

Micro-Loans In Ghana: Assessing Relationships Between Payment Of Interest And Loan Characteristics

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ABSTRACT

This paper assesses differences in loan characteristic variables between those who pay interest on their micro-loans and those who don't. The findings indicate significant differences between interest payers and interest non payers based on the sufficiency of the loans, the recency of the business and loan, and the portion of profits needed to repay loans.

Keywords: Ghana; Interest Rates; Micro-Loans; Micro-Lending; Microfinance Institutions (MFIs); Sub-Saharan Africa; Unbanked; SME

INTRODUCTION

The significant need for financial sustainability by small and medium enterprises (SMEs) has made them seek borrowed funds in both the formal and informal financial sectors. However, studies show that SMEs cannot afford credit from the formal sectors that are dominated by large commercial banks because they are perceived by those lenders as high risk borrowers that lack sufficient collateral for loans (Basu et al., 2004; Etim, 2011; Padmanabhan, 1988; Targoe, Nyarko, & Anuwa-Amarh, 2005). As a result, microfinance institutions (MFIs) have become the default lenders for SMEs and many low-income entrepreneurs.

LITERATURE

For many entrepreneurs and SMEs in the Sub-Saharan African (SSA) countries like Ghana, finding funds to support a business idea or project is an uphill task. About 80 percent of the population is unbanked (Hughes & Lonie, 2007; Basu, 2004, Etim 2011). In Basu's 2004 study, the findings were that only about five to six percent of adults in Ghana and Tanzania had access to any form of banking services. In a recent study, it was reported that half of the world's population is unbanked (Chaia et al., 2013). This is more than 2.5 billion adults who do not use formal financial services and institutions to borrow or save funds and many of them were in SSA. In a few cases, small businesses have access to informal financial systems like the local Cooperative Societies and group lending, but those lack growth and sustainability (Armendariz & Morduch, 2010). The influx of microfinance institutions into the SSA and countries like Ghana, Kenya, and Nigeria in the last three decades was therefore not surprising to scholars. The initial explanation was that the MFIs came to help solve the credit problem as well as provide ease of funding for development-related initiatives, particularly those that impacted entrepreneurs and SMEs. The MFIs, who themselves initially were funded by donor institutions, such as non-governmental organizations (NGOs) or development agencies, at relatively low or no fee grants now charge exorbitant interest rates for small loans. It is important to note that the funding organizations for MFI initially were not considered as formal financial institutions (Goodman, 2009). One of the most successful MFIs in SSA that owns the *M-PESA* mobile money, reports that the M-PESA project was initially funded with a public sector challenged grant (Hughes & Lonie, 2007).

The outreach by MFIs has been examined in the literature. According to Lafourcade, Isern, Mangi, and Brown (2005), African MFIs are the fastest growing in the world as more than 70 percent of them are now deposit-taking in various financial products like savings accounts and the regulated MFIs that are often privately owned

posted the highest return on assets in 2005 and again in 2012. The question then is, “why is it not possible for MFIs to charge low fees and low interest rates for micro-loans?” The MFIs that are supposed to serve SMEs and entrepreneurs at a small fee are charging very high interest rates to these borrowers and such rates are often higher than those that are paid by affluent borrowers. According to Rosenberg, Gonzalez, and Narain (2009), one of the reasons for the high interest rate charges is linked to the new mission of MFIs. Many MFIs were initially non-governmental organizations (NGOs) that provided mostly micro lending services, but they now see deposit-taking as a more lucrative, sustainable and profitable path to expansion and funding of micro-loans. The MFIs become deposit takers by approaching the governmental banking regulatory bodies, like the Bank of Ghana, for licenses for deposit-taking and a host of other banking services. When such licenses are granted to MFIs, they become privately-owned commercial corporations that provide a range of services including microcredit, savings, insurance and money transfers, and their mission ultimately changes to maximizing profits for their private shareholders.

Rosenberg et al. (2009) also summarize the other reasons:

- administrative costs for micro lending are much higher than regular bank lending
- operational inefficiencies
- lack of financial sustainability – making MFIs and related organizations charge higher rates and fees in order to cover the cost of lending

On the issues of financial sustainability and operational inefficiencies, Rosenberg et al. (2009) explain: “...accepting the importance of financial sustainability does not end the discussion of interest rates, and where to draw the line is a complex issue. An interest rate charge represents money taken out of clients’ pockets and it is unreasonable if it not only covers the costs of lending but also deposits “excessive” profits into the pockets of MFI private owners. Even an interest rate that only covers costs and includes no profit can still be unreasonable if the costs are excessively high because of avoidable inefficiencies.” (p. 1)

Table 1 shows the number of MFIs in selected Africa countries. The data are organized by country, number of MFIs, active borrowers, and the gross loan portfolio in 2012. It is the result from a large study of MFIs and their borrowers by the Microfinance Information eXchange (MIX).

Table 1: Number of MFIs in Selected African Countries, Active Borrowers and Gross Loan Portfolio, 2012

Country	Number of MFIs	Active Borrowers	Gross Loan Portfolio (USD)
Benin	26	299,388	177,572,052
Burkina Faso	13	97,783	33,023,154
Burundi	18	100,893	30,923,939
Cameroon	8	116,793	247,734,649
Chad	2	14,264	7,991,961
Congo, Democratic Republic of the	13	155,757	127,229,259
Congo, Republic of the	2	5,238	3,586,558
Cote d’Ivoire (Ivory Coast)	12	36,520	42,096,504
Ethiopia	24	2,616,254	558,787,567
Ghana	11	197,394	53,973,978
Kenya	23	1,226,743	1,854,127,468
Liberia	2	22,488	3,079,348
Malawi	4	164,848	13,870,608
Mali	1	22,872	3,931,992
Mozambique	4	28,768	13,069,803
Namibia	1	12,684	3,867,860
Niger	5	19,301	7,598,000
Nigeria	12	1,067,808	273,862,920
Rwanda	24	81,076	89,767,232
Senegal	9	243,888	222,842,331
Sierra Leone	2	23,585	2,506,023
South Africa	3	5,396	3,422,231,357
Tanzania	8	198,913	117,504,871

Table 1 cont.

Togo	9	108,649	171,369,607
Uganda	9	203,232	178,502,548
Zambia	2	13,807	2,082,659
Zimbabwe	1	21,401	19,189,087

Source of data: <http://www.mixmarket.org/mfi/region/Africa>

Table 1 shows that the largest number of borrowers of funds from the MFIs was from Ethiopia, Kenya, and Nigeria. For Ghana, the study reports about 11 active MFIs, with about 200,000 borrowers of funds, and the gross loan amount in U.S. dollars stood at about \$54 million. A large percentage of the SSA unbanked remains to be served effectively by MFIs. The inherent risk with the high rate loans is that some borrowers do not follow the payment terms and can default on the loans.

METHODOLOGY

A survey was created to collect a variety of information from recipients of small business micro-loans in Ghana. Students from Cape Coast University in Central Ghana administered the survey to small business owners throughout the country – Regions R1, R2, R3, and R4 (Greater Accra, Central, Eastern, and Western). The survey included questions regarding the participant and business profile, the cost of borrowed funds, participant assessment of Ghana’s Entrepreneurship Program, their use of technology and record-keeping, and their expectation about the growth of their businesses.

One question asked if the respondent paid interest to their lenders. The response to this question was used to segment respondents across several attitudinal and perceptual loan-related categories in an attempt to identify relationships between loan attitude and performance information and the payment or non-payment of loan interest. All the analyses were performed using chi-square tests of independence. The null hypothesis in each test is that the Payment/Non-payment of Interest and the demographic variable being analyzed are independent. The alternative hypothesis is that the two variables are related.

A total of 398 survey responses were collected. All respondents answered the “Do you pay interest to your lender(s) - Yes/No” question. Of these, 57 respondents were paying interest on their micro-loans and 341 were not.

Some respondents, however, did not answer all the remaining questions. If a questionnaire contained a valid response to the specific demographic item being analyzed for differences, it was included in that item analysis. This means that a particular respondent may have been included in the analysis of one demographic variable but excluded in the analysis of the next demographic variable.

RESULTS

By Years Since Start-Up of Business

Table 2 shows the distribution of respondents paying interest and not paying interest by region. One interest paying respondent and five non-interesting paying respondents did not answer the question regarding the age of the business. A significant difference exists between interest payers and non-payers relative to how long ago they started their businesses (chi-square 4 d.f. = 9.97, $p < .05$), indicating a relationship between the length of time since business start-up and payment of interest. The proportion of those paying interest on loans taken to start a business three to four years ago is significantly higher than the other business-age categories.

Table 2: Information Regarding Years in Business

How long ago did you start up your business	Pay Interest - Yes	Pay Interest - No
Less than 1 year	5 (8.9%)	54 (16.1%)
1-2 years	4 (7.2%)	35 (10.4%)
3-4 years	17 (30.4%)	49 (14.6%)
5-8 year	11 (19.6%)	85 (25.3%)
Over 8 years	19 (33.9%)	113 (33.6%)
Total	56 (100%)	336 (100%)

By Percent of Profit Going to Repayment of Loans

Table 3 shows the distribution of respondents’ perceptions about the portion of their profits that are used to repay their business loans. Eight interest paying respondents and 298 non-interest paying respondents did not answer this question. A significant difference exists between interest payers and non-payers regarding their perception of how much profit is used for the repayment of their loans (chi-square 4 d.f. = 49.28, $p < .001$), indicating a relationship between perception of loan repayment burden and payment of interest. A significantly higher proportion of borrowers paying interest perceive (Agree or Strongly Agree) that 50% or more of their profits are used for loan repayment. A t-test comparison of scoring means between interest payers and non-interest payers on loan repayment confirms the higher level of disagreement among non-interest payers (mean_{interest} = 3.29, mean_{no-interest} = 1.40, $p_{equal\ means} < .001$); confirming that interest payers perceived a greater portion of their profits went toward repayment of loans.

Table 3: Perception of Percent of Profit Used to Repay Loan

I can say that 50 % or more of my profit goes to repay my loan	Pay Interest - Yes	Pay Interest - No
Strongly Disagree	4 (8.2%)	34 (79.0%)
Disagree	15 (30.6%)	5 (11.6%)
No Opinion	7 (14.3%)	2 (4.7%)
Agree	9 (18.4%)	0 (0%)
Strongly Agree	14 (28.5%)	2 (4.7%)
Total	49 (100%)	43 (100%)

By Sufficiency of Loan Amount

Table 4 shows the distribution of respondents’ perceptions about the sufficiency of their small business start-up loans. Eight interest-paying respondents and 299 non-interest paying respondents did not answer this question. A significant difference exists between interest payers and non-payers regarding their perception of the start-up loan sufficiency (chi-square 4 d.f. = 39.74, $p < .001$), indicating a relationship between perception of loan sufficiency and payment of interest. A significantly higher proportion of non-interest paying borrowers perceive (Disagree or Strongly Disagree) that their loans were inadequate for their start-up needs. A t-test comparison of scoring means between interest payers and non-interest payers confirms this (mean_{interest} = 2.49, mean_{no-interest} = 1.26, $p_{equal\ means} < .001$).

Table 4: Loan Amount Information

The loan Amount that I received was sufficient for my small business start-up	Pay Interest - Yes	Pay Interest - No
Strongly Disagree	10 (20.4%)	36 (85.7%)
Disagree	20 (40.8%)	3 (7.1%)
No Opinion	7 (14.3%)	2 (4.8%)
Agree	9 (18.4%)	0 (0%)
Strongly Agree	3 (6.1%)	1 (2.4%)
Total	56 (100%)	340 (100%)

By Those Receiving a Loan Within the Last Five Year

Table 5 shows the distribution of respondents paying interest and not paying interest by receipt of loans during the last five years. Six interest paying respondents and 37 non-interest paying respondents did not answer this question. A significant difference exists between interest payers and non-payers relative to the recency of their business (chi-square 1 d.f. = 60.52, $p < .001$) A significantly higher proportion of those paying interest have loans that are less than five years old.

Table 5: Loan Timing Information

I received a loan during the last 5 years to support my business	Pay Interest - Yes	Pay Interest - No
Yes	30 (60.7%)	38 (56.6%)
No	21 (21.5%)	266 (32.2%)
Total	54 (100%)	304 (100%)

By Business Growth

Table 6 shows the distribution of reported business growth for both interest-paying and noninterest-paying respondents who received business loans during the last five years. Of the 30 interest paying respondents acknowledging receipt of a loan during the last five years (see Table 4), five did not answer the question about business growth. Of the 38 non-interest paying respondents acknowledging receipt of a loan during the last five years (see Table 5), six did not answer the question about business growth.

Table 6: Annual Percentage Growth in Business if Loan Received During Last 5 Years

My business grows about ___% each year since I received a loan (skip in no loan in last 5 years)	Pay Interest - Yes	Pay Interest - No
10% growth	3 (12.0%)	2 (6.3%)
15% growth	10 (40.0%)	6 (18.7%)
20% growth	1 (4.0%)	2 (6.3%)

Table 6 cont.

25% growth	5 (20.0%)	2 (6.3%)
30% growth		2 (6.3%)
35% growth		2 (6.3%)
40% growth		4 (12.5%)
45% growth		3 (9.3%)
50% growth	2 (8.0%)	6 (18.7%)
55% growth		
60% growth	2 (8.0%)	1 (3.0%)
65% growth		
70% growth		2 (6.3%)
75% growth		
80% growth	2 (8.0%)	
Total	25 (100%)	32 (100%)

Even though the respondents were asked to estimate business growth in an open-ended format, all provided answers that were some multiple of 5%. Because of the wide range of responses and the presence of so many empty cells, the responses were grouped into two categories - estimated growth rate less than 25% and estimated growth rate of 25% or higher. See Table 7 for category summaries.

Table 7: Categorized Percentage Growth in Business if Loan Received During Last 5 Years

My business grows about ___% each year since I received a loan (skip in no loan in last 5 years)	Pay Interest - Yes	Pay Interest - No
Less than 25% annual growth	14 (56.0%)	10 (31.3%)
25% or higher annual growth	11 (44.0%)	22 (68.7%)
Total	25 (100%)	32 (100%)

A chi-squared test on the data presented in Table 7 shows marginal significance (chi-square 1 d.f. = 3.53, p = .06), indicating a possible relationship between the payment of interest and the perceptions of business growth among those respondents who have received loans during the last five years.

CONCLUSION

In conclusion, the study helps to show that a higher proportion of those not paying interest perceived that they had a greater rate of annual business growth than those paying interest (Table 7). It helps to support the position that is established in the literature that borrowers who pay interest regularly felt burdened by high interest rates. A significant difference also existed between interest payers and non-payers regarding their perception of the start-up loan sufficiency. A significantly higher proportion of non-interest paying borrowers did perceive (Disagree or Strongly Disagree) that their loans were inadequate for their start-up needs and therefore failed to pay interest on the loans.

Finally, this paper helps to establish a position that the interest rate required on a micro-loan can significantly impact the ability of a SME borrower to repay the loan as well as the associated interest charges, particularly since up to 50 percent of a borrower’s profit margin can be used to service such a micro-loan.

AUTHOR INFORMATION

Alice S. Etim earned her Ph.D. at the University of North Carolina at Chapel Hill. She researches information and communication technology (ICT) adoption by business organizations, project teams and the Bottom of the Pyramid (BOP) populations as well as the applications of such technologies in business, commerce, microfinance and healthcare. Dr. Etim is currently Assistant Professor of Management Information Systems at Winston Salem State University. She is a certified Project Management Professional (PMP®) and had worked for IBM Software Group for 12 years in various positions, including Staff Software Engineer and Project Manager. E-mail: etima@wssu.edu (Corresponding author)

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REFERENCES

1. Armendariz, B., & Morduch, J. (2010). *The economics of microfinance*. Cambridge, MA: MIT Press, 2nd edition.
2. Basu, A., Blavy, R., & Yulek, M. (2004). Microfinance in Africa: Experience and lessons from selected African countries. (IMF Working Paper, WP/04/174).
3. Chaia, A., Dalal, A., Goland, T., Gonzalez, M., Morduch, J., & Schiff, R. (2013). Half the world is unbanked. In R. Cull, A. Demirguc-Kunt, & J. Morduch (ed.), *Banking the world: Empirical foundations of financial inclusion*. Cambridge, MA: MIT Press.
4. Etim, A. S. (2011). Bottom-up business development: Empowering low income societies through microfinance and mobile technologies. *International Journal of Humanities and Social Science*, 1(13).
5. Goodman, P. (2009). Raising MFI equity through microfinance investment funds. In J. D. Pischke & I. Matthaus-Maier (ed.), *New partnership for innovation in microfinance* (pp. 17-45). Berlin Heidelberg: Springer.
6. Hughes, N., & Lonie, S. (2007). M-PESA: Mobile money for the “Unbanked”, turning cellphones into 24-hour tellers in Kenya. *Innovations*, winter & spring.
7. Lafourcade, A., Isern, J., Mangi, P., & Brown, M. (2005). Overview of the outreach and financial performance of microfinance institutions in Africa. *Symposium on Microfinance Investment Funds*, Berlin, Germany.
8. Padmanabhan, K. P. (1988). *Rural credit: Lessons for rural bankers and policy makers*. London, U.K.: Intermediate Technology Publications.
9. Rosenberg, R., Gonzalez, A., & Narain, S. (2009). The new moneylenders: Are the poor being exploited by high microcredit interest rates? The Consultative Group to Assist the Poor (CGAP), 15, Retrieved December 5, 2013, from http://econ336-s12-basole.wikispaces.umb.edu/file/view/Microfinance_Interest_Rates.pdf
10. Tagoe, N., Nyarko, E., & Anuwa-Amarh, E. (2005). Financial challenges facing urban SMEs under Financial Sector Liberalization in Ghana. *Journal of Small Business Management*, 43(3), 331-343.

NOTES