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Influence of Credit Rationing on Financial Performance of Deposit Taking Microfinance Institutions in Uasin Gishu County, Kenya

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Abstract:

Globally credit usually represents the bulk of the microfinance institution's assets, while interest on the credit represents the major source of income. In this regard, the current study had been designed to investigate the Influence of credit rationing on financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya. The study sought to; establish the Influence of interest rate on financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya. The study adopted a survey design based on samples drawn from across the deposit taking microfinance institutions in Uasin Gishu County, Kenya. The target population was 68 credit officers from 13 registered deposit taking microfinance institutions sampled by census. Study relied on secondary data for the financial performance and interest rate and primary data on loan repayment period and collateral security. Primary data was collected by use of questionnaires. The validity and reliability of the instruments were tested improve credibility of data. Collected data was analyzed by use of both inferential and descriptive statistics using SPSS version 20. The study established linear by linear association for interest rate, loan repayment period and collateral with financial performance to be 0.010, 0.036, 0.002 $P < 0.05$ respectively. Therefore, there was a significant positive association between interest rate, collateral and loan repayment period on financial performances of deposit taking microfinance institutions.

Keywords: Credit rationing, interest rate, loan repayment, Financial performance

1. Introduction

In a microfinance institution, interest on credit represent the source of income whereas credit represent the institution's asset. According to Neelam (2017), loans have a profound effect on the financial institutions liquidity, solvency and profitability and thus have a high degree of risk. The failure of the trading partner to fulfil their obligations in due date can greatly jeopardize the smooth functioning of the institution (Isanzu, 2017). Therefore, to secure maximum performance of deposit taking microfinance institutions, in the effort to strengthen non-bank finance, revitalizing securitization element is among the important elements, and can be custom-made to fit the needs particularly of SME finance (Wehinger, 2014).

The obstacles of financial performance of deposit taking microfinance institutions include Informational asymmetries, Business and judicial environment, Tax regime, Regulatory and supervision issues, Skills all of which precipitates credit rationing (Imam & Kolerus, 2013). According to Haile (2016), stated that if the financial institutions can achieve good performance financially, the socio-economic welfare of the poor can be sustained hence microfinance institutions achieve positive impacts. Financial performance therefore consists of measuring of the results of a firm's operations and policies in monetary terms which are reflected in the firm's return on value added, assets and on investment (Shukla & Kagoyire, 2016). If the profitability generated increased sales can exceeds the added costs of receivables then the firm can benefit from credit (Wachowicz & Horne, 1998). This calls for credit management through credit rationing whose objectives can be stated as safe guarding the companies' investments in debtors and optimizing operational cash flows hence increased financial performance.

Pecking order theories and credit rationing theories among other theories predicted the credit rationing. According to the credit rationing by Weis and Stigiltz (1981) argued that the supply of credit from the financial institutions is exceeded by the demand for credit at the prevailing rates, therefore, equal collateral amount need to be provided by the borrowers. Meyers (1984) on the pecking order theory states that a firm prefer debt over equity in a case they require funding and equity is created as a last resort. The theories suggest that forms will require funding from external sources and therefore remains credit rationing victims.

However MFIs in Kenya have over the time been witnessing high levels of non-performing loans which are, needless to say, occasioned by high default rates which poses a threat to their financial performance and their very existence (Moti, Masinde, Mugenda, & Sindani, 2012). According to (Haile, 2016) Credit rationing negatively and positively affects the loan repayment performance which leads to financial performance. This argument connoted a mixed result which called for the study on effects credit rationing on the financial performance of deposit taking microfinance institutions in order to fill in the existing gap in literature.

2. Theoretical Review

The examination received hypotheses, for example, Credit Rationing Theory, Pecking Order Theory and Stakeholders hypothesis. The fundamental hypothesis received by the examination is Credit Rationing Theory.

Credit proportioning speculation was advanced by Stiglitz and Weiss in 1981. This speculation is grounded on layaway markets which are imperfect depicted by information unevenness, which makes it excessively costly for banks, making it impossible to obtain correct information on the borrowers and to screen the exercises of the borrowers. The credit distributing speculation expect that there are many banks that hope to abuse their advantages through premiums that they fix and certification that they ask. This decreases the probability of defaulting on their advances and overwhelming piece of possible borrowers who try to support their advantages through the endeavors they pick. The probability that the wander will succeed isn't known to the bank yet unquestionably comprehended to the associations in perspective of information asymmetry. Now and again, borrowers move from safe assignments, on which propels were given, to high-peril broadens that assurance critical yields yet with a low probability of accomplishment. In such cases, the banks generally have no control over such exercises of the borrowers. If there should arise an occurrence of frustration, all errands yield same regard (Banerjee, 2008).

As indicated by (Banerjee, 2008) banks contend by picking loan fee and utilize financing costs as a screening gadget for recognizing terrible dangers from great dangers. The borrowers are comprehended to request credits that have been settled in order to back activities that they think have the same predicted result. In a situation like this, borrowers that are high hazard will pay a loan cost that is high. Nonetheless, swollen premiums may pilot a lessening in the anticipated benefit of the bank in view of unpalatable choice impact (which is because of debilitating of nature of the gathering of credit candidates) and the impact of motivating force (which originates from a variety in the examples of borrowers moving from safe to high hazard ventures). Balance with credit proportioning in this way happens at the loan fee at which the bank expands the normal benefit (Banerjee, 2008). Under circumstances of defective credit markets portrayed by data asymmetry, there is disappointment of loan fees assuming the market-clearing part of comparing interest and supply. Or maybe the banks embrace the technique of credit proportioning utilizing the non-value instruments to augment their normal benefits.

As indicated by (Lloyd and Money, 2006; McConnel, 2009) loan fees are a cost paid for getting reserves communicated as a rate for each year. It can likewise be characterized as the value a borrower needs to pay to the bank for exchanging acquiring energy to what's to come. At the end of the day financing costs speak to the cost of acquiring capital for a given timeframe (Drake, 2002). Loan fees can be great as in financing cost reimbursements improve and builds microfinance benefit. Be that as it may, it can be awful if the borrowers can't make intrigue reimbursements and in addition the chief sum which in the long run outcomes in defaulting or non-performing resources. "Non-performing loans (NPLs) are those advances which are ninety days or more past due or no longer gathering interest" (Joseph, 2012).

As indicated by an examination completed by (Amarasekara, 2005) found basic significance of loan fees spread on monetary development and budgetary execution. Quaden (2004), for instance, battles that a more successful keeping cash structure benefits the certified economy by allowing 'higher expected returns for savers with a budgetary overabundance, and lower getting costs for placing assets into new errands that need outside reserve'. In this way, if the keeping cash zone's credit charge spread is generous it discourages potential savers in view of low benefits for stores and subsequently confines financing for potential borrowers (Ndung'u, Njuguna, and Ngugi, 2000). Valverde et al (2004) delineate by observing that in light of the costs of intermediation among savers and borrowers, only a little measure of the hold stores enacted by banks can be finally coordinated into theories. An extension in the inefficiency of banks, grows these intermediation costs, and therefore assembles the part of assets that is 'lost' amid the time spent intermediation.

Individual money related foundations are at freedom to set their unmistakable financing cost spread. Nonetheless, it ought to likewise be comprehended that the capacity of setting store and loaning rate is basic for fiscal approach transmission instrument. The terms and conditions connected to these rates vary by nation, be that as it may, restricting their similarity. As per Amarasekara, (2005) some experimental investigations found that in specific nations when approach loan costs are rising, retail loaning rates react rapidly however store rates stay slow, while the inverse holds when strategy financing costs are declining. The sum by which the premium earned by a speculation surpasses or neglects to surpass its own advantage obligation, if a bank pays contributor's one loan cost, and loans the saved cash out at higher financing cost, the distinction between those two financing costs is the financing cost spread. Loan fee spread is like net premium edge, however is distinction in that net financing cost spread is theoretical number that foundation could acquire if all benefits were obtained and contributed (Drake, Deborah and Elisabeth, 2002).

In this manner, there is a positive relationship between credit prizing by microfinance banks and the measure of store got from the customer's. In the event that organizations have adequate measure of store, they will be in a position to advance

the customers at a lower loan cost, which means the quantity of borrowers will expand coming about to development in productivity (McDonald and Robert, 2010). Recall that advance expenses are by all record not by any means the only factors affecting an affiliation's budgetary execution ideally measuring a social event execution is more basic than focusing on only a solitary or two measures at the disallowance of others (Bernanke and Ben, 2008).

These discoveries are identified with those of Wensheng, Kitty, Leung, and Chang, (2003) who established that an ascent in the Hong Kong dollar hazard premium, meant by an augmenting of the spread between Hong Kong dollar and US dollar loan costs, would impact bank's benefit. The experimental evaluations demonstrated the net premium edge declined in light of increments in the hazard premium, since store financing costs were more delicate to changes in the hazard premium than the loaning rate.

As indicated by Mwindi, (2012), higher measures of credit allowed to SMEs are charged larger amounts of loan costs however empower them to meet a greater amount of their arranged operations. This outcome in higher gainfulness to the SMEs henceforth a positive relationship exists between the financing costs charged by MFIs and the benefits of the SMEs mostly as a result of the measure of acknowledge related for these high loan costs. Ingram, (2011) states that financing costs are essential since they control the stream of cash in the economy. High financing costs control swelling yet in addition back off the economy. Low loan fees animate the economy, yet could prompt expansion (Mnang'at, Namusonge, and Oteki, 2016). At the point when financing costs are high, individuals would prefer not to take advances out from the bank since it is harder to pay the credits back, and the quantity of procurement of genuine resources goes down. The inverse is likewise valid. The impact of a lower loan cost on the economy are exceptionally advantageous for the shopper. However genuine yield on credit portfolio as often as possible utilized intermediary for loan costs has a positive and very huge effect on MFIs' budgetary execution and advance reimbursement rates (Ashim and Ranjula, 2014). The institutionists battle that making benefits by charging high advance expenses is fundamental for the commercialization and viable expansion of the microfinance business (Robinson, 2001; Drake and Rhyne, 2002).

In Kenya, bring down rates can influence borrowers to be more reliant on giver's cash while high rates to can prompt higher administrative examination and pull in the most noticeably bad borrowers (unfriendly determination) (Mnang'at, Namusonge, and Oteki, 2016). The subject of reasonable loan fees is stays key to policymakers and MFIs. In Kenya, mostsmall-scale back foundations charge loan fees that range from between 1.8 per penny to 2.5 for every penny for each month. Others, then again, charge no less than 0.5 percent for every week (Atieno, 2011). This means between 21.6 for every penny and 30 for every penny for each year. The establishments have reimbursement times of week by week and month to month contingent upon the span of the credit, loaning standards and how one concurs with different individuals from the gathering kept running by the small-scale back foundation, who together go about as underwriters of the advance. Advances offered by such foundations don't have elegance period, borrowers begin overhauling the credits when they get them (Mnang'at, Namusonge, and Oteki, 2016).

The spearheading work of Stiglitz and Weiss (1981 referred to by Godquin, 2004) denoted the start of endeavors at clarifications of credit proportioning in credit markets. They affirmed that "... loan costs charged by an acknowledge organization are viewed as having a double part of arranging potential borrowers (prompting unfriendly choice), and influencing the activities of borrowers (prompting the motivating force effect)". Weinberg (2006) supported that intrigue charged and the measure of obligation are the two fundamental components influencing reimbursement commitments. A few banks utilize the loan fees that an individual will pay as a screening gadget to distinguish borrowers with a high likelihood of reimbursement. This might be unsafe since high daring people are the most noticeably awful rate payers, in the process influencing default by borrowers on credits.

3. Methodology

The study adopted descriptive survey design with a target population was 68 credit officers from Deposit Taking Microfinance Institutions licensed to carry out banking business under the Microfinance Act (2006) in Uasin Gishu County. Census method of sampling was used where all the 68 credit officers of all the 13 deposit taking microfinance institutions in Uasin Gishu County. Questionnaires were used in data collection in which the researcher used drop and pick method to collect data from the respondents. The study also used secondary data obtained from the following sources; Data on borrowing interest rates trends and Annual financial statements for the last four years based on availability and accessibility. The instruments were tested for reliability and validity. Inferential and descriptive statistics was used to analyze the data. For descriptive statistics, percentage, means and frequency were used and on the other hand Chi-Square was adopted in the inferential statistics. The data was presented using tables. Chi-Square was calculated as follows:

$$X_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where; X^2 = Financial performance
 O = Observed frequencies
 O_1 = Interest rate
 O_2 = Loan repayment period
 O_3 = Collateral securities
 E = Expected frequencies

4. Results

4.1. Descriptive Statistics for Interest Rate

For analysis, frequency, percentages and mean ratings of response for each item were determined and summarized in Table 1.

Statements	Frequency	Percentage
<=22.00	0	0.0
22.01-23.81	26	40.6
23.82-25.62	12	18.8
25.63-27.44	9	14.1
27.45+	17	26.6
Total	64	100.0

Table 1: Descriptive statistics for interest rate

Table 1 shows that 26(40.6%) of the microfinance institutions charge an interest rate of 22.01-23.81, 17(26.6%) 27.45+, 12(18.8%) 23.82-25.62, 9(14.1%) 25.63-27.44 and none 0(0.0%) charged below 22. This implies that most of the micro-finance institutions charge an interest rate of 22.01-23.81 which is higher than the average for the commercial banks. As indicated by Banerjee (2008) banks contend by picking loan cost and utilize financing costs as screening gadget for recognizing awful dangers from great dangers. The borrowers are comprehended to request credits that have been settled to fund extends that they think have the same predicted result. These engaging insights of target one was trailed by a Chi-square test to set up the relationship between loan fee and budgetary execution of store taking microfinance establishments in Uasin Gishu County, Kenya. This was broken down under the accompanying sub-area.

4.2. Chi-Square Test for the Association between Interest Rate and Financial Performance of Deposit Taking Micro-Finance Institutions

The Chi-square test at $p \leq 0.05$ significance level illustrating association between interest rate and financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya, are as summarized in Table 4.2. To achieve this, the hypothesis was tested;

- **H₀₁:** There is no association between interest rate and financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	71.484 ^a	9	.000
Likelihood Ratio	58.706	9	.000
Linear-by-Linear Association	6.567	1	.010
N of Valid Cases	64		

a. 12 cells (75.0%) have expected count less than 5. The minimum expected count is 1.27.

Table 2: Chi-square test for association between interest rate and financial performance of deposit taking micro-finance institutions

From the results in Table 2, the P-value for the Linear-by-Linear Association between interest rate and financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya is 0.010. Therefore, the null hypothesis that, "there is no association between interest rate and financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya", was rejected ($p < 0.05$). This implies that there is a significant association between interest rate and financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya. This concurs with the findings of McDonald and Robert (2010) that interest rate significantly affects financial performance of deposit taking microfinance institutions. Lloyd and Money (2006) and McConnel (2009) adds that interest rates can be good in the sense that interest rate repayments enhance and increases microfinance profitability.

5. Conclusion

Based on the literature review, findings and discussions, the study concluded that credit rationing has a significant association with financial performance of deposit taking microfinance institutions in Uasin Gishu County, Kenya. Therefore, the determinants of the credit rationing such as interest rate, loan repayment period and collateral securities are likely to improve the financial performance of the micro-finance institutions.

On the influence of interest rates on financial performance of deposit taking microfinance institutions, the study concluded that, interest rate has a significant influence financial performance of deposit taking microfinance institutions. That is, interest rates can be good in the sense that interest rate repayments enhance microfinance profitability. Micro finance

institutions compete by using interest rates as devices for screening and choosing interest rates for distinguishing good and bad risks. It is understood that borrowers demand fixed loans in order to finance project with the same foreseen outcome. This is underpinned by Credit Rationing Theory which avows that excess demand for loans in the market cannot be cleared by the use of interest rates. With the lender function of supply becoming perfectly price inelastic, credit rationing treats the supply side phenomenon at the same time. Thus, the higher the interest rate borrowers would be willing to come for the loan as long as the supply is high hence high performance of the microfinance institutions. Besides high-quality borrowers prefer a contract that entails a slightly lower interest rate with a reduced loan amount which also translates to high profitability. At equilibrium credit rationing occurs at the interest rate at which the microfinance institution maximizes the expected profits.

6. Recommendations

6.1. Policy Recommendations

The findings of the study suggested that interest rate affect the financial performance of micro finance institutions, therefore; the study recommends that the government policy makers should reform Kenya's financial sector through ensuring low interest rates and eliminating the collateral security risks to make it easy to access financial institutions more easily to spur their financial performance. There is therefore a need for the deposit taking micro finance organization to impose a proper policy guideline that will help increase financial performance. Moreover, from the findings, the study recommends that in order for the deposit taking micro finance to have a high financial performance the organization will have to also concentrate on other factors affecting its operations.

6.2. Recommendation for Further Studies

Further study should be narrowed down to the influence of each interest rate on financial performance of microfinance institutions. Besides, further study should be done on the moderating effects of the micro finance institutions characteristics on the relationship between credits rationing and financial performance of deposit taking microfinance institutions. The study conducted limited the generalization to other counties and banks, therefore, researcher recommends studies of similar nature conducted in other banks and counties.

7. References

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