Microcredit, Micro Enterprising and Repayment Myth: The Case of Micro and Small Women Business Entrepreneurs in Tanzania

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The aim of this article is to examine the sources and determinants of loan repayment among women microcredit clients in Tanzania. We surveyed a random sample of 286 business owners who were PRIDE microfinance programme clients in Morogoro and Iringa towns. The study focused on loan conditions, household characteristics and business management experience, skills and management practises by the business owners. Loan repayment difficulties were reported among 19.6 per cent of borrowers. Logistic regression results have shown that loan size, interest rate and duration of membership in the programme do not predict loan repayment. Instead the results have demonstrated that business skills and management practises play a very significant role. We also found household size, the number of household members with fixed salaries and decision making regarding loan use to have a significant influence on loan repayment. From the results, it is established that the factors that limit growth of women businesses are also liable for their repayment difficulties. These results may imply that for the borrowers to increase their avenues for loan repayment, it is imperative that the measures used by microfinance programmes to ensure that borrowers repay their loans they also include support services that enable clients to expand their businesses; increase profit levels and generate enough surplus for loan servicing and re-investment in the business. Such services could include training in business skills and management. This further suggests that there is a need for an integrated and holistic policy approach in supporting and promoting micro enterprising among the women rather than piecemeal initiatives.

Keywords: Tanzania, microcredit, microenterprising, repayment

Introduction

Increasing numbers of women particularly in the developing world are establishing micro and small businesses as a way of generating incomes for their own and their households (Coleman, 2007). Most of these businesses are financed through microcredit. This is because women are more restricted in their access to formal sources of finance owing to limited access to and control over economic resources. Consequently, women are considered unbankable and less creditworthy by the traditional financing sector (Fletschner, 2009). It is therefore assumed that with improved access to microcredit women, are able to engage in micro-enterprising that eventually contributes to improvements in their household incomes, accumulation of assets and enhancement of their avenues for escaping poverty. Moreover, microcredit assisted enterprising enables women business owners increase their opportunities for self-employment, self-empowerment and command of respect in their households and societies at large.

Interestingly, despite their improved access to microcredit, studies on small business ownership report that businesses owned by women are not only smaller but also they underperform businesses owned

by men in a number of performance measures (Coleman, 2007). Evidence from research also suggests that women businesses are more vulnerable to financial failure and distress (Watson & Robinson, 2003). While there exist mixed findings regarding the factors influencing performance of micro and small businesses, gender of the business owner is deemed to play a very significant role (Fielden, Davidson, Dawe & Makin, 2003). Gender plays a role in business performance because it influences self-perception (Anna et al., 1999), motivation and the choice or type of a business to undertaken (Shane, Kolveried & Westhead, 1991). Gender is also viewed as a proxy for life experiences, access to networks and other resources needed for business start-up and growth (Verheul & Thurick, 2001). Gender differences also make male and female business owners behave differently with respect to responses to recognition and exploitation of entrepreneurial opportunities (Fielden et al., 2003), consequently, affecting their businesses performance in different magnitudes.

Information Gap and Objectives of the Study

Despite the long establishing empirical evidence that women businesses are smaller and underperform businesses owned by men in a number of performance measures, research on microfinance on

the other hand, has established that women microcredit clients have higher loan repayments than men (Armendariz & Morduch, 2005). From these facts, conventional wisdom would suggest that if women-owned businesses underperform and experience high failure rates, it is evident that women are better payers not because they are efficacious in their entrepreneurial undertakings but possibly because of some other reasons. Moreover, aside celebrating these high repayment rates, empirical evidence on the determinants of loan repayment among women and how women borrowers repay their loans is flimsy and not well addressed in the literature. Most of past research has focused on the factors influencing loan repayment characteristics of borrowers without considering the effect of gender and how women borrowers repay their loans. In addition, while providing useful insights, much of the past research also suffers from mixed findings leading to inadequate conclusions(see for example, Arene & Aneke, 1999; Bhatt & Yang, 2002; Eze & Ibekwe, 2007; Brehanu & Fufa, 2008). It is also true that the factors influencing loan repayment capacity among borrowers are not only likely to differ by programmes but also differ from country to country depending on the domestic business and economic environment.

Therefore, this study has two main objectives. Firstly, it intends to investigate how women micro and small business owners in Tanzania repay their loans, and secondly to explore the factors determining loan repayment among them. To the best of our knowledge, there is no prior empirical evidence in the country on how women microcredit clients repay their loans and the factors influencing their ability to repay.

Literature Review

Microfinance and lending models

The terms microfinance and microcredit are often used interchangeably; however, they differ in their attributes. Specifically, microfinance is the provision of financial services to low-income microenterprises and poor households that have limited access to formal sources of credit. These services include savings and loans. They also include insurance, leasing, and money transfers. On the other hand, microcredit is simply the provision of credit services only in the form of small loans or micro loans for supporting microenterprise and other income generating activities (Ledgerwood, 1999).

While providing microloans to the poor; microfinance institutions risk none repayment of their funds and sustainability of their operations. To address this challenge, microfinance institutions use a number of lending models when disbursing loans to their clients. They include among others solidarity group, village banking and individual lending models (Brau & Wooler, 2004). Solidarity group model has

its origin in the Grameen Bank in Bangladesh. In this model, lending is done to a solidarity group of five (5) persons in which each group member guarantees the other members' repayment, and therefore access to consequent loans depends on successful repayment by all members of the group. In case of default by any group member, the other members are obliged to repay the loan on behalf of the defaulter, or otherwise, the groups' possibility of access to future credit is forfeited (Brau & Wooler, 2004). On the other hand, village banking model involves community based and managed credit and savings associations. In this model, a loan is extended to a larger group of clients in the range of 15-30 persons or more. Usually, the microfinance institution lends a loan to the village bank, which in turn lends to individual members. In individual lending model, the loan is given to individuals instead of groups.

Group lending models

The essence of solidarity group and village banking models is that the majority of microfinance programmes potential clients are poor, and therefore, if collaterals were a requirement for borrowing, most potential clients would not be able to borrow (Bali Swain, 2004). Therefore, solidarity groups and village banking are being used to guarantee individual member borrowers who do not have tangible assets as their guarantee. In particular, solidarity groups or group lending is considered the pillar of microfinance programmes sustainability as well as a strategic approach for improving access to credit for the poor in developing countries (Armendariz & Morduch, 2005). Under information asymmetry, group lending may also be used as a screening process to ease the problems resulting from possible moral hazard and adverse selection (Ghatak & Guinnane, 1999). Through group lending, institutions are also able to identify and classify risks of their potential borrowers; detect the diversion of funds, ensure proper utilization of the loans and can easily enforce loan repayment or recover the loans in case of default (Ghatak & Guinnane, 1999). Moreover, group lending helps financing institutions reduce transaction costs and make loan management process less costly. In addition, group lending is able to inculcate risk taking behaviour among borrowers (Giné *et al*., 2010). This is likely to happen when borrowers know each other's investment plans and when information asymmetry exists, making it possible for a borrower to take advantage of the insurance provided by other members of the group (Fischer, 2010).

Beside these advantages, group lending has some drawbacks, including the arduous and time consuming weekly repayment meetings that borrowers have to attend. There are also other challenges resulting from group dynamics. Group lending can cause tension among members especially when some group members intentionally refuse to

repay their loans on the assumption that other borrowers will pay for them (free rider problem). Group lending liability is also more costly for clients that are good credit risks particularly when they are forced to repay the loans of the defaulting members or when clients with smaller loans become reluctant to guarantee borrowers with larger loans (Giné & Karlan, 2010). Likewise, group liability is likely to hinder other potential borrowers from joining microfinance programmes for fear or not wanting to be responsible for other people's loans. Research, has however, established that, the performance of group lending in developing countries is very diverse because of different socio-economic factors, product designs; individual and business characteristics (Armendariz & Morduch, 2005).

Women borrowers and loan repayment

In addition to using group liability as strategic approach to ensuring their sustainability, microfinance programmes are also targeting women on grounds that compared to men, women are better payers of their loans (Pitt & Khandker, 1998). It is also assumed that the participation of women in microfinance programmes has a wide welfare and socio-economic development impacts (Pitt & Khandker, 1998). Empirical evidence also supports repayment adage about women. For example, a study by Hulme (1991) finds that in Malawi, 92 per cent of women repaid their loans on time, compared to 83 per cent for men. Khandker et al. (1995) also found that among Grameen Bank borrowers in Bangladesh repayment rate was 98.7 per cent for women and 85.7 per cent for men. Kevane & Wydick (2001) also arrived at same conclusions in Guatemala that female members had higher repayment rates than men. Moreover, evidence from Pakistan has shown that female borrowers had a higher probability of repaying their loans (Chaudhary & Ishafq, 2003).

It is purported that women are better payers and good credit risks because they are more careful in their investment plans (Todd, 1996). The World Bank (2007) also contends that *"[…] repayment is higher among female borrowers, mostly due to more conservative investments and lower moral hazard risk"* (p.124). It is also assumed that women are better payers because they are easily influenced by coercive sanctions by microfinance programmes and members of the liability group (D'Espallier, Guéri & Mersland, 2009). Arguably, women can easily feel embarrassed by the verbal antipathy of others, and therefore are quick at making their repayments to avoid any possible embarrassment. Besides, it is argued that because of their limited mobility, female borrowers tend to stay closer to their homes, and therefore can easily be monitored and followed up by the microfinance programmes (Armendariz & Morduch, 2005). Armendariz & Morduch (2005) also argue that because of their constrained access to credit from formal sources, women cannot risk to

lose their main source and possibly the only source of credit. Thus, they have to repay their loans to ensure continued access to this vital service. Similar views are shared by Rosenberg (2010). He argues that the higher repayment rates demonstrated by the women simply indicate their desire to retain access to microloans with view to coping with any possible household emergencies or income shocks in the future. He further suggests that borrowers may even be willing to pay high interest rates on the loan even if they receive very small or no return on their loans just to retain their access to credit. This implies that women's continued membership to microfinance programmes cannot simply be interpreted to mean that the services provided by these institutions benefit them and meet their needs. Verhelle & Berlage (2003) contend that repayment rates shown by microcredit borrowers also suggest that there may be more to microfinance than it is assumed or known.

Although studies suggest that women are good payers of their loans, they also highlight reasons for failure to honour their repayment obligations. For instance, studies have long established that women businesses are over-represented in the sectors with relatively lower profits and limited growth opportunities (Coleman, 2007). As a result, women borrowers are more constrained to honour their repayment obligations. Women are also unlikely to repay their loans when they do not have any control over their loans or when their loans are used by spouses or other male members in the household (Kabeer 2001; Mayoux, 2001). Similarly, women may not be able to repay their loans if product and service designs by microfinance institutions are unfavourable or do not meet their needs (Attanasio et al., 2011). From these facts, we gather that if women are able to retain higher repayment rates despite these drawbacks, it obvious that there are other factors contributing to their loan repayment behaviour.

Because of the above reasons, the use of loan repayment rate as a measure of programme success and poverty alleviation effect of microcredit is still debatable. Hulme and Mosley (1998) for example, argue that the use of repayment level can fool evaluators, donors and policy makers to believe that as long the loans are being repaid, the microcredit supported businesses are faring very well, incomes are generated and the poor are being reached and finding their way out of poverty. Similarly, Bali Swain (2004) questions the use of repayment rate to judge the effectiveness of microfinance on poverty alleviation. He contends that repayment rates may simply show the prospects of receiving future loans and not necessarily an indication that the impacts of the loans have been significant. Cull *et al.* (2007), on the other hand argue that at times clients borrow from others sources just to meet their repayment obligations with the microfinance institutions, consequently, forcing them into debt trap.
Repayment performance is also used as a key variable for donors and international funding

agencies to assess the viability and sustainability of microfinance programmes including determining MFIs that still depend on them for their operations (Bali Swain, 2004; Godquin, 2004). For that reason, programme management may inflate or understate their repayment figures to show attractiveness to or the need of more support from donors.   Therefore, attempting to measure the impact of microcredit on poverty alleviation using loan repayment rate is incomplete without studying how borrowers repay their loans.

Factors determining loan repayment

Although studies on the factors determining loan repayment among microfinance institutions borrowers give mixed and overlapping results, the general consensus is that is determined by willingness, ability and other characteristics of the borrowers; businesses characteristics and characteristics of the lending institutions including product designs and suitability of their products to borrowers. Other external factors such as the economic, political and business environment in which the borrower operates are also important determinants of loan repayment (Derban et al., 2005; Addisu, 2006). Regarding the characteristics of borrowers, studies have shown that repayment of loans depend on the willingness and ability of the borrowers to repay. Therefore, individual borrowers can either repay their loans or choose to default. Defaults may be intentional or unintentional (Bhole & Ogden; 2010; Brehanu & Fufa, 2008). Unintentional defaults may be caused by any unforeseen circumstances that affect borrowers, their businesses or households, and consequently their ability to repay (Tedeschi, 2006). In contrast, intentional or strategic default can happen due to moral hazard behaviour by the borrowers. This happens when borrowers have enough money or have the ability but refuse to repay their loans (Brehanu & Fufa, 2008; Tedeschi, 2006).

Concerning business characteristics, Oke *et al*. (2007) found that any business that is making profits is more likely to enable owners repay their loans. On the other hand, Hulme & Mosley (1996) argue that important factors that contribute to repayment performance include the suitability and design features of the loan. Copisarow (2000) and Tedeschi (2006) argue that default rate is likely to be high if microfinance programmes are characterised by poor designs particularly poor enforcement mechanisms. Godquin (2004) found that programmes that provide both financial and non-financial services such as training and health services are more likely to experience higher repayment rates than otherwise. In the following section we present empirical evidence on the factors determining loan repayment.

Empirical evidence of the factors determining loan repayment

As we have already indicated, empirical evidence on the factors determining loan repayment gives mixed and overlapping results. For example, in a study that attempted to assess factors determining loan repayment among borrowers of the Supervised Agricultural Credit Scheme in Enugu State in Nigeria, Arene and Aneke (1999) found that repayment increased with loan size, education level, farm size and household size. They also found that borrowers who had higher gross income and levels of innovations adoption were more likely to meet their loan repayment obligations than otherwise. Likewise, repayment rates improved with shorter distance between home and the source of loan.

In a study that investigated the borrower's socio-economic determinants of loan repayments in microcredit programmes that applied the group lending in the US, Bhatt and Yang (2002) found that repayment increased with the level of education. On the other hand, the study found that the level of household income, business type and borrower's experience were not significant predictors of loan repayment. Evidence from rural Pakistan also shows that borrowers involved in non-farm business activities, borrowers who were using their loans for the intended investment and borrowers with higher educational levels had higher odds of repaying their loans (Chaudhary & Ishafq, 2003).

Moreover, in exploring microfinance repayment problems in the informal sector in Addis Ababa Addisu (2006) found that repayment capacity increased with education level. Addisu also found that borrowers who planned their business activities in advance or who had prior experience were least likely to default in their loan repayment. In contrast, they found that the levels of monthly sales were directly related to non-repayment of loans. Eze and Ibekwe (2007) in their study on determinants of loan repayment in Imo State in Nigeria identified loan size, age of beneficiaries, household size, and number of years of formal education and occupation as the key predictors of loan repayment.

In a different study that explored the determinants of loan repayment rates for agricultural loans in Ethiopia, Brehanu and Fufa (2008) found that borrowers with larger farms, higher numbers of livestock and farms located in areas with sufficient rainfall had a higher capacity to repay their loans. Moreover, borrowers who had higher education level, extra business income and those who were experienced in using agricultural technology had a good repayment performance. They also found that borrowers whose businesses were located closer to the financing institutions were more likely to experience lower default rates, possibly because of close monitoring.

In addition, Dayanandan and Weldeselassie (2008) in their study on loan determinants of small farmers in Northern Ethiopia, found that amount of credit, educational status and occupation (off farm and nonfarm income) were important factors in loan repayment. Other factors determinants were; experience in credit use, repayment period,

ownership of livestock and credit follow-up by credit officers or when there is close supervision of how the fund is being utilized. In a study that examined socio-economic factors influencing loan repayment among small scale farmers in Ogbomoso agricultural zone of Oyo State in Nigeria, Oladeebo & Oladeebo (2008) found that repayment rate increased with loan size, years of farming experience with credit use and education level of the borrower. However, they found repayment ability to decrease with the age of the borrower. Roslan and Mohd Zaini (2009) investigated microcredit loan repayment behaviour of AgroBank Malaysia borrowers in Malaysia. They found borrowers who had a longer duration for repayments to have a higher probability of defaulting. In contrast, borrowers with larger loans, those who were involved in the service sector and attended training in areas related to their businesses were found to have low default rates.

In analysing socio-economic characteristics of small scale farmers that influence their level of loan repayments in Oyo State, Nigeria, Afolabi (2010) examined eight variables: farming experience, amount granted, gross farm income, farm size, family size, non-farm expenses, interest rate charged and non-farm income. Of these, only four variables had significant impact on loan repayment, namely loan amount, farm size, interest charged and non-farm income. In his earlier study, (Afolabi, 2008) that examined socio-economic determinants of loan repayment among small scale farmers in South Western Nigeria, using discriminant analysis, found that age of farmers, gross farm income, non-farm income, net farm income, interest rate charged and farming experience were significant factors in discriminating between defaulters and non-defaulters.

Moreover, in studying the factors which influence loan default among small scale farmers in North-West Province of South Africa, Akwasi & Idowu (2011) found that repayment problems decreased with education level, possession of financial management skills, timely disbursement of the requested loan and technical support received by the farmers. On the other hand, borrowers were more likely to experience repayment problems when faced with increased total monthly household expenditures, increasing size or number of loans and the use of the loan fund for purposes not applied for. In investigating determinants of loan repayment among fishermen in Ghana, Acquah and Addo (2011) find that loan repayment increased with the fishing income, loan size and amount of investment made.

In a recent study that investigated the factors affecting repayment rate of loan beneficiaries of MFIs in the Southeast States of Nigeria, Onyeagocha, Chidebelu, & Chukwuemeka (2012) found that default rate decreased with loan size, level of education, the length of experience in occupation, the ability of the supported business to make profits and portfolio diversity or ownership of multiple enterprises. Another study in Nigeria that analysed smallholder farmers'

loan repayment capacity using household data from 110 cooperative farmers in Ogun State, also found that loan size and farm size had significant positive influences on loan repayment capacity whereas, household size had a negative influence on loan repayment (Ojiako & Ogbukwa, 2012).

Regarding the factors influencing loan repayment among women self-help groups in Bayelsa State, Nigeria, Ugbomeh, Achoja, Ideh and Ofuoku (2008) found that household headship was a determinant factor in loan repayment. In particular, women were more likely to face repayment difficulties when they were the sole household heads. They also found that interest rate and household size were negative predictors of loan repayment. On the other hand, their study established that women borrowers were able to meet their repayment obligations in case of farm output price stability and when borrowers were committed to self-help groups. Evidence from Kenya shows that the ability of women business owners to repay their loans was negatively influenced by social responsibilities such as the feeding of children, paying of house rents, hospital bills, and the number of households members (Sangoro, Ochieng & Bureti, 2012). From the literature review, we deduce that the factors influencing loan repayment differ not only from one programme to another, differ according to the nature of supported activity, but also differ according to the demographic characteristics of the borrowers, their households and other external factors facing both the borrowers and their businesses.

The Microfinance Programme

PRIDE Tanzania is using a modified Grameen methodology. In principal before loans are disbursed potential applicants should form a group of five (5) people called Enterprise groups (EGs). These groups then join in tens to constitute a larger group of 50 clients called Market Enterprise Committees (MEC). In addition, the programme had a loan insurance policy (forced savings) of which clients must pay Tsh.1,500 (US$1.45)[1] per week. Before receiving a first loan, members must save Tsh.1,500 for six weeks, or a total of Tsh.9,000 (US$8.5). For subsequent loans, members must have a minimum savings amount equal to 25% of the loan amount. Once a loan is received, members must continue to save Tsh.1,500 per week. This is in addition to their weekly loan instalments. The forced savings are used to cover defaults and provide the basis for the group guarantee. In case of loan delinquency, the delinquent amount has to be recovered from the savings of the client; otherwise, the solidarity group has to make up the missed payment.

During the time of the survey, the main loan products offered by PRIDE were the solidarity group guarantee loans. The loans were offered in the range of US$ 95 - 4717. Applications to subsequent loans were offered to any member of the liability group

who successfully repaid a first loan and complied with all other requirements. The interest rate charged were 30% for the loans in the range of US$95 - 471.70; 28% for loans in the range of US$707.70 - 943.40; and 24% for the loans in the range of US$1886.80 - 4717.00. It is estimated that as of 2011, PRIDE Tanzania had a loan portfolio of US$, 37.0 million with 100,055 active borrowers and an average loan balance per borrower of US$370.1[2]

Methodology

This study is based on a survey of 286 women business owners who had accessed microcredit from PRIDE – Tanzania microfinance programme at Morogoro and Iringa town branches. The main study was preceded by a pilot study that employed face to face interviews using a questionnaire. The pilot study covered 48 women microcredit clients, and was meant to test adequacy of research instruments including establishing whether the sampling frame and technique were effective. The study was also meant to assess the accuracy of the research protocol. After the pilot study, the survey instrument was refined as well as shortening and dropping some questions that were found to be ambiguous. Rephrasing and sequencing of questions was also done to ensure that all respondents had a common understanding of the questions.

During the main study, the studied respondents were clustered and randomly selected from programme's list of clients depending on their duration of membership in the programme and the amount of last loan. These were mature clients in their second loan cycle and above. We surveyed mature clients on the assumption that they are more likely to have gained experiences in managing both their businesses and loans. To gain the consent of the randomly sampled respondents to participate in the study, potential respondents were informed of the exercise and required to confirm their availability for the survey with credit officers at their respective branch offices. After ascertaining their responses concerning participation in the survey, arrangements for the main study were finalised.

During the survey, no visits were made to the business locations of the clients. Instead, borrowers participated in the survey when coming for their weekly repayment meetings. Surveys were held in a rented primary school classroom close to programme office at the two branches. During the survey, the questionnaires were distributed to respondents for self-administration. In case of those who could not read or write were assisted. Upon filling the questionnaires, all questions were crosschecked for missing data, errors and other ambiguous answers; and clarification was sought before a respondent could leave the room. The average time taken to administer the survey instrument was forty (40) minutes per individual.

After the first round of interview in the two regions, for various reasons not all potential respondents were able to turn up for the interviews. Therefore, another round of interview for the potential respondents was planned. Overall, this method resulted into a satisfactory response rate of more than 100 per cent of the original sample. All those who were involved in the study were owners of the enterprise. The survey was undertaken in September – October 2008.

Model estimation

To model the relationship between our dependent variable (loan repayment) and the factors determining loan repayment, we used logistic regression. This is because our response variable is about whether women borrowers faced any repayment difficulties during their last loan cycle or not. For borrowers who experienced repayment problems during the last loan cycle, a dependent variable takes a value of 1, whereas, borrowers who did not experienced any repayment problems during the last loan cycle the value of 0 was assigned.

To determine the factors determining loan repayment, we focused on the business experience and management practices of the borrowers and loan conditions. Selection of variables was based on empirical literature on the factors determining loan repayment. While guided by the literature review, we also considered other factors likely to influence loan repayment but could not necessarily feature in our literature review. In addition, we studied household characteristics of the borrowers. This because investment decisions, the general operations and performance of women businesses are to a larger extent influenced by the dynamics of their households (Chrisman, Chua & Zahra, 2003). Research also posits that household resources play a very unique role in the survival and success of women businesses (Sirmon & Hitt, 2003; Davidsson & Honig, 2003). Moreover, due to their limited access and control over economic resources, such as land and property women are at times forced to have the approval of their male family members, for example, a husband, brother or father before they could be allowed to borrow or engage in any financial transactions (CIP/SED, 1999). This also presupposes that women borrowers are unlikely to plan for any investment including borrowing or using the borrowed money without the consultation with or approval of their spouses or family members. We also studied business experience and management practices of the borrowers because studies have consistently established that business owners particularly in the informal sector where the majority of women businesses are located, lack experience in business management. Evidence from the small business sector in Tanzania also shows that enterprises run by owners who have business experience and skills, and those who receive extension advice, perform better than

those that do not (Kuzilwa, 2005). Our study variables and their measurement are shown in Table 1.

Table 1. Study variables and measurement.

	Variables	Measurement	Predicted Impact
	Loan conditions		
1	Loan size in Tsh.	Loan size (Tsh.) transformed into ln	-
2	Duration of membership in the programme	Years transformed into ln	-
3	Interest charged	Interest rate charged transformed into ln	-
4	Decision making regarding loan use	1= Borrower, 0=otherwise	+
	Household characteristics		
5	Number of household members	Numbers of members transformed into ln	-
6	Number of household members with fixed salaries	Number of members transformed into ln	-
7	Number of schooling children	Number of children transformed into ln	+
	Business experience and management practices		
8	Previous business ownership	1= Yes, 0= otherwise	-
9	Years of business operation experience	Years in ln	-
10	Possession of business skills	1= Yes, 0= otherwise	-
11	Training in business management	1= Yes, 0= otherwise	-
12	Microcredit supported enterprise as the main source of household income	1= Yes, 0= otherwise	+
13	Ownership of multiple enterprises	1= Yes, 0=otherwise	+ -

Descriptive Results

The study has shown that the majority of sampled clients were in the lower loan cycles with 75% in the range of approximately US$141.50-283.0, followed by 23% in the range of US$ 472- 944; 14% in the range of Tsh.US$1603-2830. Further analysis has shown that about 15% of business owners had less than a year experience of business operation; 62% had 1-5 years' experience, 19% had 6-10 years of business experience and 3.5% had over ten years of business operation experience. On average, about 77% of borrowers had less than 5 years of business operation experience. This supports the long established adage that women businesses are not only smaller but also newer than businesses owned by men (Coleman, 2007; Eddleston and Powell, 2008). About 19.6 per cent of the sampled borrowers faced repayment problems in their last loan cycle. Results have also shown that repayment problems were more evident among clients in higher loan categories than clients in lower loan categories were, possibly because while clients with bigger loans had higher repayments, were also subjected to same weekly repayments as clients in small loan cycles. Interestingly, all the sampled clients had their loans repaid, conceivably because of group sanctions.

Reasons for loan repayment problems and sources of repayment

Of those who faced repayment difficulties, 34% associate it with the lack of product or service demand and 29% experienced repayment problems due sickness. Other clients (27%) faced repayment problems due to using a portion of the loan fund on non- enterprise activities such as, on consumption smoothing. The remaining others (14%, 11% and 5%) attribute loan repayment difficulties to failure of enterprise to make profits, selling on credit and failure to collect the debts; and disasters, such as fire and theft respectively.

As a loan repayment strategy, 43 per cent of borrowers who faced repayment difficulties, returned a portion of the loan to meet their repayment obligations, whereas, 41 per cent withdrew their savings. Others had to sell their personal assets to repay their loans. Other sources included loans from friends (11%), repayment made by the solidarity group (8%) and salary or other sources of income (4%).

For the borrowers who did not face any repayment problems, the majority (88%) repaid their loans from profits generated by enterprises supported by the loan. However, further observation shows that the majority used profits generated by the enterprise in conjunction with other sources of income to repay their loans. This is particularly the case when profits generated are not adequate to meet weekly repayments or in case the business product circle is not weekly. Those who withdrew their savings were 17 per cent. It is further noted that 18 per cent returned part of the loan to meet their repayment obligations. An interesting observation is that about 30 per cent of borrowers kept part of the loan fund to meet loan repayment should the business fail to make any profits or in case they cannot mobilize enough money to repay their loans from other sources. About 5 per cent used other sources of income to repay their loans.

Logistic regression results

The results of the logistic regression analysis on the determinants of loan repayment are reported in Table 2. Our results have shown that the variables included in the model explain only 31.9% of the loan

variability in repayment. This also suggests that for the sampled borrowers there may be other factors

determining their repayment capacity but are not included in the model.

Table 2. Logistic regressions analysis results: Loan repayment difficulties as a dependent variable.

Variables	Parameter Estimates	Wald Statistics	Sig.
Loan size	0.394	0.611	0.434
Duration of membership in the programme	-0.299	0.788	0.375
Interest charged	2.081	0.625	0.429
Decision maker regarding loan use	0.752	4.070	0.044
Number of household members	-1.437	5.917	0.015
Number of household members with fixed salaries	-1.028	4.499	0.034
Number of schooling children	0.465	1.423	0.233
Previous business ownership	-0.824	5.337	0.021
Years of business operation experience	-0.210	0.746	0.388
Possession of business skills	-1,436	10.966	0.001
Training in business management	-1.456	6.292	0.012
Microcredit supported enterprise as the main source of household income	-1.704	10.247	0.001
Ownership of multiple enterprises	-0.727	4.144	0.042

N   =   286 R^2 = 0.319 (Nagelkerke R Square)
Model constant   = 10.621

Econometric Results and Discussion

Out of thirteen (13) predictors operationalized in the model, only eight turned out to have a statistical significant impact on repayment capacity or status (Table 2). The empirical results have shown that the coefficient of loan size has a positive sign. This suggests that as the loan increases in size, borrowers are more likely to report repayment difficulties. In other words, borrowers with bigger loans are more likely to default than borrowers with smaller loans. On the other hand, the coefficient for interest rate has a negative sign to suggest that when the interest rate increases, borrowers are less likely to report repayment difficulties. This contravenes the general expectation that with increasing interest rate, the more the burden of repayment becomes. This is opposite trend is experienced because the programme charges higher interest for smaller loans than bigger loans, that is, interest rate decreases with increasing loan size. However; taken together, our results suggest that repayment difficulties are more evident among clients with bigger loans than smaller loans. This is because while clients with bigger loans had higher repayments, they were subjected to same weekly repayments as clients in small loan cycles. Nevertheless, both loan size and interest rate are insignificant determinants of loan repayment for the sampled clients.

Results have also shown that decision making regarding loan use is negative and significantly related to repayment difficulties (p<0.01). This implies that women borrowers are more likely to report repayment problems when they are the sole decision makers regarding the use of their loans than otherwise. In other words, women borrowers are unlikely to report repayment problems when decision making role is a joint function among the husband, wife and other household members rather than when decision-making is a sole function of the business owner. Studies report

that a household is a social institution where household members may exert an influence on the business operations far beyond their official status'' (Heck, 2000) in Steier, Chrisman, and Chua (2004, p.230). Possibly, in households where decision-making was not a joint function among household members; women borrowers were not getting the needed support from members of the household.

Household size has a negative sign which indicates that household size impacts negatively on the loan repayment performance of the sampled borrowers (p<0.05). This might have resulted from the fact that large household sizes increase household responsibilities for example, increased expenditure for health services and consumption smoothing among others. When this is the case, a borrower may use some of the borrowed fund for unintended purposes, particularly for the upkeep the family. This is turn could lead to loan repayment problem with other allied consequences. This result also agrees with study findings by Ojiako and Ogbukwa (2012) who in their study of loan repayment performance in Nigeria found that household size impacted negatively on loan repayment performance of borrowers. Studies in microfinance have also shown that women are more likely to use their loans and proceeds from enterprises supported by microloans for the betterment of welfare of their households which at times comprise ability to repay their loans (Mayoux, 2001).

Results also show that the number of household members with fixed salaries is a significant determinant of loan repayment (p< 0.05). As the number increases women borrowers are less likely to report repayment difficulties. Possibly, borrowers were supported by the salaried members in the household to repay their loans and to alleviate pressure on the business supported by the loan fund. It is also possible that borrowers were relieved from servicing household expenditures including reducing any

possibility of women loans appropriation by other members of their households.

We also expected the number of schooling children in a household to be positively related to repayment difficulties. As the number of schooling children increases, school related expenditures increase, thus, borrowers may divert some of the loan fund to meet the increased expenditures. The use of the loan in indirectly productive activities (school expenditures) is likely to push borrowers into repayment difficulties. Nevertheless, the number of schooling children is not significantly predicting repayment difficulties (p>0.1).

Results have also shown that experience in business management is negatively related to repayment problems. Specifically, we found that when borrowers possess experience and skills related to their business operations (p<0.01), those who had undergone training in business management (bookkeeping, marketing, planning and budgeting) (p<0.01), and when they previously owned a business prior to accessing business loans (p<0.05) were less likely to experience repayment problems. This is because skilled and experienced borrowers are better able to manage their businesses but also make efficient use of their loans. Experience in the business operations is also able to amplify borrowers problem solving ability including seizing opportunities that are important to the growth of the business and their repayment abilities (Papadaki & Chami, 2002; Verheul et al., 2007).

In addition, results have demonstrated that when the microcredit assisted enterprise is the main source of household income, borrowers are unlikely to experience repayment difficulties (p<0.01). Possibly, borrowers from these households they increased their commitment to business operations for the business to generate surplus to service both household expenditures and the loan. In other words, the more dependent the borrower (owner) is on income from the enterprise supported by the loan fund the greater the commitment to business operations, and hence the greater the enterprise growth and repayment rate.

We also find that the coefficient between ownership of multiple enterprises and repayment problems is significant and negative (p<0.05). This indicates that borrowers with multiple enterprises were less likely to encounter any repayment problems. This may suggest that perhaps, borrowers were using profits generated from other enterprises to support the activity that used the loan, or to assist with repaying the loan. Research also reports that as a strategy for spreading business risks across a number of activities, business owners may opt for ownership of multiple enterprises (Marcucci, 2001).

Moreover, results show that repayment difficulties are more likely to decrease with increasing years of business operation experience. Nonetheless, number of years in business operation is not significantly determining repayment capacity of the borrowers (p>0.1). Likewise, the coefficient for the duration of membership in the programme is negative to suggest that as the duration of membership in the programme increases borrowers are unlikely to experience repayment problems. This is because with increasing duration of membership in the programme, borrowers acquire business experience that enables them to manage their businesses better and make efficient use of their loans. This in turn reduces their odds of reporting repayment difficulties. However, the duration of membership in the programme did not turn out to have a significant influence on repayment status.

Conclusions and Policy Implications

The aim of this article is to examine the sources and determinants of loan repayment among women microcredit clients. Loan repayment difficulties were reported among 19.6 per cent of borrowers. For the majority of borrowers who did not face any repayment difficulties, they used their enterprise profits to repay their loans. Moreover, a good number of borrowers who faced and those who did not face any repayment difficulties used a portion of loan fund to repay their loans. Other borrowers used other sources of income to meet their loan repayment obligations.

Results have also shown that women borrowers who possessed business skills or had been trained in business management skills were less likely to experience repayment difficulties. Likewise, when women lose control of their loans were more likely to report repayment difficulties. From these results we find that the factors that limit growth of women businesses are also liable for their repayment difficulties. These findings also accentuate the need to ensure that women micro entrepreneurs not only have access to training opportunities and business management experience for them to grow, expand their businesses but also increase their avenues for loan repayment. This further suggests that there is a need for an integrated and holistic policy approach in promoting women entrepreneurship rather than piecemeal initiatives. Providing micro-credit in conjunction with training in entrepreneurship development and management may help instil the mind sets, and confidence in women's abilities to start and manage a business. It is also imperative that policies that address gender issues at household level are corrected designed and enforced to ensure women empowerment and make their participation in entrepreneurial activities more profitable.

It should however, be noted that our study has focused on only one microfinance programme. It is therefore, possible that repayment difficulties experienced by the borrowers have programme specific influences. Similarly, growth of women businesses is influenced by many factors including socio-cultural and other contextual influences. Thus, while the findings of this study could be generalised to a wider international population, is vital that issues of

programme specific conditions and country contexts are taken into account.

Notes

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