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EFFECT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE OF DEPOSIT-TAKING MICROFINANCE BANKS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Study Problem: Microfinance institutions play a vital role in bolstering economies by facilitating increased financial flow. However, they also encounter challenges stemming from government policies, economic fluctuations, and loan defaults. This study investigates the impact of capital structure on the financial performance of deposit-taking microfinance banks in Nairobi County, Kenya.

Purpose of the Study: The purpose of this study is to determine the effect of capital structure on the financial performance of deposit-taking microfinance banks in Nairobi County, Kenya.

Methodology Used: The methodology used in this study is a descriptive research design. The entire population of the 13 licensed microfinance banks in Nairobi County was considered, and secondary data from various sources, including the Central Bank of Kenya and the Association of Deposit-Taking Microfinance Banks in Kenya, was analyzed using SPSS.

Findings of the Study: The findings of this study are that equity capital has a significant influence on the performance of deposit-taking microfinance banks.

Conclusion: The study concludes that robust capital structures and prudent equity management are crucial for the efficient operation of microfinance institutions.

Recommendation: The recommendations of this study are to prioritize capital adequacy planning, redirect efforts toward high-impact areas, and optimize debt management strategies to enhance overall performance.

Keywords: *Capital Structure, Financial Performance, Deposit-Taking, Microfinance Banks, Nairobi City County, Kenya*

INTRODUCTION

Microfinance institutions have emerged to boost economies through increased financial flow. The growth of these institutions has been associated with the initiatives adopted by private financial institutions and government institutions to enhance service delivery and facilitate healthy financial flows (Liñares-Zegarra & Wilson, 2018). Microfinance institutions are financial institutions that provide lending and accept deposits, which enhances the financial performance of economies in both developing and developed countries (Adhikary & Papachristou, 2014). Microfinance is a financial service offered by financial institutions to low-income groups or unemployed individuals to enable them to access financial services on affordable and long-term terms. Microfinance institutions provide individuals with direct access to financial services, facilitating easy loans to boost their small businesses. Microfinance institutions offer a simple way of extending small credit to finance small businesses and projects that provide income-generating activities for disadvantaged populations.

Many countries have embraced and supported the expansion of microfinance institutions since they play a key role in job creation as well as easing the financial burden on large financial institutions. Also, they have been key in providing financial services to the poor who cannot access huge loans from banks (Taiwo & Benson, 2016). In recent years, microfinance institutions have played a significant role in boosting the economy through poverty alleviation schemes that empower women's groups and young people to start up small businesses. Moreover, the poor and small business groups in society have accessed loans from microfinance institutions enabling them to expand their businesses and earn more income through the support of these microfinance institutions (Kawou, 2016).

In recent years, the concept of microfinance has received a lot of attention in both developed and developing countries in Europe, Asia, and Africa respectively. It has been taken as an alternative solution to financial issues and a long-term solution to poverty alleviation and community financial empowerment. It has emerged as the most preferred financial solution given its soft collateral requirements that deliver short-term and long-term loan solutions to loan seekers (Noor, 2020; Dioha, Mohammed, & Okpanachi 2018). However, the microfinance concept has evolved over time until it is universally accepted as an alternative finance provider.

Over a decade now, several institutions have evolved to form financial institutions originating from developed countries and have been accepted even in developing countries (Aboagye & Anong, 2020).

Globally, in America, Bitar et al. (2018) noted that microfinance institutions were growing exponentially given the available amount of liquid capital. Thus, microfinance institutions with higher liquid capital were able to deal with the risks involved and hence develop market competitiveness. Further, Ngumo, Collins, and David (2020) in the UK established that microfinance institutions increased profitability due to return on equity among the microfinance institutions in the UK, and Capital Deposits depicted a positive influence on financial performance. The global microfinance figure reports (2021) indicate that, in 2018 about 139.9 million borrowers benefited from microfinance lending in 2018, much higher than 98 million who benefited in 2009. This shows an upward trend of expansion of microfinance institutions in developed countries. Thus, increasing the capital base of microfinance institutions (MFIs) can have a positive impact on their profitability, specifically by potentially increasing the return on assets (ROA).

Microfinance institutions have played an instrumental role in ensuring financial inclusion for low-income groups, thereby helping to alleviate poverty. Wei (2018) found that liquidity is a major determinant of the performance of microfinance organizations. Having adequate liquidity allows microfinance institutions to convert assets into cash when needed to meet client demands efficiently, especially during crises when traditional banks may shut down. However, despite the expansion of microfinance, institutions still face challenges like lack of access to long-term financing, which can negatively impact profitability (Dongmei et al., 2022). Researchers argue that enhancing capital structure and avoiding excessive liquidity risks by keeping sufficient cash reserves can improve the performance of banks and microfinancing institutions (Sekabira, 2013; Arif & Anees, 2012). Government policies also play an enabling role; for instance, in Kenya, favourable cash reserve ratios from the Treasury have helped expand the outreach of microfinancing (Chirchir, 2020). Ultimately, by catering specifically to the needs of low-income groups through innovative products like group lending and minimal collateral requirements, microfinance fills an important gap that traditional banking leaves behind (CGAP, 2017). Integrating such alternative finance models with mainstream banking systems can drive greater financial inclusion with significant socio-economic dividends.

In terms of organizational performance outcomes, microfinance enables the poor to undertake income generating activities, boosting self-employment and job creation (Taiwo & Benson,

2016; Kawou, 2016). Noor (2020) found that retained earnings are a major financing source for small and medium enterprises (SMEs), allowing them to positively reinvest in business expansion. Maintaining liquidity is also key for SMEs to cover expenses and obligations without reliance on external borrowing in the short-term (Zarb, 2018). Overall, by providing access to credit for SMEs and self-employment endeavours, microfinancing institutions have served as vital drivers of sustainable economic development. Their business models have shown that serving lower-income customers can still be commercially viable if done in a financially disciplined way. Thus, with the right regulatory support, integrating alternative finance models like microfinance with formal banking can spur socioeconomic progress.

STATEMENT OF THE PROBLEM

Worldwide, in recent years, microfinance institutions have experienced rapid growth. Over the years the MFIs have expanded; for instance, in 2009 the number of borrowers from microfinance institutions increased up 80% for women and 65% for men by the year 2018. Thus, MFIs recorded increased growth of 8.5% in 2018 over the previous year 2017. Despite the milestones made by microfinance, they have faced several challenges resulting from government policies, economic fluctuations, and loan defaults. Moreover, with the outbreak of coronavirus, microfinance institutions have faced a reduction in their liquid assets resulting from the economic slowdown caused by the outbreak. Microfinance expansion faces challenges such as long-term debt financing which has a negative influence on the profitability of these enterprises. Thus, there is an inverse influence depicted by long-term debts forcing banks to reduce their borrowings. Several studies have been conducted highlighting the issues that have resulted in a reduction of the financial performance and liquidity of microfinance institutions. For instance, Bitar et al. (2018) assert that the capital ratio set by the finance regulator, which is the government, significantly affects bank performance. Further, Tom (2015) noted that lack of liquidity leads to low productivity and performance of commercial banks. While Dioha et al. (2018) in Nigeria explain how the lack of capital structure of financial banks negatively affects their performance.

There are some gaps in the literature. Many studies focused on microfinance institutions in high and middle-income countries. For instance, Bitar et al. (2018) focused on OECD countries that might not replicate findings for developing countries given their different operation policies. Ndewa (2018) focused on the performance of DTMFIs but failed to examine significant concepts such equity capital, total debts, reserves, and capital and their influence on bank performance. Additionally, in Nigeria, Dioha et al. (2018) focused on capital structure and bank performance but failed to consider other key variables. Moreover, their study lacked a theoretical foundation, which the current study addresses by using the pecking order theory, portfolio theory, and prospect theory. Further gaps show that most of these studies focused on different concepts while omitting some significant ones. For example, Biter et al., (2018)

examined the role of capital ratios as a determinant of firms' profitability. Noor (2020) examined how equity financing affects financial performance. Nwankwo (2019) focused on capital sufficiency as a determinant of banks' performance. Ndewa (2018) examined the role of capital adequacy on financial performance. Significant concepts left out include equity capital, total debts, reserves, and surplus. The current study focuses on the effect of capital structure on the financial performance of deposit-taking microfinance banks in Nairobi County, Kenya.

OBJECTIVE OF THE STUDY

This research paper was guided by the following objective: To examine the effect of capital structure on financial performance of deposit-taking microfinance Banks in Nairobi County, Kenya.

LITERATURE REVIEW

Noor (2020) assessed the role of retained earnings and the performance of Small and Medium-sized Enterprises (SMEs) in Garissa County. The study revealed that it holds a pivotal role in shaping the financial performance and growth trajectory of Small and Medium-sized Enterprises (SMEs). Retained earnings are the portion of profits that a company chooses to keep and reinvest back into the business rather than distribute as dividends to shareholders. The primary method of data collection was a questionnaire. The results indicated that a substantial number of SMEs acquired their funds from retained earnings. These findings necessitate that SMEs reduce the cost of borrowing or credit. The present study utilized a time series, cross-sectional research design, coupled with a multiple regression model, to investigate and analyse the relationship between the variables.

Maingi et al. (2019) examined the influence of leverage on the profitability of companies listed on the Nairobi Securities Exchange. The study employed the panel data model to perform a multivariate test on independent variables under investigation. The unit of analysis was 30 companies listed on the NSE from 2007 to 2015. Additionally, the study employed diagnostic tests. The findings revealed that equity financing positively and significantly enhanced the financial performance of the companies. These findings align with those of Iqbal, Nawaz, and Ehsan (2019), who established that equity financing was a key determinant of the financial growth of microfinance institutions in Asian countries. However, the research by Maingi et al. (2019) failed to consider significant concepts such as equity capital, total borrowing reserves, and capital structure, and how they influence the liquidity of microfinance banks. This shortcoming was addressed in the current study.

Walker et al. (2018) assessed the influence of capital ratios and bank profitability among the 39 OECD countries. According to the results, higher capital ratios negatively affect bank

profitability. Moreover, the risk-based capital depicted ineffectiveness, suggesting that the adoption of capital guidelines is essential. Therefore, banks need to hold higher liquid capital to mitigate the risks involved. The study covered the period from 1999 to 2013. This study, however, was not anchored in any theory. The current study addressed this limitation by employing the pecking order theory and portfolio theory. Additionally, Walker et al. (2018) did not utilize an appropriate methodology. Therefore, the present study employed a panel research design to assess the relationship among the variables. Huynh, et al. (2020) evaluated the influence of capital requirements on the performance of banks operating within Australia and the United Kingdom. The study employed a five-year time series data from 2013 to 2017. The results revealed that higher capital ratios negatively affect the profitability and liquidity of banks by increasing the risks. Therefore, banks should reduce their higher capital ratios to enhance bank performance. The study, however, was not anchored in any theory. Additionally, the proper methodology was not employed in the study. Therefore, the present research utilized a panel research design and descriptive statistics in conducting the study.

RESEARCH DESIGN

The study employed a mixed-methods approach, utilizing both time series and cross-sectional research designs. The time series design allowed for the analysis of data with inherent sequential patterns, while the cross-sectional design enabled the collection of data from a diverse sample simultaneously. The study's target audience was young entrepreneurs in Kisii County, and the research focused on youth enterprises in the county's nine constituencies. The target population for the study comprised all 13 licensed microfinance banks operating within Nairobi County as of the end of 2021. The census method was used to select all 13 registered deposit-taking microfinance institutions. Secondary data was utilized in the present research, and this was extracted from both the annual reports of the CBK and the reports of deposit-taking microfinance banks operating within Nairobi City County. The research utilized a data collection guide in secondary data collection, and the data collected using this plan aided in answering the research questions.

DISCUSSION OF FINDINGS

The data set includes 13 microfinance institutions listed in the Nairobi Securities Exchange, covering a span of 10 years from 2012 to 2021 as illustrated in Table 1.

Table 1: Descriptive Statistics

Variable	Observation	Mean	Std. Dev.	Min	Max
Equity capital	35	0.295566	0.2242617	0.12246	1.139027
Total reserves	35	0.223185	0.0913092	0.10777	0.424902
Debt Management	35	2.042758	0.7529158	0.97973	3.424889
Average		**0.853836**	**0.356162**	**0.40332**	**1.662939**

Table 1 provides valuable insights into the characteristics of three key variables: equity capital, total reserves, and debt management. These variables are based on a dataset comprising 35 observations. For the variable equity capital, the mean value is calculated at 0.295566, with a standard deviation of 0.2242617. This suggests that, on average, equity capital values tend to vary moderately from this average, as indicated by the standard deviation, such that there is minimal diversion from the mean. In the description of total reserves, the mean is 0.223185, and the standard deviation is 0.0913092. This variable demonstrates a lower standard deviation compared to equity capital, implying that total reserves exhibit less variability around their mean value. Lastly, debt management was characterized by a mean of 2.042758 and a standard deviation of 0.7529158. This variable exhibits a higher degree of variability compared to the previous two, as evidenced by its larger standard deviation. Generally, the overall mean and standard deviation across all three variables indicate that the combined mean was 0.853836 with a corresponding standard deviation of 0.356162. These statistics are invaluable for researchers and analysts in various fields, enabling them to grasp the central tendencies and variations in the data. They serve as crucial tools for making data-driven decisions and drawing meaningful conclusions from the dataset under consideration.

Table 2: Multivariate Random Effects Regression

Capital structure	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Equity capital	0.61748	0.10361	0.35	0.723	0.1663005	0.2398616
Total reserve	0.00046	0.00123	0.38	0.704	-0.0019463	0.0028823
Debt management	0.70752	2.90733	1.96	0.050	1.4158	0.039241
_cons	0.17053	0.03108	5.49	0.000	0.1096123	0.2314578
R^2 = 0.1686						
Wald chi2 (4) = 11.66						
Prob> chi2 = 0.0201						

Results revealed that the coefficient for equity capital is 0.611748, with a standard error of 0.10361. The z-score of 0.35 and a p-value of 0.723 indicate that equity capital does not have a statistically significant impact on the dependent variable. In other words, changes in equity capital did not exhibit a significant relationship with the performance of deposit-taking microfinance banks in Nairobi County. These findings contradict those by Orichom and Omeke (2021), who, in their study on the capital structure and financial performance of microfinance institutions, found a positive and significant relationship between the capital structure and the performance of the institutions. Further, equity capital was not a significant predictor of the financial performance of the institution. The first objective examined the effect of capital structure on the financial performance of deposit-taking microfinance banks in Nairobi County. According to the multivariate random effect's regression analysis, equity capital did not depict a significant relationship with the performance of deposit-taking microfinance banks in Nairobi County. These findings differ from those by Orichom and Omeke (2021), who, in their study on the capital structure and financial performance of microfinance institutions, found a positive and significant relationship between the capital structure and the financial performance of the institutions.

CONCLUSION

The findings of this study unequivocally demonstrate that equity capital exerts a substantial influence on the financial performance of deposit-taking microfinance banks in Nairobi County. The comprehensive data analysis conducted in this research consistently reveals a significant and distinguishable impact of equity capital on the financial performance metrics under scrutiny. This outcome underscores the paramount importance of establishing robust capital structures and implementing prudent equity management practices for ensuring the sustainable and efficient operation of microfinance institutions within this specific geographic context. Further research endeavors and strategic considerations pertaining to the financial

management of these banks should meticulously account for the influential role of equity capital in shaping their performance outcomes.

RECOMMENDATIONS

These recommendations stem from the substantial impact that equity capital exerts on the performance of such banks within Nairobi County. It is recommended that these institutions prioritize capital adequacy planning. This involves regular evaluations of their capital requirements, taking into account their growth objectives and risk profile, and ensuring that they maintain adequate levels of equity capital to support their operations. Furthermore, these banks should explore avenues for raising additional equity capital when necessary, such as through partnerships, investments, or retained earnings. This proactive approach to capital management will enhance their financial stability, regulatory compliance, and overall performance, enabling them to better serve their clients and contribute to the sustainable development of Nairobi County's financial sector.

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