risk on the financial performance of financial institutions in Sierra Leone. A representative sample of 8 commercial banks were the focus of the investigation throughout a five-year span (2013 to 2017). Secondary information was gathered from the Sierra Leone's central bank and the eight financial institutions. Multiple regression analysis model and a descriptive research design were both utilised to examine the connection amongst the result and predictor factors. It was determined that there's a substantial negative connection between how financial institutions in Sierra Leone handle liquidity risk and

their financial performance. The present research setting, however, was microfinance institutions in Kenya as opposed to the previous context, which were commercial banks in Sierra Leone.

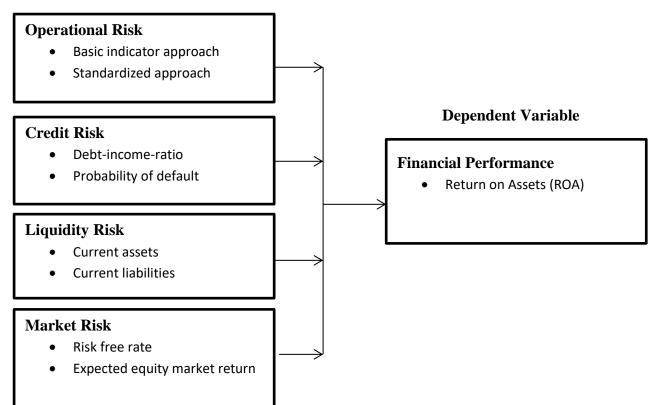
Market Risk and Financial Performance

Odubuasi, Wilson-Oshilim, and Ifurueze (2020) investigated how market risks affected the financial success of Nigerian businesses. The study utilised secondary data and a causal research approach. The twelve (12) corporations traded on the Nigerian Stock Exchange in the Oil and Gas industry are covered by the research. Secondary information was gathered from the Nigerian Central Bank Statistical Communiqué and the companies' financial filings, which covered the years 2014 to 2018. Descriptive statistics, correlation, and multiple regression analysis were utilised to examine the data. The conclusions show that the exchange rate has a considerable impact on the ROA and ROE of oil and gas companies. However, the study focused on listed under Nigerian Oil and Gas sector but the current study context was MFIs in Kenya.

The study by Chepkemoi, Kanini, and Kahuthia (2019) looked at the connection between market risk and the financial success of Kenya's listed non-financial companies. The research examined the balance sheets of nine traded non-financial companies in Kenya and their financial ratios. Unbalanced panel data from nine listed non-financial firms from the years 2008 to 2017 were utilized in the study. The degree of financial leverage was employed as an indicator of interest rate risk, while the net profit margin was utilized to evaluate the firms' financial success. The random effects models premised on the Hausman and LM test specifications were used to regress the financial performance against the market risk indicators. The conclusions demonstrate that, with a p value of 0.000, financial leverage expressively improves the performance of non-bank financial organizations in Kenya. Although non-bank financial institutions in Kenya were stated as the study context, the current study context was MFIs in Kenya.

Conceptual Framework

Independent Variables



Research Design

The study employed a descriptive research approach to provide a detailed explanation of the relationship amongst the variables. This study's approach was considered acceptable since calls for the acquiring and analysis of factual data. The descriptive analytic technique, according to Dulock (2014), comprises the act of providing a complete and correct description of the proofs and narrative of occurrences, populations, and places of particular interest.

Target Population

The thirteen microfinance organizations in Kenya as of December 31, 2021, as listed on the CBK website, made up the study's population.

Data Collection Instruments

The study utilized secondary data that was acquired through a secondary data collecting sheet from the MFIs yearly financial reports published of the Kenyan Central bank. Additionally, pertinent data was gathered from the MFIs' websites to guarantee that sufficient demonstrative data is accessible to undertake the study.

Data Analysis and Presentation

With the help of STATA version 20.0, quantitative data was assessed utilizing descriptive statistics like mean and standard deviation and displayed as tables and figures when appropriate. To ascertain the correlation amongst financial risk and MFIs' financial results, inferential statistics that incorporate correlation and regression analysis was employed. For analysis, the study used a panel regression model.

The panel regression model followed the following form;

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon$$

Whereby $Y_{it} = Financial Performance$ $X_{1it} = Operational Risk$ $X_{2it} = Credit Risk$ $X_{3it} = Liquidity Risk$ $X_{4it} = Market Risk$ $\beta_1, \beta_2, \beta_3$ and $\beta_4 = Coefficients$ $\epsilon = Error Term$

RESEARCH FINDINGS AND DISCUSSIONS

Variable	Obs.	Mean	Std. Dev.	Min	Max
ROA	65	3661538	1.158224	-4.63	.43
Operational Risk	65	.3847692	.361378	78	1
Credit Risk	65	1.094462	2.53895	29	17.68
Liquidity Risk	65	.2707692	.2062561	.01	.82
Market Risk	65	.1378462	.1087786	.01	.52

Descriptive Statistics

Source: Study Data (2022)

The above findings imply that ROA mean= -0.3661538 and the standard deviation=1.158224 with a minimum value= -4.63 and the maximum value=0.43. This demonstrates ROA steadiness over the course of the research period. Similarly, operational risk was constant with an average of 0.3847692 and deviance of 0.361378 with a lowest value of -0.78 and a highest value of 1 indicating consistency of occurrence over time. Credit risk had an average of 1.094462 and a deviance of 2.53895 with a lowest value of -0.29 and a highest value of 17.68 exhibiting a minimal volatility. Liquidity Risk had an average of 0.2707692 and a deviance of 0.2062561 with a lowest value of 0.01 and a highest value of 0.82 reflecting a comparable result throughout. Market Risk had an average of 0.1378462and a deviance of 0.1087786with a lowest value of 0.01 and a highest value of 0.52 reflecting a comparable result throughout.

Regression Analysis

The empirical model served as the basis for the panel regression and the findings displayed.

CreditRisk 2860599 .0501224 -5.71 0.000 384298 1878217 LiquidityRisk 1.519981 .6082801 2.50 0.012 .3277744 2.712189 MarketRisk .2855677 1.013435 0.28 0.778 -1.700729 2.271864	Table 1: Panel regress	ion results						
R-sq: within = 0.4061 between = 0.7082 overall = 0.4805 Obs per group: min = 5 avg = 5.0 max = 5 wald chi2(4) = 55.49 Prob > chi2 = 0.0000 ROA Coef. Std. Err. z P> z [95% Conf. Interval] OperationalRisk CreditRisk LiquidityRisk MarketRisk cons 1.037886 .3167435 3.28 0.001 .4170804 1.658692 .2860599 .0501224 -5.71 0.000 384298 1878217 MarketRisk cons .2855677 1.013435 0.28 0.778 -1.700729 2.271864 sigma_u 0 0 0 0 0 0 0	Random-effects GLS regression				Number of obs			65
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$\begin{array}{c cccc} & & & & & & & & & & & & & & & & & $	between =	0.7082				avg	=	5.0
corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000 ROA Coef. Std. Err. z P> z [95% Conf. Interval] OperationalRisk 1.037886 .3167435 3.28 0.001 .4170804 1.658692 CreditRisk 2860599 .0501224 -5.71 0.0003842981878217 LiquidityRisk 1.519981 .6082801 2.50 0.012 .3277744 2.712189 MarketRisk .2855677 1.013435 0.28 0.778 -1.700729 2.271864 _cons 9033476 .2689818 -3.36 0.001 -1.4305423761529 sigma_u 0	overall =	0.4805				max	=	5
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MarketRisk .2855677 1.013435 0.28 0.778 -1.700729 2.271864 _cons 9033476 .2689818 -3.36 0.001 -1.430542 3761529 sigma_u 0	CreditRisk	2860599	.0501224	-5.71	0.000	3842	298	1878217
	LiquidityRisk	1.519981	.6082801	2.50	0.012	.32777	744	2.712189
sigma_u 0	MarketRisk	.2855677	1.013435	0.28	0.778	-1.7007	729	2.271864
	_cons	9033476	.2689818	-3.36	0.001	-1.4305	542	3761529
	sigma u	0						
		.86404364						
rho 0 (fraction of variance due to u_i)		0	(fraction	of varia	nce due t	o u_i)		

Source: Study Data (2022)

The equation obtained was:

$ROA_{it} = -0.9033476 + 1.037886 OR_{it} - 0.2860599 CR_{it} + 1.519981 LR_{it} + 0.2855677 MR_{it}$

According to the results, the simultaneous effects of independent variables was estimated through the R Square (0.4805), which suggests that the independent variables in the model ascertained the financial performance of microfinance institutions by 48.05%. This result was statistically significant, as demonstrated by the p value of 0.000<0.05. There was 51.95% of the ROA result that couldn't be justified by the model's factors and could only be the consequence of other external influences besides purview of the study.

The ROA of the micro finance institutions increased by -0.9033476 when the predictor variables were not taken into account. The p value of 0.001 indicates the rise is significant. The ROA of the microfinance organization rises by 1.037886 times for every unit increase in operational risk. The p value of 0.001 achieved demonstrates the significance of this rise. These findings are congruent with those of Lyambiko (2015) who examined how operational risk management techniques affected Tanzanian commercial banks' financial results and observed that operations risk management has a favorable impact on Tanzanian financial institutions' returns. It also agrees with the findings by Fadun & Oye (2020) who studied how operational risk management affected the financial performance of Nigerian financial institutions and observed that good operational risk management procedures had a constructive influence on banks' financial performance.

Secondly, a unit increment in the credit risk of the MFI results in a decrease in the MFI ROA by - 0.2860599. The decrease is substantial because the p value was 0.000. The findings contradict those of Masinde (2017) who analyzed the influence of credit risk on financial performance of Financial Institutions in Kenya and discovered a strong connection between credit risk and financial performance of Kenyan commercial banks financial performance. It agrees with the findings by Muriithi, Muturi & Waweru (2016) who investigated the consequence of credit risk on financial performance of Financial Institutions in Kenya and observed that credit risk has a materially negative impact on bank profits.

Thirdly, a unit increment in liquidity risk of the MFIs leads to an increment in the MFI by 1.519981. A p value of 0.012 infers that the increase is substantial. These findings contradict those of Laminfoday (2018) who analyzed the impacts of managing liquidity risk on the financial performance of financial institutions in Sierra Leone and observed that there was a substantial negative connection between how financial institutions in Sierra Leone handle liquidity risk and their financial performance. It also contradicts the findings by Otieno's (2020) who assessed the impact of liquidity risk on the financial position of agronomic enterprises traded on the NSE in Kenya and observed that performance is negatively but negligibly impacted by liquidity risk.

Lastly, a unit increment in market risk of the MFIs leads to an increment in the MFI by 0.2855677. The growth is negligible with a p value of 0.778. These findings contradict those of Namasake (2016) who looked into how market risk affected Kenyan commercial banks' financial results and found that there are negative and substantial correlations between financial leverage, interest rates, and foreign currency exposure and bank profitability. The findings agree with those of Odubuasi, Wilson-Oshilim, and Ifurueze (2020) who investigated how market risks affected the financial

success of Nigerian businesses and observed that the exchange rate has a substantial impact on the ROA and ROE of oil and gas companies.

Conclusions

The study's conclusion depends on the findings of the investigation. Finding out how operational risk affects a micro-finance institution's financial performance was one of the study's goals. Accordingly, the study discovered that the connection between operational risk and financial performance is statistically significant in a way that is favourable. Based on the study, credit risk has an undesirable and considerable impact on how well micro-finance institutions function financially. Kenya.

Regarding the impact of liquidity risk on financial performance of micro finance institutions in Kenya. The study determined that there exists substantial and favourable impact of liquidity risk on financial performance of Micro Finance institutions, Kenya. Finally, in respect of the influence of market risk on financial performance of micro finance institutions in Kenya. The study observed that there is a marginally significant and favourable impact of market risk on financial performance of micro finance institutions, Kenya finance of micro finance institutions in Kenya.

Recommendations

The study's policy recommendations are based on factors that significantly affect Kenya's microfinance institutions' financial performance. The study observed that operational risk substantially and favourably impacts financial performance of Micro Finance institutions, Kenya. Hence the study recommends that micro-finance institutions should ensure putting in place the right policies, regulations and systems that will reduces business losses but realize smooth business operations that will enhance improved financial performance. The study found that the credit risk on financial performance is unfavourable and statistically significant. Consequently, the study suggests that microfinance organizations first think about comprehending their customers' ability to honour the financial obligations at hand. This will reduce default rates and enhance improved financial performance is both favourable and statistically significant. Consequently, the study advocates MFIs need to work on the modalities that will see working capital management being optimal to be able to take care of short-term financial obligations that may fall due with ease.

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