Nonperforming Loans and Financial Performance of Kenya Women Finance Trust in Kenya

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Abstract

The social intermediation mission of microfinance has swiftly turned into commercialized direct banking via deposit taking microfinance with Central Bank of Kenya as the regulator. These institutions receive deposit from customers hence the risks that go with banking have caught up with them. The study focused 10 years from 2006-2015 and used descriptive research methodology that enabled presentation of information as it is currently. Primary and secondary data collection research methods were used in order to bring out both qualitative and quantitative aspects for variable analysis. The study employed a census method to get responses from 33 management employees of KWFT Kenya which included 7 senior employees in management and 26 operational employees from different departments to whom the questionnaires were administered of which 33 were filled and returned giving a 100% return rate. Questionnaires, interview schedules and document analysis were used for data collection. Validity and Reliability of the research instrument was observed using a test-retest method. Computed Cronbach`s alpha reliability of research instruments was 0.761 which was above the threshold of 0.7 that is acceptable in social sciences` research. Data collected was analyzed through descriptive and inferential statistics using SPSS version 20 and Eviews 9.5. Analysis of variance test was conducted so as to determine variability and model a relationship between risk and financial performance of Kenya Women Finance Trust. Data was presented through lag plots, tables and correlograms. Regression analysis modeled a causal relationship between variables and the findings confirmed that exposure through nonperforming loans reduced returns. It is therefore recommended that the firm should tighten the monitoring of its credit policy in order to enhance financial performance.

Keywords: *Nonperforming loans, Return on assets, Financial Performance.*

1. Introduction

Armendariz (2007) describes risk exposure as primarily concerned with increasing the earnings volatility at any enhancement level of return. Thus, higher returns necessitate greater risk encounter. Credit Risk is the possibility that debtors to the business will fail to pay what they owe in full and on time (Joana, 2000). It causes a company to be downgraded in terms of credit rating. Written loan contracts that follow rules of lending in terms of credit policy, loan appraisal mnemonics and loan recovery procedures need to be re-communicated to employees in the loans department as organizations compete to expand their loan portfolios (Joana, 2000). Auronen (2003) and Akaloaf (1970) express the difficulty of distinguishing good borrowers from bad ones. Richard (2011) argued that such a difficulty may result to adverse selection and moral hazard problems and as a consequence, wrong decisions made in lending, leading to nonperforming loans accumulation. Poor people lack the security necessary to act as a fall back so that in the event default occurs MFI's find themselves exposed to loss of principal and interest, increased collection costs and disruption of cash flows (Bank for International Settlement, 2000).

Nonperforming loan is a credit facility which typifies the principal amount and interest to remain past due over a given threshold in terms of time. Where installment payments delay for a short while, the loan is considered to be past due and if it not serviced after 90 days period, the loan becomes nonperforming (Stuti, 2013). A loan is assets to the bank and loan interest paid constitute a stream of cash flows that determines bank profitability. NPLs signify imminent condition for bank ill health and has a direct bearing on ROA and liquidity risk management of a bank (Stuti and Basnal, 2013; Aburime, 2008).

1.1 Statement of the problem

KWFT was formed with the main aim of advancing and promoting direct participation of economically active women in viable businesses and improving their social and economic status by providing sustainable financial and social support. Despite this intermediation, poor performance continues to rock the banking sector in Kenya. This has led some banks to be put under receivership in recent times. This instability thus mirror-images the sub-prime crisis that rocked the US economy in 2007-2008 though with the difference that the sub-prime crisis resulted from mismanagement of the counterparty derivatives contract. Kenya's case seems to suggest mismanagement of the credit quality producing nonperforming loans. KWFT financial loan impairment losses have been shooting up year after year. A rise of such expenses by a 176% rate between 2012 and 2013 per the CBK Supervision report (2013) gave the researcher ground to investigate the effect of loan nonperformance on financial performance of KWFT. Borrowers demand for loans and understand their own financial commitments better than lenders do and their actions may not be interpreted well by lenders. As a consequence, adverse selection may arise causing lenders to make wrong decisions on whom to lend to resulting into accumulation of nonperforming loans (Thakor, 1986; Auronen, 2003). June (2013) analyzed factors leading to default bringing out credit policy, loan appraisal and loan recovery procedures, but she failed to tell how these factors impact on supply side of loaning and its consequences to ROA. What is quite clear is that banking is a risky venture and risk taking weakens MFI Portfolio which inhibits financial performance of MFIs leading to poor performance, erosion of the franchise value of a bank since banks will pursue riskier policies in order to maintain previous profits. Deregulation and liberalization in the banking sector increases risk as competition among banking and non-banking financial institutions creates conditions ripe for increased interest rates on bank liabilities and reduced interest rate on loans. This research therefore took a longitudinal analysis of returns of KWFT for the last 10 years to 2015 in order to establish the relationship between nonperforming loan risk exposure and growth in ROA**.**

1.2 Objective of the Study

To determine the effect of nonperforming loan on the financial performance of KWFT in Kenya.

1.3 Hypothesis

H_0: There is no significant effect of nonperforming loan on financial performance of KWFT.

1.4 Conceptual Framework

This study was anchored on a conceptual framework in Figure 1 where credit risk exposure of nonperforming loans was an independent variables while business performance was measured in terms of Return on Assets. MFI size was expected to moderate the relationship between risk and financial performance.

Figure 1: Conceptual Framework showing risk exposure and financial performance, **Source**: Research data (2016)

2. Literature Review

2.1 Study theory

Grameen solidarity group theory

Yunus and Alia (1999) of Grameen bank in Bangladesh describes the dynamics of solidarity group as encompassing group membership which creates support, protection and smoothest out erratic behavior patterns of individual members making each borrower more reliable in the process. Peer pressure acts as a force in keeping each members of the group member in line with the credit program broader objectives. The group approves the loan request of each member and the group assumes moral responsibility for the loan where in event a group member gets financially indisposed, the group volunteers to assist. To bind members together and assist them to focus on objectives, regular meetings are scheduled and attendance is compulsory. In the perspective of this research, borrower's propensity to borrow from KWFT is high and the terms of group loan stress more on peer guarantee. The fact that the group has screened the borrower may not be sufficient proof of a good borrower.

Theory of Information asymmetry

The market for `Lemons` concept argues quality uncertainty and the `market mechanism` where sellers are privy to inside information about their product than the buyers know. The defining literature of this theory traces the ground laying works of nobelists George A. Akerloaf, (1970) and Joseph Stiglitz (1970). Akerloaf (1970) uses bad lemons to refer to used cars which are bad. Buyers cannot discriminate good cars much as sellers are not able to get better than average market price. So, individuals do not have adequate information about their risk types though bankers and insurers know more about interest calculations and surrender values respectively. At the same time, financiers lack experience to accurately judge defaulters in advance.

   In this study context liberalization and relaxation of loaning policy by commercial banks to offer unsecured credit for home improvement and to support previously sidelined but mushrooming MFI whose membership partly draws from the informal sector such as the boda-boda sector in Kenya and acceptance of deposit from them may raise moral hazard asymmetry.

2.2 Micro Finance Risk Exposure

Horcher, (2005) states that risk and exposure are closely linked and are often used interchangeably. Risk is defined as the probability of loss while exposure is defined as the possibility of loss. Risk arises as a result of exposure. Credit risk is the risk of not receiving the promised repayments on outstanding investments, because of default of borrowers (McNeil, Embrechts, and Frey, 2005). It is the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms.

Asset quality (AQ) measures the ability of a commercial bank to manage risk. It determines the capability of a commercial bank to foresee, avoid, monitor risks and possibly to cover the losses arising (Aburime, 2008). Credit risk comprises default and settlement risk and it can arise on issuers of securities (in the company investment portfolio), debtors (mortgagors), or counterparties (on reinsurance contracts, derivative contracts, or deposits) and intermediaries, to whom the company has an exposure. In investment, it refers to a situation where the business will get returns that vary negatively with the level of output (Dun and Bradstreet, 2007). Credit risk is the financial exposure resulting from a microfinance institution's dependence on another party (counterparty) to perform an obligation as agreed. Late or nonpayment of loan obligations affects the capital or earnings of microfinance institutions (MFI). This is due to loss of principals as a result of loan defaulters and loss of income as a result of failure to collect anticipated interest earnings.

Studies have shown that MFI financial performance is high when they put in place strategies of managing their credit risk inherent in the entire portfolio and individual credit transactions risks. Additionally, microfinance institutions should be aware that credit risk does not exist in isolation from other risks, but is closely intertwined with those risks (National Bank of Ethiopia, 2010). It is the total amount of credit extended to a borrower by a lender. The risk of loss caused by the borrowers default is indicated by the credit exposure magnitude. Credit risks are calculated based on the borrowers' overall ability to repay. Late payment or non-repayment of the debt gives rise to nonperforming loan (Stuti, 2013).

3. Research Methodology

The study used descriptive research design that enabled presentation of information as it is currently. Primary and secondary data collection research methods were used in order to bring out both qualitative and quantitative aspects for variable analysis. Secondary data collection was done through undertaking document analysis at the Kenya Women Finance Trust head office. On secondary data, this research employed longitudinal explanatory research design. The study targeted all 33 management employees of KWFT at the head office in Nairobi. Census was conducted on all the 33 respondent of the target population. Questionnaires, interview schedule and document analysis were used as the tools of data collected.

Qualitative data obtained from the field was edited, coded and tabulated, then subjected in the SPSS version 20 software for analysis. Quantitative data from document analysis was analyzed using Eviews statistic package version 9.5. The study used Analysis of the Variance (ANOVA) for testing the goodness of fit of the regression model at 95% level of confidence. F-test and *t*-test were also used to test for any significant difference between financial performance of MFI DTM and the risk.

The researcher used adjusted R^2 to determine the variation in the financial performance due to changes in nonperforming loans.

The study used the following regression model was used: $Y_t = \alpha_0 + \beta^1 X^1_t$; Where Y represents MFI financial performance measured by ROA; X^1: is the nonperforming loan; and Y represents the financial performance-ROA. β^1 represents coefficient values of the nonperforming loans respectively α_0 represents the value of the financial performance when the value of the coefficients of nonperforming loans equals to zero. $_{t-1}$: represents time series data for past years. The model number measured the effect of credit risk exposure on financial performance of KWFT measured by ROA. Data was presented through lag plots, correlograms and variograms.

4. Data Analysis, Presentation and Interpretation

4.1 Questionnaires return rate

Out of the 33 questionnaires distributed to KWFT respondents, 33 were returned giving a 100% return rate which is adequate for data analysis.

4.2 Descriptive Statistics of Variables

To identify the Nonperforming loans and financial performance, the mean, standard deviation, maximum and minimum values were obtained for a total 33 observations for all the study variables. The results are presented in Table 1.

The study objective was to establish to effect of nonperforming loans on financial performance of KWFT in Kenya. The results obtained in this study showed that KWFT Loan collection policy is efficient and its credit rating is high. On average, respondents agreed to this and the mean response rates were 4.6061 and 4.4242 respectively.

However, few respondents tended to reject the fact that loan appraisal process is efficient and the mean response rate was 3.2727 in this case.

These mixed reactions are consistent with studies conducted by various scholars. LI and ZOU (2014) concluded that non-performing loans had a positive impact on the banks profitability as measured by ROA and ROE.

Table 1 Minimum, maximum, mean and standard deviation of nonperforming loans

	N	Minimum	Maximum	Mean	Std. Deviation
Loan collection policy is efficient	33	4	5	4.6061	0.4962
Credit rating is high	33	2	5	4.4242	0.79177
Loan appraisal process is efficient	33	2	5	3.2727	1.23168
Valid N (listwise)	33				

Source: Research data (2016)

Bourke (1989) concluded that there exist a negative relationship between credit risk and financial performance. The more the financial institutions are exposed to high risk loans, the poor the performance. If banks accumulate a greater quantity of non-performing loans, they will experience higher loses and as a consequence their returns will be lower (Miller and Noulas, 1997).

4.3 Inferential statistical analysis

4.3.1 Correlation analysis

Table 2: Correlation

Correlation	X1NPLN	Y
X^1NPLN	47.40742	
	1	
Y	-7.913876	30.16
	-0.209284	1

Source: Research data (2016)

To examine the variation in of the financial performance explained by non-performing loans, the research examined the null hypothesis and the alternative hypothesis below:

H_0: there is no statistically significant effect of non-performing loans on KWFT financial performance.
H_A: there is a statistically significant effect of non-performing loans on financial performance of KWFT.

The correlation coefficient, R shows the existence linear relationship between two explanatory variables. In order to determine the strength of the relationship, the research conducted Pearson moment correlation and obtained correlation coefficient that measured the degree to which changes in the value of one variable predicts changes in the value of the other. Correlation coefficient ranges between -1 to +1 where -1 tells an inverse movement or association between variables while +1 shows there to exist a strong association between the variables. Based on these research findings, there exists a negative correlation of -0.209 between non-performing loans and ROA.

The study investigated the effect of nonperforming loans on financial performance of KWFT and established that the NPL was inversely related with ROA by -0. 209. Thus NPL protected it from risk exposure. However, management needs to be cautious when setting credit policy, be careful when appraising loan requests and be strict in implementing loan recovery procedures in order to protect the company from degenerating into poor asset quality that could cause distress.

R^2 was also used to conduct the goodness of fit to show how accurate the regression line predicts the estimates of the mean and determine distance from the actual values.

4.3.2 Regression analysis

Table 3: Model Summary

	Coefficient	Std. Error	t-Statistic	Prob.
NPL	3.827997	0.94059	4.069783	0.0066
R-squared	0.761486	Mean dependent var		6.4099
Adjusted R-squared	0.64223	S.D. dependent var		6.634031
S.E. of regression	3.968073	Akaike info criterion		5.883613
Sum squared resid	94.47361	Schwarz criterion		6.004647
Log likelihood	-25.41806	Hannan-Quinn criter.		5.750839
F-statistic	6.385268	Durbin-Watson stat		1.776274
Prob (F-statistic)	0.026886			

Source: Research Findings (2016)

Adjusted R squared coefficient or the coefficient of determination explains the variation in the dependent variable resulting due to change in the independent variables. From the findings, secondary data gave adjusted R squared of 0.642 which revealed that there was a 64.2% variation on financial performance of KWFT in Kenya due to exposure to nonperforming loans at 95% level of confidence. Thus, 64.2% of KWFT financial performance in Kenya can be accounted for by changes in nonperforming loans. The findings for this research show that there is a fairly strong positive relationship between the study variables as disclosed by 0.761implying that a unit change in an explanatory variable will cause a 76.1% change in financial performance of KWFT.

4.3.3 Hypotheses Testing

The results showed that nonperforming loans had a significant negative effect on ROA (β = -1.142825 with a *p*-value 0.0083), and the results remained consistent even when other variables were introduced in the other

models. This was contrary to the findings by Dermiguc-Kunt and Huizinga (2012) that large commercial banks outperformed smaller ones due to the higher banking efficiency of small banks.

The hypothesis that nonperforming loan has no effect on the financial performance of a KWFT bank was rejected for ROA. As shown by the regression results, the results showed that nonperforming loans had a significant negative effect on ROA (β = -1.142825 with a p-value0.0083), but the results changed when other variables were introduced in the other models.

Table 4: Nonperforming loans on financial performance

	Coefficient	Std. Error	t-Statistic	Prob.
NPL	0.282218	0.298727	0.944737	0.3695
R-squared	-0.582005	Mean dependent var		6.4099
Adjusted R-squared	-0.582005	S.D. dependent var		6.634031
S.E. of regression	8.344136	Akaike info criterion		7.175635
Sum squared resid	626.6215	Schwarz criterion		7.205893
Log likelihood	-34.87817	Hannan-Quinn criter.		7.142441
Durbin-Watson stat	1.543245			

Source: Research data **(2016)**

When NPL was regressed against financial performance, R^2 fell below the threshold, the t-statistic *p*-value was also above the 0.05 level of significance and but the Durbin Watson fell around 2 implying that autocorrelation did not exist.

Conclusions

The study concluded that non-performing reflected a proximature of financial performance estimated through ROA. Although KWFT banks were consistently exposed through nonperforming loan assets over the study period, the results obtained in this study showed that KWFT Loan collection policy is efficient and its credit rating is high. These reactions are consistent with studies conducted by various scholars. LI and ZOU (2014) concluded that non-performing loans had a positive impact on the banks profitability as measured by ROA and ROE. Bourke (1989) concluded that there exist a negative relationship between credit risk and financial performance. Research data showed that increase in loans advances to total deposits significantly increases KWFT bank's profitability thereby exposing them to high risk levels. The researcher found out that nonperforming loans had an effect on financial performance of KWFT as measured by ROA. Nonperforming loan metric was used to interrogate the efficacy of the loan appraisal and recovery procedures and actually pointed some issues in its credit policy.

Recommendations

The result obtained is consistent with expectations of the bank market showing that increase in loans advances to total deposits significantly increases KWFT bank's profitability thereby exposing them to low risk levels. KWFT should therefore tighten loans appraisal and recovery procedures through use of techniques like frequent phone call or text reminders as opposed to traditional field visits by loans officers where defaulters get sigh of relief at the end of the visit by loans officer.

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