Determinants of Repayment Performance in Microcredit Programs: A Review of Literature

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Abstract

The aim of microcredit is to help the poor and lower income group to get funds for their business activities and to improve their lives. Usually, the loans given are very small, in short term period, no collateral needed and required weekly repayment. However, repayment problems become the main obstacle for the microcredit institutions to continue providing microcredit services. This is because most of the microcredit institutions are Non- Governmental Organizations (NGOs), where they received funds from the government and donors and there are not profits oriented organizations. Therefore, this paper tries to review the determinants of repayment performances in microcredit programs which can be divided into four factors namely borrower characteristics, firm characteristics, loan characteristics and lender characteristics.

Keywords: Repayment Performance, Microcredit Programs, NGOs

1.0 Introduction

Lending to the poor or lower income group raises many debates among practitioners and academicians. The poor are usually excluded from credit facilities because of many reasons. These include insufficient collateral to support their loans, high transaction costs, unstable income, lower literacy and high monitoring costs. Usually they survive through involvement in micro business activities or informal activities that comprises food processing and sales, small scale agriculture, services, crafts and petty trading. However, these activities actually contribute a number of total employment and gross domestic product (GDP) to the country. Micro and small enterprises (MEs) have been recognized as a major source of employment and income in many countries of the Third World (Mead & Liedholm, 1998).

The Inter-American Development Bank (1997) reported that micro enterprise makes a major contribution to aggregate employment, production, and national income in Latin America and the Caribbean. Budiantoro (2004) found that 30 percent of GDP in Indonesia was contributed by MEs. MEs provide income and employment for significant workers in the rural and urban areas by producing basic goods and services such as traditional foods, craft, barber and hair salon and hawkers for the need of rapidly growing populations.

The most challenges faced by MEs around the world are lack of access to credit (Cotler & Woodruff, 2008; Mel et al., 2007; Tambunan, 2007; Schoombee, 2000; Kurwijila & Due, 1991). Schoombee (2000) finds that lack of access to formal bank credit is one of the important problems faced by South African micro entrepreneurs in the informal sector. Mel et al. (2007) confirm that missing credit markets is the main limitation for small businesses to grow.

Meanwhile, Mead & Liedholm (1998) conclude that small amount of a single missing ingredient; working capital is required to sustain the enterprise and to enable it to improve its performance. Access to capital is critical for the entrepreneurs and essential for the development of small-scale enterprises (Leaman et al., 1992). Most of micro entrepreneurs just relied on their own sources of funding such as personal savings and borrowings from family and friends (Ang, 1992; Petersen & Rajan, 1994; Berger & Udell, 1995; Binks & Ennew, 1996).

In Malaysia, financial resources became the major problem faced by entrepreneurs and the main reason of business failure (Bank Negara Malaysia, 2008; SMEcorp, 2004; Hashim Hassan, 1992; Chee, 1986). Over the years, MEs have become a key supplier and service provider to the Malaysian community. MEs accounted for 79.4 percent (412,000 from a total of 22,552,804) of the total Small and Medium Enterprises (SMEs) and 78.7 percent of business establishments in Malaysia (Department of Statistic, 2005, p.7). The census also indicates that Micro and SMEs contribute about 64 percent (3,223,000 out of 5,038,000) of total employment and generated RM159,411 million of value added in 2003 (Department of Statistics, 2005, p.12 & 14). The World Bank claims that between one third and three quarters of total employment in most developing countries comes from informal sector (Webster & Fidler, 1996).

However, there are several constraints to MEs development. Such constraints include lack of relevant laws and administrative procedures; a lack of or limited access to institutional credit; imperfect market information and lack of opportunities for skill development (Census of Establishment and Enterprise 2005). Saleh & Ndubisi (2006) found that among the challenges faced by SMEs (including MEs) in Malaysia are the low level of technological capabilities and limited skilled human capital resources, a low level of technology and ICT penetration, low levels of research and development (R&D), a substantial orientation towards domestic markets, a high level of international competition, a high level of bureaucracy in government agencies and difficulty in obtaining funds from financial institutions and government.

This paper will be divided into five sections. The first section 1.0 is introduction and it followed by section 2.0 which is microcredit definition. Section 3.0 will discuss repayment performance of microcredit programs and section 4.0 will discuss the factors affecting repayment performance. The last section 5.0 will conclude the discussion present in this paper.

2.0 Microcredit and Microfinance Definition

Microcredit or known as micro lending is defined as an extremely small loan as small as RM100 given to impoverished people to help them become self employed. Microcredit was given to the poor individuals for income-generating activities that will improve the borrowers' living standards. The loans characteristics are, too small, short-term credit (a year or less), no collateral, required weekly repayment, poor borrower and mostly women who are not qualified for a conventional bank loan. Usually the loan pays high interest rates because of the high cost in running microcredit program. Microcredit is also used as the extension of very small loans to those who are in poverty that designed to spur entrepreneurship and help them out from poverty group. These individuals lack collateral, steady employment and verifiable credit history, which therefore, cannot even meet the most minimal qualifications to gain access to traditional credit.

The Grameen Bank defined microcredit as small loans given to the poor for undertaking self-employment projects that would generate income and enable them to provide for themselves and their families. The target population comprising women microenterprises from the low-income households and the loans have no collateral.

However, microfinance is defined as the provision of financial services to low-income clients, including consumers and the self- employed, who traditionally lack access to banking and related services (Gonzalez-Vega, 2008). Microfinance is a place for the poor and near poor clients to get access to a high quality financial service, which include not just credit but also savings, insurance and fund transfer. According to Ledgerwood (1999), microfinance is a provision of a broad range of financial services such as savings, credit, insurance and payment services to the poor or low-income group who are excluded from the normal banking sectors.

Microfinance is a development approach that provides financial as well as social intermediation. The financial intermediation includes the provision of savings, credit and insurance services, while social intermediation involves organising citizens' groups to voice their aspirations and raise concerns for consideration by policy makers and develop their self-confidence (Robinson, 2002).

Moreover, Conroy (2002) stated that microfinance is the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and their MEs. The term evolved from the concepts of "microcredit" and "microenterprise" financing, to include the importance of savings as well as borrowing. Although the terms are used interchangeably, microfinance represents the field as a whole, while the other two terms are more technical and refer only to credit provision (Maria, 2004).

The World Bank defines microfinance as "…. Small-scale financial services – primarily credit and savings – provided to people who farm or fish and who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and groups at the local levels of developing countries, both rural and urban" (Robinson, 2001). However, Bank Negara Malaysia (BNM) defined microfinance as the provision of small loans/financing up to RM50,000 to microenterprises or self-employed individuals, for their business activities.

Therefore, based on all definitions given, it can be concluded that microcredit is just a small credit given to the poor that engaged in microenterprise or for the purpose of income-generating activities. On the other hand, microfinance encompasses broad financial services given to the poor and low-income group for many reasons and not just for income generating activities. Woller & Parsons (2002) describe microfinance as the second revolution in credit theory and policy where the first revolution is microcredit.

Microfinance institutions (MFIs) were established to fill the gap in the financial services sector by providing funds to the poor and lower income group and thus alleviating poverty and enhance their business activities. The MFIs provide funds for start-up business or for working capital. In addition, some MFIs also provide funds for non-business activities such as for education and emergencies purpose. In the credit market, agency problem, moral hazard and adverse selection exist because of information asymmetries. Information asymmetries are the main obstacle for MFIs to provide loans to clients. Financial institutions usually requires business proposal, borrower past credit information and collateral before approving the loan. MFIs offer credit through group-based lending method to mitigate agency problems, moral hazard and adverse selection and to replace the collateral requirement. In group-based lending, borrowers must form a group before applying loans and they also responsible to other loan members. If one member default, the others will be responsible to pay the loan or they will be denied access for the next loans.

MFIs are usually non-governmental organizations (NGOs) who are not profit-oriented. NGOs assume poverty is created through social processes that deprive the poor of their rightful access to social resources, including credit. These NGOs help the poor to find credits to support their small enterprises or income-generating activities. These institutions acted as a financial intermediation like formal bank. The difference between formal banks and microfinance institutions (MFIs) is the former focus on rich clients, while the latter to MFIs clients who are poor people. According to Remenyi (2000), subsidized credit and subsidized banking with the poor are inimical to "best practice in microfinance". Moreover, MFIs also offered skills training and marketing to their clients. The most successful MFI is the Grameen Bank in Bangladesh founded by Prof Mohammed Yunus who won the Nobel Peace in 2006.

3.0 Repayment Performance of Microcredit Programs

The calculation of performance indicators is important for donors, practitioners, and consultants to determine the efficiency, viability, and outreach of Microcredit programs. Performance indicators collect and restate financial data to provide useful information about the financial performance of the microcredit institutions. The sustainability and viability of MFIs is important to make sure that MFIs can continually provides financing to MEs without depending on donors and government. Therefore, financial sustainability is a prerequisite for making micro financial services permanent as well as widely available (ICC, 2001). Llanto et al. (1996) argue that to continue providing financial services to the poor on a sustaining basis, the MFIs themselves must be viable and sustainable and the study shows that many of the MFIs are far from attaining these goals.

Chamhuri and Basri (2001) study on issues and constraints faced by MFIs namely Amanah Ikhtiar Malaysia (AIM), Yayasan Usaha Maju (YUM) and Koperasi Kredit Rakyat (KKR). The study identifies the issues and constraints especially with respect to (a) outreach (b) viability/sustainability (c) resource mobilisation and (d) policy environment. The study found that the outreach performance of these MFIs are relatively low which is AIM has the highest outreach. This study shows that AIM and YUM have not achieved full financial viability and sustainability. The MFIs also have limited ability to mobilise their savings.

Based on institutionist approach (Murdoch, 2000; Woller et al., 1999), MFIs should be able to cover its operating and financing costs with program revenues and not depend on subsidies and gifts from governments and donors. Gonzalez-Vega (1998) finds that the failure of rural credit agencies established by several LDC governments during the 1960s and 1970s is due to the lack of institutional viability. The UNDP and the United Nations Capital Development Fund (UNCDP), 2005 propose five keys indicators to measure the performance of MFIs namely outreach; client poverty level; collection performance; financial sustainability and efficiency. MFIs are quite dependent on the loan repayments to get fund for future loans. Therefore, MFIs must take great precautions to insure that the clients will repay the loan. Roodman (2006) list four key microfinance challenges include building volume, keeping loan repayment rates high, retaining customers and minimizing scope for fraud in branches.

4.0 Factors Affecting Repayment Performance

The literature on factors influencing loan repayment performance among financial institutions targeting the poor is very sparse and limited mainly to microfinance experience in low-income countries (Derban et al., 2005; Silwal, 2003). The results of the studies show mixed result. Based on past literature, the factors affecting repayment performance of MFIs can be divided into four factors namely individual/borrowers factors, firm factors, loan factors and institutional/lender factors. Several studies (Greenbaum et al., 1991; Hoque, 2000; Colye, 2000; Ozdemir & Boran, 2004) show that when a loan is not repaid, it may be a result of the borrowers' unwillingness and/or inability to repay. Stiglitz and Weiss (1981) recommend that the banks should screen the borrowers and select the "good" borrowers from the "bad" borrowers and monitor the borrowers to make sure that they use the loans for the intended purpose. This is important to make sure the borrowers can pay back their loans. Greenbaum and Thakor (1995), suggest to look at a borrower's past record and economic prospects to determine whether the borrower is likely to repay or not.

Insert table (I) about here

Besides characters of the borrowers, collateral requirements, capacity or ability to repay and condition of the market should be considered before giving loans to the borrowers. The table I below shows the individual/borrower characteristics that affect repayment performance.

i.   Individual/ Borrower Characteristics Affecting Repayment Performance

Some authors link the repayment performance with firm characteristics such as Nannyonga (2000), Arene (1992) and Oke et al. (2007) (Table ii). Oke et al. (2007) mention that firm's profit significantly influenced loan repayment. Besides that, Khandker et al., (1995) raise the question of whether default is random, influenced by erratic behavior, or systematically influenced by area characteristics that determine local productions conditions or branch-level efficiency. Their study on Grameen overdue loans supports the idea of partial influence of area characteristics. Rural electrification, road width, primary educational infrastructure and commercial bank density are positively correlated with a low default rate as well as predicted manager's pay.

ii.   Firm Characteristics Affecting Repayment Performance

Insert table (II) about here

Godquin (2004) suggests that the provision of non-financial services such as training, basic literacy and health services has a positive impact on repayment performance. Roslan & Mohd Zaini (2009) found that borrowers that did not have any training in relation to their business have a higher probability to default.

Tedeschi (2006) notes that there are two possible reasons for default: strategic default or default due to a negative economic shock. The lending contract provides incentives to discourage strategic default, but default due to an economic shock is unavoidable. In contrast, Hulme & Mosley (1996) argue that the important factors contribute to loan repayment performance are the design features of the loan. They categorize the design features into three categories namely access methods, screening methods and incentive to repay. Access methods generally ensure that poor people access the loans not the richer people and the features include maximum loan ceilings and high interest rate. Screening methods are used to screen out bad borrowers.

However, Stearns (1995) argues that, "it is the lender not the borrower, who causes or prevents high levels of delinquency in credit programs. While, Awoke (2004), reports that most of the default arose from poor management procedures, loan diversion and unwillingness to repay loans. Therefore, the lenders must devise various institutional mechanisms that aimed to reduce the risk of loan default.

iii.   Institutional/lender characteristics influencing repayment performance

Insert table (III) about here

A few researchers also found that loan characteristics play an important role in determining repayment performance (Roslan & Mohd Zaini, 2009; Njoku, 1997; Ugbomeh et al., 2008) (Table iv). Copisarow (2000) found that defaults generally arise from poor program design or implementation, not from any essential problems with the borrowers.

iv.   Loan characteristics affecting repayment performance

Insert table (IV) about here

According to Derban et al. (2005), the causes of non-repayment could be grouped into three main areas: the inherent characteristics of borrowers and their businesses that make it unlikely that the loan would be repaid. Second, are the characteristics of lending institution and suitability of the loan product to the borrower, which make it unlikely that the loan would be repaid? Third, is systematic risk from the external factors such as the economic, political and business environment in which the borrower operates? Vigenina & Kritikos (2004) find that individual lending has three elements namely the demand for non-conventional collateral, a screening procedure with combines new with traditional elements and dynamic incentives in combination with the termination threat in case of default, which ensure high repayment rates up to 100 percent.

Roslan Abdul Hakim et al. (2007) in their study conclude that close and informal relationship between MFIs and borrowers may help in monitoring and early detection of problems that may arise in non-repayment of loans. In addition, cooperation and coordination among various agencies that provide additional support to borrowers may help them success in their business. The study compared the good practices and performance of selected MFIs in Malaysia namely; Amanah Ikhtiar Malaysia, TEKUN, Koperasi Kredit Rakyat and Bank Pertanian Malaysia. However, Addisu (2006) categorized repayment problems into four factors: (a) borrower related cause, (b) business operation related cause, (c) lender related cause and, (d) extraneous causes.

5.0 Conclusion

Repayment problem is one of the critical issues of MFIs that concerns all stakeholders (Sharma & Zeller, 1997; Marr, 2002; Maata, 2004; Godquin, 2004) where the high loan default rate is the primary cause of the failure of MFIs (Yaron, 1994; Woolcock, 1999; Marr, 2002; Maata, 2004). The agency problem, adverse selection and moral hazard that appear as a result of information asymmetries are the main reason why these happened. This is because the lenders cannot observe the behaviors of their clients either they are honest and dishonest. The lenders can only observe the outcome of their loans either the clients repay or not. Therefore, to mitigate the repayments problems, a close relationship between lender and borrower can be applied through monitoring, business adviser and regular meeting. Besides that, the lender can introduced reward system to those that paid on time such as rebate or discount.

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Table I : Factors affecting repayment performance

Individual/Borrower Characteristics	*Researchers*
Age	Eze & Ibekwe (2007), Papias & Ganesan (2009), Aguilera & Gonzalez-Vega (1998), Reinke (1998), Nannyonga (2000)
Educational level	Bhatt & Tang (2002), Arene (1992), Nikhade et al. (1994), Eze & Ibekwe (2007), Rambabu & Eswaran (1994)
Gender	Roslan & Mohd Zaini (2009), Papias & Ganesan (2009), Khander et al. (1995); Derban et al (2005); Sharma & Zeller (1997)
Borrower's business experience	Arene (1992), Njoku (1997)
Monthly income	Nannyonga (2000)

Table II : Institutional/lender characteristics influencing repayment performance

	MFI Characteristics	*Researchers*
1.	The threat imposed by the lenders Regular monitoring	Bhatt & Tang (2002)
2.	Transaction cost	Zeller (1998); Arsyad (2006)
3.		Bhatt & Tang (2002); Olomola (2000); Oke et al. (2007); Papias & Ganesan (2009)

Table III: Institutional/lender characteristics influencing repayment performance

	Loan Characteristics	*Researchers*
1.	Amount of loan (loan size)	Roslan & Mohd Zaini (2009), Sharma & Zeller (1997); Eze & Ibekwe (2007); Arene (1992); Njoku (1997); Guttman (2007)
2.	Repayment method	Nannyonga (2000); Jain & Mansuri (2003)
3.	Repayment period	Guttman (2007); Sharma & Zeller (1997); Derban et al. (2005)

Table IV: **Loan characteristics affecting repayment performance**

	Loan Characteristics	*Researchers*
1.	Amount of loan (loan size)	Roslan & Mohd Zaini (2009), Sharma & Zeller (1997); Eze & Ibekwe (2007); Arene (1992); Njoku (1997); Guttman (2007)
2.	Repayment method	Nannyonga (2000); Jain & Mansuri (2003)
3.	Repayment period	Guttman (2007); Sharma & Zeller (1997); Derban et al. (2005)