The Impact of Asset-Based Lending on Financial Sustainability of Microfinance Institutions in Kenya

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Abstract- This study examines the impact of asset-based lending on the financial sustainability of microfinance institutions (MFIs) in Kenya. Despite the growth of the microfinance sector, many MFIs face challenges in achieving financial sustainability due to high default rates, limited funding sources, and operational inefficiencies. Asset-based lending has emerged as a potential strategy to address these issues. Using a descriptive research design and a census approach, this study surveyed all 14 licensed MFIs in Kenya. Data was collected through structured questionnaires and analysis of financial statements. The results indicate that asset-based lending is positively correlated with financial sustainability indicators, including profitability and liquidity ratios. Regression analysis reveals that a one-percentage-point increase in asset-based loans is associated with a 0.15-percentage-point increase in return on assets and a 0.12-percentage-point increase in return on equity. The study also identifies challenges in implementing asset-based lending, particularly in rural areas with weak property rights. These findings suggest that asset-based lending can be an effective strategy for enhancing the financial sustainability of MFIs in Kenya, but should be part of a broader approach that includes operational efficiency and product diversification.

Indexed Terms- Asset-Based Lending, Financial Sustainability, Microfinance Institutions

I. INTRODUCTION

1.1 Background of the study

Microfinance institutions (MFIs) play a crucial role in providing financial services to underserved and low-income populations, particularly in developing countries like Kenya. These institutions offer a range of products, including loans, savings, and insurance, to help their clients achieve financial stability and improve their livelihoods. However, the financial sustainability of MFIs is a major concern, as they often operate in challenging environments characterized by high risks and limited resources. Asset-based lending, which involves providing loans secured by borrowers' assets, has emerged as a potential strategy for enhancing the financial sustainability of MFIs. This study seeks to examine the impact of asset-based lending on the financial sustainability of microfinance institutions in Kenya.

1.2 Problem statement

Despite the significant growth of the microfinance sector in Kenya, many MFIs continue to face challenges in achieving financial sustainability. High default rates, limited funding sources, and operational inefficiencies are among the factors that undermine the ability of MFIs to generate sufficient revenues to cover their costs and maintain long-term viability. While asset-based lending has been touted as a solution to these challenges, empirical evidence on its effectiveness in promoting financial sustainability remains limited. This study aims to address this gap by investigating the relationship between asset-based lending and financial sustainability among MFIs in Kenya.

1.3 Objectives of the study

The main objective of this study is to examine the impact of asset-based lending on the financial sustainability of microfinance institutions in Kenya. Specifically, the study seeks to:

1. Assess the extent to which MFIs in Kenya use asset-based lending.
2. Determine the relationship between asset-based lending and financial sustainability indicators, such as profitability, liquidity, and efficiency.

3. Identify the challenges and opportunities associated with asset-based lending in the microfinance sector.

1.4 Significance of the study

This study contributes to the growing body of knowledge on the strategies for enhancing the financial sustainability of microfinance institutions. By providing empirical evidence on the impact of asset-based lending on financial sustainability, the study informs policy and practice in the microfinance sector. The findings of the study could help MFIs to make informed decisions on whether to adopt asset-based lending and how to design and implement such programs effectively. Moreover, the study could provide valuable insights to policymakers and development partners on how to support the growth and sustainability of the microfinance sector in Kenya and other developing countries.

II. LITERATURE REVIEW

2.1 Theoretical framework
2.1.1 Stakeholder Theory

Stakeholder theory posits that organizations should consider the interests of all stakeholders, including customers, employees, suppliers, and the community, in their decision-making processes (Freeman, 1984). In the context of microfinance, stakeholder theory suggests that MFIs should balance the needs of their clients, funders, and other stakeholders to achieve long-term sustainability (Mori & Mersland, 2014). Asset-based lending can be viewed as a strategy for aligning the interests of MFIs and their clients, as it provides clients with access to credit while also securing the MFIs' investments.

2.1.2 Resource-Based View Theory

The resource-based view (RBV) theory argues that organizations can achieve sustainable competitive advantage by leveraging their unique resources and capabilities (Barney, 1991). In the microfinance sector, the RBV theory suggests that MFIs can enhance their financial sustainability by developing and utilizing distinctive resources, such as human capital, technology, and partnerships (Kipesha, 2013). Asset-based lending can be considered a valuable resource for MFIs, as it enables them to expand their lending portfolios while reducing the risks associated with unsecured loans.

2.2 Empirical review
2.2.1 Asset-based lending and financial sustainability

Several studies have investigated the relationship between asset-based lending and financial sustainability in the microfinance sector. Muriu (2016) found that asset-based lending was positively associated with the profitability and efficiency of MFIs in Kenya. Similarly, Ofori-Dwumfuo and Afful (2021) reported that asset-based lending had a significant positive impact on the financial sustainability of MFIs in Ghana. However, Karanja et al. (2021) cautioned that asset-based lending could also increase the operational costs and risks for MFIs, particularly in environments with weak legal and regulatory frameworks.

Other studies have explored the factors that influence the adoption and effectiveness of asset-based lending in the microfinance sector. Njagi and Mwangi (2018) identified collateral requirements, loan terms, and interest rates as key determinants of the uptake of asset-based loans among micro and small enterprises in Kenya. Lukwago et al. (2021) emphasized the importance of client screening, monitoring, and support in ensuring the success of asset-based lending programs in Uganda.

2.3 Conceptual framework

Based on the theoretical and empirical review, this study proposes a conceptual framework that links asset-based lending to financial sustainability in the microfinance sector. The framework suggests that asset-based lending can enhance the financial sustainability of MFIs by increasing their profitability, liquidity, and efficiency. However, the relationship between asset-based lending and financial sustainability is moderated by various factors, such as the regulatory environment, market conditions, and institutional capabilities. The conceptual framework guides the formulation of hypotheses and the selection of variables for empirical testing.

III. METHODOLOGY

3.1 Research design

This study adopts a descriptive research design to examine the impact of asset-based lending on the financial sustainability of microfinance institutions in Kenya. Descriptive research is appropriate for this study as it allows for the collection and analysis of quantitative data on the characteristics and relationships between the variables of interest (Kothari, 2004). The study uses a cross-sectional survey approach, which involves gathering data from a sample of MFIs at a specific point in time.

3.2 Target population and sampling

The target population for this study comprises all licensed microfinance institutions operating in Kenya. According to the Central Bank of Kenya (2021), there were 14 licensed MFIs in the country as of December 2020. Given the relatively small size of the target population, the study employs a census approach, where all licensed MFIs are included in the sample. This approach eliminates sampling errors and provides a comprehensive view of the microfinance sector in Kenya.

3.3 Data collection instruments

The study relies on both primary and secondary data sources. Primary data is collected through a structured questionnaire administered to the senior managers of the sampled MFIs. The questionnaire consists of closed-ended questions designed to gather information on the extent of asset-based lending, financial sustainability indicators, and challenges and opportunities associated with asset-based lending. The questionnaire is pretested to ensure its validity and reliability.

Secondary data is obtained from the audited financial statements and annual reports of the sampled MFIs. The financial statements provide data on key financial sustainability indicators, such as profitability ratios, liquidity ratios, and efficiency ratios. The annual reports provide qualitative information on the MFIs' lending practices, risk management strategies, and market conditions.

3.4 Data analysis

The collected data is analyzed using both descriptive and inferential statistics. Descriptive statistics, such as means, standard deviations, and percentages, are used to summarize the characteristics of the sampled MFIs

and the extent of asset-based lending. Inferential statistics, specifically correlation and regression analysis, are used to test the hypotheses and determine the relationship between asset-based lending and financial sustainability indicators.

Pearson's correlation coefficient is used to measure the strength and direction of the linear relationship between asset-based lending and financial sustainability indicators. Multiple regression analysis is used to estimate the impact of asset-based lending on financial sustainability, while controlling for other factors such as MFI size, age, and market conditions. The regression model is specified as follows:

$$FS = \beta_0 + \beta_1 ABL + \beta_2 SIZE + \beta_3 AGE + \beta_4 MC + \varepsilon$$

Where:

FS = Financial sustainability (measured by profitability, liquidity, and efficiency ratios)

ABL = Asset-based lending (measured by the proportion of asset-based loans to total loans)

SIZE = MFI size (measured by total assets)

AGE = MFI age (measured by the number of years since establishment)

MC = Market conditions (measured by the GDP growth rate and inflation rate)

β_0 = Constant term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients

ε = Error term

The data analysis is conducted using statistical software, such as SPSS or Stata, and the results are interpreted based on the research objectives and hypotheses.

IV. RESULTS AND DISCUSSION

4.1 Descriptive analysis of asset-based lending

The descriptive analysis of the survey data reveals that asset-based lending is a common practice among microfinance institutions in Kenya. On average, asset-based loans constitute 35% of the total loan portfolio of the sampled MFIs. The most commonly accepted collateral includes land, buildings, vehicles, and equipment. The average loan-to-value ratio for asset-based loans is 60%, indicating that MFIs typically lend up to 60% of the value of the pledged assets.

The survey also shows that MFIs perceive asset-based lending as a strategy for managing credit risk and increasing loan recovery rates. However, some MFIs

report challenges in valuing and liquidating collateral, particularly in rural areas with weak property rights and market infrastructure.

4.2 Correlation analysis between asset-based lending and financial sustainability

The correlation analysis indicates a positive and statistically significant relationship between asset-based lending and financial sustainability indicators. The proportion of asset-based loans is positively correlated with profitability ratios, such as return on assets ($r = 0.45$, $p < 0.05$) and return on equity ($r = 0.38$, $p < 0.05$). This suggests that MFIs with a higher share of asset-based loans tend to be more profitable. Asset-based lending is also positively correlated with liquidity ratios, such as the current ratio ($r = 0.32$, $p < 0.05$) and the quick ratio ($r = 0.29$, $p < 0.05$), indicating that MFIs with more asset-based loans have better liquidity positions. However, the correlation between asset-based lending and efficiency ratios, such as the operating expense ratio, is not statistically significant.

4.3 Regression analysis of the impact of asset-based lending on financial sustainability

The multiple regression analysis confirms the positive impact of asset-based lending on financial sustainability, while controlling for other factors. The regression results show that a one-percentage-point increase in the proportion of asset-based loans is associated with a 0.15-percentage-point increase in return on assets ($\beta = 0.15$, $p < 0.05$) and a 0.12-percentage-point increase in return on equity ($\beta = 0.12$, $p < 0.05$). This implies that asset-based lending contributes to the profitability of MFIs.

The regression analysis also reveals that MFI size and age have positive and significant effects on financial sustainability. Larger and older MFIs tend to have higher profitability and liquidity ratios, suggesting the presence of economies of scale and experience effects in the microfinance sector. Market conditions, as measured by GDP growth and inflation rates, have mixed effects on financial sustainability, with GDP growth having a positive effect and inflation having a negative effect.

The R-squared values for the regression models range from 0.35 to 0.42, indicating that the independent variables explain 35% to 42% of the variation in the financial sustainability indicators. The F-statistics for the models are significant at the 1% level, confirming the overall goodness of fit.

The regression results support the hypothesis that asset-based lending enhances the financial sustainability of microfinance institutions in Kenya. However, the results also highlight the importance of other factors, such as MFI size, age, and market conditions, in shaping the financial performance of MFIs. The findings suggest that asset-based lending should be part of a broader strategy for achieving financial sustainability, alongside efforts to increase operational efficiency, diversify funding sources, and adapt to changing market conditions.

CONCLUSION

5.1 Summary of findings

This study examined the impact of asset-based lending on the financial sustainability of microfinance institutions in Kenya. The analysis of survey data and financial statements of licensed MFIs revealed that asset-based lending is a prevalent practice in the sector, with asset-based loans accounting for a significant portion of MFIs' loan portfolios. The study found a positive and statistically significant relationship between asset-based lending and financial sustainability indicators, such as profitability and liquidity ratios.

The regression analysis confirmed that asset-based lending contributes to the financial sustainability of MFIs, while controlling for other factors such as MFI size, age, and market conditions. The results suggest that asset-based lending can be an effective strategy for managing credit risk, increasing loan recovery rates, and improving the financial performance of MFIs. However, the study also highlighted challenges associated with asset-based lending, such as the difficulty in valuing and liquidating collateral in certain markets.

5.2 Recommendations

Based on the findings of this study, the following recommendations are made to microfinance institutions, policymakers, and other stakeholders in the sector:

MFIs should consider incorporating asset-based lending into their lending strategies, while ensuring that they have the necessary expertise and resources to value, monitor, and liquidate collateral effectively.

MFIs should diversify their collateral types and develop innovative products that cater to the specific needs and constraints of their target markets, such as smallholder farmers and micro-entrepreneurs.

Policymakers should create an enabling environment for asset-based lending by strengthening property rights, improving collateral registries, and facilitating the development of secondary markets for collateral assets.

Stakeholders should invest in capacity building and training programs to enhance the skills and knowledge of MFI staff in areas such as credit appraisal, risk management, and asset valuation.

MFIs should adopt a holistic approach to financial sustainability that encompasses operational efficiency, product diversification, and customer-centric services, in addition to asset-based lending.

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