



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Multiple Borrowing and Loan Repayment: A Study of Microfinance Clients at Iringa, Tanzania

By Hosea Mpogole, Immaculate Mwaungulu, Serijo Mlasu,
& Galinoma Lubawa

Tumaini University, Iringa

Abstract - Studies on multiple borrowing and its effect on loan repayment among clients and sustainability of microfinance providers (MFIs) show contradicting results. Some studies indicate that multiple borrowing has a positive effect on loan repayment and sustainability of MFIs while others show that it leads to over indebtedness and consequently default on loan. Therefore, this study analysed the incidences of multiple borrowing, reasons for multiple borrowing, and effects of multiple borrowing on loan repayment at Iringa municipality in Tanzania. Results showed that prevalence of multiple borrowing at Iringa in Tanzania was very high. Over 70% of the 250 microfinance clients had at least two loans from different MFIs at the same time. In addition, about 16% had also borrowed from individual lenders. Major reasons for multiple borrowing were insufficient loans from MFIs, loan recycling, and family obligations. Over 70% of the respondents had problems in loan repayment because of multiple pending loans. We found that education level and number of dependants of the respondent significantly influenced the number of loan contracts. Recommendations are also provided.

Keywords : *Loan repayment; Microfinance; Microfinance institutions; Multiple borrowing; Multiple loans, Tanzania.*

GJMBR-B Classification : *FOR Code:150203, 150202, JEL Code: G21*



MULTIPLE BORROWING AND LOAN REPAYMENT A STUDY OF MICROFINANCE CLIENTS AT IRINGA, TANZANIA

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

© 2012 . Hosea Mpogole, Immaculate Mwaungulu, Serijo Mlasu, & Galinoma Lubawa. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Multiple Borrowing and Loan Repayment: A Study of Microfinance Clients at Iringa, Tanzania

Hosea Mpogole^a, Immaculate Mwaungulu^σ, Serijo Mlasu^a, & Galinoma Lubawa^a

Abstract - Studies on multiple borrowing and its effect on loan repayment among clients and sustainability of microfinance providers (MFIs) show contradicting results. Some studies indicate that multiple borrowing has a positive effect on loan repayment and sustainability of MFIs while others show that it leads to over indebtedness and consequently default on loan. Therefore, this study analysed the incidences of multiple borrowing, reasons for multiple borrowing, and effects of multiple borrowing on loan repayment at Iringa municipality in Tanzania. Results showed that prevalence of multiple borrowing at Iringa in Tanzania was very high. Over 70% of the 250 microfinance clients had at least two loans from different MFIs at the same time. In addition, about 16% had also borrowed from individual lenders. Major reasons for multiple borrowing were insufficient loans from MFIs, loan recycling, and family obligations. Over 70% of the respondents had problems in loan repayment because of multiple pending loans. We found that education level and number of dependants of the respondent significantly influenced the number of loan contracts. Recommendations are also provided.

Keywords : *Loan repayment; Microfinance; Microfinance institutions; Multiple borrowing; Multiple loans, Tanzania.*

I. INTRODUCTION

Tanzania is one of the poorest countries in the world with a per capita GDP of about USD 525 (NBS, 2010). About 34% of the 40 million Tanzanians fall below the basic needs poverty line and 17% below the food poverty line (HBS, 2009). Contrary to the government efforts of reducing poverty incidences through various measures such National Strategy for Growth and Reduction of Poverty (NSGRP) or commonly known as MKUKUTA, Vision 2025, Millennium Development Goals (MDG), and financial deepening, the absolute number of people living in poverty has been increasing since 2000/01. For instance, in 2007/08 there were 12.9 million Tanzanians below the basic needs poverty line as compared to 11.4 million in 2000/01 (HBS, 2009).

The main factors behind the slow progress and poverty incidences in Tanzania are primarily inadequate capital accumulation and productivity growth (Randhawa and Gallardo, 2003). To address the issue of capital there has been a number of economic and financial reforms notably the financial reforms of 1991 and the subsequent development of the National

Microfinance Policy of 2000. Since then, a number of supportive microfinance institutions (MFIs) have been mushrooming extending credit to the informal business sector (Chijoriga, 2000; Kuzilwa, 2005). Such MFIs share a common belief that provision of microfinance can facilitate growth and development (Kessy and Urio, 2006; PRIDE Tanzania, 2006).

The rising number of microfinance providers has led to a drastic increase in competition. On one hand, this has enabled microfinance clients to have a wider choice of services as from which MFI to take a loan. On the other hand, anecdotal evidence and our own observation show that the increasing number of MFIs has tempted clients to take more than one loan at the same time resulting into multiple loans. Incidences of one client with five different loans at the same time are not uncommon. Literature shows that multiple borrowing for low-income clients is said to increase incidences of over-indebtedness and consequently default on loans (Gwendolyn, 2001; Vogelgesang, 2003). As such, multiple borrowing can sometimes make clients poorer and at the same time threaten the sustainability of MFIs (Gwendolyn, 2001; Vogelgesang, 2003).

This study, therefore, analysed the incidences of multiple borrowing, reasons for multiple borrowing, and effects of multiple borrowing on loan repayment at Iringa municipality in Tanzania. Currently, Iringa municipality is estimated to have a population size of about 120,000 people (NBS, 2007) with over 10 microfinance providers excluding Savings and Credit Cooperative Societies (SACCOS) (MBF, 2010).

II. MULTIPLE BORROWING AND ITS EFFECTS

The fast growth of microfinance services is leading to the risk of multiple borrowing by clients, which makes governance of the loans being more difficult (Johnson, 2004; Krishnaswamy, 2007). In fact, multiple borrowing is becoming a common practice for many clients in areas where there is concentration of MFIs (Wisniwski, 2010). According to Wisniwski, some of the causes of multiple borrowing are clients poaching and loan pushing on the MFIs side, and loan recycling from the clients' side.

Empirical evidences on the effect of multiple borrowing on clients and the MFIs are contradictory. Some studies find that multiple borrowing has a positive

Author ^a : Tumaini University, Iringa, Tanzania.

Author ^σ : Mama Bahati Foundation (MBF), Iringa, Tanzania.

effect on loan repayment and sustainability of MFIs (Krishnaswamy, 2007) while others, for example, Chaudhury et al. (2001), Rhyne (2001), Johnson (2004), and Wisniwski (2010) show the opposite. Krishnaswamy (2007) reports that multiple borrowers have been found to have equal or better repayment records than their single borrowing peers in the same villages.

Contrary to Krishnaswamy (2007), a number of incidences of failure to repay because of multiple borrowing have been reported. For example, Chaudhury et al. (2001) find that there have been an increasing number of households in Bangladesh that take multiple loans from different MFIs and that their repayment rate was declining. Similar incidences have been reported in Bolivia, Bosnia, Herzegovina, Morocco, Nicaragua, and elsewhere (Rhyne, 2001; Wisniwski, 2010). It has been found that multiple borrowers had increasingly high debt levels and repayment obligations, which they frequently could not fulfil because of over-indebtedness. For instance, Wisniwski (2010) finds a correlation between over-indebtedness as measured by number of credit contracts and risk of default as measured by over 30 day unpaid loans. Individuals with more credit contracts were at a higher risk of defaulting. On the other hand, Vogelgesang (2003) argues that lower repayment rates may lead to less favourable credit conditions for the poorest borrowers, for example, when interest rates are raised, which may consequently lead them to drop-out from the loan portfolio of the MFI. In this regard, Johnson (2004) argues that caution must be taken when planning for expansion of loan to discourage multiple borrowing and default.

Incidences of multiple borrowing and its effects have not been well studied and documented in a Tanzanian context. As such the prevalence of multiple borrowing, reasons for multiple borrowing and their effects have not been documented. This study attempted to bridge this knowledge gap and to propose ways of managing loans for sustainability of the microfinance sector and the informal business sector. According to UK (2007), over-indebtedness threatens the government's goal of improving the well-being of its citizens and is therefore a serious concern.

III. METHODOLOGY

a) *Study location*

The study was conducted at Iringa municipality in Tanzania. The location was purposively selected for two major reasons. First, Iringa has both characteristics of urban and semi-urban features where like other parts of the country, microfinance services have been growing rapidly with increasing cases of multiple borrowing (MBF, 2010). Second, the location was within the reach of the researchers especially in terms of associated travel and data collection costs since there was no external funding for this study. According to Creswell

(2003) and Kumar (2011), the choice of study location and data collection depend upon among other things the resources available and the demographic characteristics of the study population. As such, we did not find any threats or limitations on data quality associated with the study location.

b) *Sampling and data collection*

A sample of 250 microfinance clients from 6 MFIs at Iringa municipality was included in the survey. The six MFIs were BRAC Tanzania, FINCA, PRIDE Tanzania, IDYDC, MBF, and Presidential Trust Fund (PTF). MFIs were purposively selected because of their popularity regarding the number of clients they served. In addition, six depth interviews were conducted.

Survey participants were randomly drawn from the mentioned MFIs when they went to repay the loan or to negotiate for an extension of repayment date. A lot of socialisation was done to make the interviews interactive for participants to disclose their multiple borrowing statuses. Depth interviews were carried out with group loan leaders. Because of lack of collateral, clients organise themselves in groups and guarantee each other. In case of default of one group member, the entire group is held responsible. These interviews helped to solicit information on prevalence of multiple borrowing among group members. It was considered easier for a person to talk about the status of the group or another person than him/herself. In this regard, depth interviews were supplement to the survey questionnaire. However, since the results of survey questionnaire and the interviews did not contradict, the distinction between the two in the results and discussion section is less pronounced.

Depth interviews were conducted in Swahili, a Tanzanian national language and later translated to English. Each interview took about 45 minutes and was tape-recorded for further transcription. Participants of the depth interviews were not part of the respondents of the survey questionnaire.

The survey questionnaire included questions on: demographic information of the respondents such as age, education level, and gender; whether had loans from more than one institution; reasons for taking more than one loan; repayment schedule; whether repays on time; and benefits and problems associated with multiple loans. The main survey was conducted between June and July 2010. Data for this study were part of the principal researcher's MBA dissertation at Tumaini University, Iringa University College.

c) *Data analysis techniques*

This was a descriptive study aiming at obtaining a general picture of the prevalence of multiple borrowing, reasons for multiple borrowing and associated effects of multiple borrowing. Although we performed a regression analysis for determinants of

multiple loan contracts, rigorous statistical/econometrical analysis was not our aim at this stage as we did not focus at meeting any statistical significance (see Kumar (2011)). For the regression model, we hypothesised that age, sex, education level, and number of dependants would affect the number of loan contracts of clients. This supposition led to the development of the following linear model:

$$\text{Multiloans} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{Education} + \beta_4 \text{dependants} + \epsilon$$

Where:

- Multiloans is the dependent variable measured by the number of loan contracts a client had;
- Age is the age (in years) of the client;
- Sex is the sex of the client (1 = male, 0 = female);
- Education is the level of education of the client measured on a scale of 1 to 5, where 1 means no formal education and 5 means university/college education;
- Dependants is the number of persons who completely depend on the client for a living;

- β_0 is the intercept;
- β_i 's are the parameters to be estimated using the OLS method; and
- ϵ is the stochastic error term.

Also, depth interviews were coded by tagging recurring themes about incidences of multiple borrowing, reasons for multiple borrowing, and benefits/problems associated with multiple borrowing.

IV. RESULTS AND DISCUSSION

a) Description of respondents

Our sample consisted of both male and female respondents. As shown in Table 1, out of the 250 survey respondents, about 38% were male while the remaining about 62% were female. Since our sample was random, this reflects the current situation where majority of the MFIs focus their loans to women. It was expected that men would have more multiple loans than women because are less risk averse as compared to women (Olomi, 2009).

Table 1: Characteristics of respondents

Category	Frequency	Percentage	Category	Frequency	Percentage
Sex			Dependants		
Male	96	38.4	1 - 3	70	28.0
Female	154	61.6	4 - 5	95	38.0
Total	250	100.0	Above 5	85	34.0
Age			Total	250	100.0
15 - 24	26	10.4	Education		
25 - 34	82	32.8	No formal education	23	9.2
35 - 44	127	50.8	Primary education	125	50.0
45 +	15	6.0	Secondary education	65	26.0
Total	250	100.0	Vocational training	18	7.2
			College/university	19	7.6
			Total	250	100.0

About 51% of all survey respondents were in the 35 to 44 year age group whereas about 43% were less than 35 years of age. It was expected that older people would have more loan contracts than younger ones reflecting the family obligations. Since, clients of 45 years of age and above were negligible, it either means that older people were not engaged in small businesses or MFIs discouraged such people. According to NBS (2010), life expectancy at birth in Tanzania is 51 years.

In terms of education, 50% of all survey respondents were primary school leavers, 26% had secondary education, and about 9% did not have any formal education. According to HBS (2009), about 24% of adults in Tanzania mainland do not have any formal education. By definition, adults with no formal education are the ones who never attended school whether primary or adult education (HBS, 2009). It is interesting

however, to note that even complete illiterate people were entrusted with loans. In this study it was expected that individual with higher levels of education would have less loan contracts as compared to individuals with lower levels.

The other important characteristic of respondents to measure was the number of dependants. As shown in Table 1, all respondents had at least one dependant. However, 72% of all survey respondents had four or more dependants. Contrary to HBS (2009), which defines dependants as individuals who are under 15 or above 65 years, we defined dependants as individuals of whatever age who entirely depend on the respondent for a living. We expected that individuals with more dependants would have more loan contracts than those with fewer dependants.

b) *Existence of multiple loans, reasons, and repayment*

The incidences of multiple loans, reasons for multiple loans, and effects on repayment schedules are summarised as in Table 2. Results indicate that about 71% of all survey respondents had two or more loan contracts with different MFIs at the same time. This indicates that the prevalence of multiple borrowing at Iringa in Tanzania is very high. In addition to multiple loan contracts with MFIs, about 16% of all survey

respondents had also borrowed from friends/relatives or just individuals. These findings indicate that majority of the MFIs did not adhere to traditional banking credit rating history nor did they share clients' information with each other. On the other hand, this might reflect Wisniwski (2010) argument that client poaching exist among MFIs in various countries. Since, majority of the MFIs are clustered in same urban or town centres, they certainly compete for the same clients.

Table 2: Incidences of multiple loans, reasons, and effects

Category	Freq	%	Category	Freq	%
No. of loans from MFIs			Reasons for multiple loans		
One	72	28.8	Loan recycling	29	11.6
Two	125	50	Family obligations	60	24.0
Three or more	53	21.2	Delayed loan disbursement	10	4.0
Total	250	100	Small loans from MFIs	80	32.0
Loans from friends/individuals			Influence of friends	26	10.4
Yes	39	15.6	Relaxed procedures	45	18.0
No	211	84.4	Total	250	100.0
Total	250	100	Reasons for late repayment		
Incidences of late repayment			Multiple loans	85	34.0
Yes	178	71.2	Family obligations	59	23.6
No	72	28.8	Poor business turnover	106	42.4
Total	250	100.0	Total	250	100.0

We asked respondents to mention the one major reason for multiple loan contracts. Results show that the mismatch between the size of loans issued by MFIs and the needs of the clients was one of the major reasons for multiple loan contracts. During the depth interviews, we learnt that some MFIs provide loans between TZS 50,000 to TZS 100,000 equivalent to USD 36 to USD 72 for an exchange rate of TZS 1,396 per USD 1 (BOT, 2010). These amounts are too small to conduct any meaningful business; as such clients have to take the small loans from different sources to reach their goals. Other reasons for multiple borrowing include family obligations, loan recycling, and relaxed or simple loan procedures, influence of friends who are taking multiple loans, and delayed loan disbursement from the MFI in which the client first applied. Family obligations ranked second after that of small loans. This means that although MFIs provide loans for running businesses, clients used the loan for family obligations as well. From the depth interviews, we also learnt that clients did not distinguish business from family matters, as one informants said in Swahili "Huwezi kuacha watoto wanakufa wakati hela ya mkopo ipo" meaning in our own interpretation "You cannot leave children dying at home while there is some money from the loan." The

lack of distinction between family and business in Tanzania has persisted for quite some time (Olomi, 2009).

Incidences of failure to repay loan on time were also high. About 71% of all survey respondents admitted to often face the problem. Multiple borrowing was one of the major reasons for failure to repay on time. Although other reasons such as family obligations and poor business turnover were mentioned, we are of the opinion that the major reason remains to be multiple borrowing. Our argument is backed by the fact that about 71% of all survey respondents had two or more loan contracts while at the same time about 71% of all survey respondents faced problems in loan repayment. With the exception of Krishnaswamy (2007), our findings are consistent with previous studies that multiple borrowing among the poor increases their indebtedness, which threatens their ability to repay. However, Krishnaswamy (2007)'s findings may apply in situations where the borrowers are purely business enterprises who separate the family from the business. In the following section, we briefly discuss about the factors for multiple borrowing.

c) *Determinants of multiple borrowing*

The regression results are shown in Table 3. As seen, the model was significant in explaining about multiple borrowing. The adjusted R-squared was as high

as 83.5% and the variance inflation factor (VIF) did not indicate any presence of serious collinearity among the independent variables.

Table 3: Factors for multiple borrowing

Source	SS	df	MS	Number of obs =	250	
				F(4, 245)	316.140	
Model	103.503	4.000	25.876	Prob > F	0.000	
Residual	20.053	245.000	0.082	R-squared	0.838	
				Adj R-squared	0.835	
Total	123.556	249.000	0.496	Root MSE	0.286	
Multiloans	Coef.	Std. Err.	t	P>t	VIF	Tolerance
Age	0.073	0.048	1.53	0.128	.247	4.044
Sex	-0.095	0.069	-1.37	0.172	.290	3.446
Education	0.153	0.030	5.01	0.000	.342	2.925
Dependants	0.550	0.048	11.49	0.000	.232	4.307
_cons	-0.294	0.155	-1.89	0.059		

Contrary to our expectation, we find that age and sex did not significantly affect the number of loan contracts an individual had. However, level of education and number of dependants significantly affected the number of loan contracts a client had. Again, contrary to our expectation we found that the higher the level of education the more the number of loan contracts. Also, the coefficient of Dependants is relatively very high. The more dependants a client had the more were the loan contracts. This reflects the response that one of the reasons for multiple loans was family obligations, where we have seen that some clients borrow to meet some family problems rather than for business. Even those who borrowed for business did not distinguish between family matters and business itself. In fact, we found that the Pearson correlation coefficient between Multiloans and Dependants was as high as 0.90. Meaning that there is a strong and positive association between the number of dependants a person has and his/her loan contracts.

V. CONCLUSION AND RECOMMENDATIONS

Prevalence of multiple borrowing at Iringa in Tanzania was very high. Over 70% of the 250 microfinance clients had at least two loans from different MFIs at the same time. In addition, about 16% had also borrowed from individual lenders. Major reasons for multiple borrowing were insufficient loans from MFIs, loan recycling, and family obligations. Over 70% of the respondents had problems in loan repayment because of multiple pending loans. We found that education level and number of dependants of the respondent significantly influenced the number of loan contracts.

In order to control the incidences of multiple borrowing we recommend that MFIs should devise a

way of sharing clients' loan information. In addition, MFIs should provide adequate loans so as to avoid the practice of clients to reapply to other MFIs to meet their requirements. Some form of training should also be provided to help clients distinguish between business and family matters.

VI. ACKNOWLEDGMENTS

The authors would like to thank Ms. Grace Sanga and all other research assistant for data collection. Also, authors would like to thank all respondents for their time and for their participation in this study.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Bank of Tanzania (BOT), (2010). Indicative Foreign Exchange Market Rates. Bank of Tanzania; <http://www.bot-tz.org>, site visited September 2010.
2. Chaudhury, I. A. and Imran, M. (2002). Dimensions and Dynamics of Microfinance Membership Overlap: A Micro Study from Bangladesh. *Small Enterprise Development* 13(2): 46-55.
3. Chijoriga, M. M. (2000). Performance and Sustainability of Micro Financing Institutions in Tanzania. *Austrian Journal of Development Studies*, Volume, XVI/3, December.
4. Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Second edition). Sage Publications; Thousand Oak, London, and New Delhi.
5. Gwendolyn, A. (2001). *An Empirical Analysis of Microfinance: Who are the Clients?* North East Universities Development Consortium (NEUDC); <http://www.minneapolisfed.org>, site visited July 24, 2010.

6. Household Budget Survey (HBS), (2009). Household Budget Survey 2007. Ministry of Finance and Economic Affairs, United Republic of Tanzania.
7. Johnson, S. (2004). The Dynamics of Competition in Karatina's Financial Market. Imp-Act Working Paper No. 9. Brighton: Institute of Development Studies.
8. Kessy, S. S. A. and Urio, F. M. (2006). The contribution of microfinance institutions to poverty reduction in Tanzania. Research on Poverty Alleviation (REPOA); Dar es Salaam.
9. Krishnaswamy, K. (2007). Competition and multiple borrowing in the Indian microfinance sector. Working Paper, Institute for Financial Management and Research, Centre for Microfinance; <http://www.mendeley.com/research>, site visited on January 31, 2012.
10. Kumar, R. (2011). Research Methodology (Third edition). Sage; Los Angeles, London, New Delhi, Singapore, and Washington DC.
11. Kuzilwa, J. A. (2005). The Role of Credit for Small Business Success: A Study of the National Entrepreneurship Development Fund in Tanzania. *Journal of Entrepreneurship*, 14(2):131-161.
12. Mama Bahati Foundation (MBF), (2010). Annual Report; Mama Bahati Foundation, Iringa, Tanzania.
13. National Bureau of Statistics (NBS), (2010). Tanzania in Figures 2009. Ministry of Finance and Economic Affairs, United Republic of Tanzania.
14. National Bureau of Statistics (NBS), (2007). Iringa region socio-economic profile. NBS and Iringa Regional Commissioner's Office, United Republic of Tanzania.
15. Olomi, D. R. (Ed.) (2009). African entrepreneurship and small business development: context and process. Otme; Dar es Salaam.
16. PRIDE Tanzania (2006). Performance and Expansion service to the working poor.
17. Randhawa, B. and Gallardo, J. (2003). Microfinance Regulation in Tanzania, Implications for Development and Performance of the Industry; <http://www.worldbank.org>, site visited July 20, 2010.
18. Rhyne, E. (2001). Mainstreaming Microfinance: How lending to the poor began, grew, and came of age in Bolivia. Kumarian Press ; Bloomfield CT.
19. UK (2007). Tackling over-indebtedness. Department for Business Enterprise & Regulatory Reform, Annual Report, UK; <http://www.bis.gov.uk>, site visited on April 12, 2011.
20. Vogelgesang, U. (2003). Microfinance in times of crisis: The effects of competition, rising indebtedness and economic crisis on repayment behaviour. *World Development*; 31(12): 2085-2115.
21. Wisniwski, S. (2010). Overindebtedness: Evidence, causes and consequences. European Fund for Southeast Europe, Prague, Czech Republic.