ANALYSING THE EFFECTIVENESS OF MICROFINANCE IN VIETNAM: A CONCEPTUAL FRAMEWORK

Hong Son Nghiem*

ABSTRACT

The microfinance industry has experienced rapid expansion worldwide. Yet in spite of this growth, there is a paucity of a solid theoretical ground to allow one to analyse the effectiveness of microfinance. To help address this shortcoming, this paper presents a conceptual framework, which is an important part of a PhD research on the efficiency and effectiveness of microfinance in Vietnam. This framework allows analysts to overcome the issue fungibility in microfinance evaluation. In addition, it presents clear pathways of effects that microfinance created to target clients and related stakeholders.

Key words – Microfinance, effectiveness, conceptual framework

JEL classification - O12, P34, R29

*PhD Candidate: h.nghiem@uq.edu.au School of Economics, the University of Queensland, Australia

1. INTRODUCTION

Microfinance is considered one of the most important tools for poverty reduction. It has attracted the attention of governments, donors and development agencies all over the world. The United Nations has declared that 2005 is the International Year of Microcredit, which recognised microfinance as an important way to meet the millennium development goals, particularly the goal of halving the world's poverty rate by 2015. In Vietnam, microfinance has enjoyed rapid growth over the last ten years. The development of microfinance in Vietnam also coincides with significant progress in the country's effort to reduce poverty. However, most previous studies on the relationship between access to microfinance and poverty reduction are anecdotal.

This paper presents a conceptual framework which allows one to conduct an effectiveness analysis of microfinance, a crucial part of a PhD thesis on efficiency and effectiveness of microfinance in Vietnam. This framework provides guidelines for detailed analysis in the thesis. The paper includes a brief review of previous studies and some definitions. Section 2 analyses the effects of microfinance and the differences between impact and effectiveness studies. Section 3 presents the main conceptual framework while some methodological considerations are discussed in Section 4. Finally, some concluding remarks are presented in Section 5.

1.1 Previous frameworks

Previous studies on microfinance evaluation generally focus on impact assessment. Most frameworks used in these studies were discussed in the Assessing the Impact of Microenterprise Services (AIMS) project¹ (AIMS 2001). The preliminary framework proposed by Sebstad et al. (1995) identified four domains of microfinance interventions,

¹ This project, supported by the United States Agency for International Development (USAID), provide microfinance services to households with the aim to promote the development of small enterprises, established and operated by households.

individuals, households, enterprises and community. The authors suggested that households should be the focus of impact assessments. In particular, they proposed three impact domains (i.e., the areas where impacts are expected) at the household level, namely income, expenditure and assets. According to Sebstad et al. (1995) microenterprises are embedded in households; they provide income for households but their performance is largely dependent on the characteristics of the households. The impact domains for microenterprises include the resource base, production process, management, markets, and financial performance. The authors argued that microenterprise intervention not only has impacts on program participants but also on other household members through intra-household dynamics. Thus, impact domains for individuals in households include control over personal resources, leverage in household decisions, and community participation. This framework was further developed to facilitate the assessment of risk (Barnes, 1996; Sebstad et al., 1995), examination of environmental factors (Snodgrass, 1996), analysis of household economic portfolios (Chen & Dunn, 1996), and the investigation of intra-household impacts (Chen, 1997).

Barnes (1996) asserted that assets are a crucial elements of household welfare since they reflect current living conditions and production capacities. However, assets of a household may have been accumulated over a long period. Thus, if not treated appropriately (e.g., using longitudinal data), this variable may provide misleading measure of the impacts due to differences in asset values among households before the intervention.

The issue of risk in household analysis is discussed in Dunn et al.(1996), and Sebstad and Cohen (2000). In particular, Dunn et al. (1996) argued that microfinance impacts are desirable if they helps households reduce *ex-ante* exposure to risk and/or provides better strategies for the management of *ex-post* losses. Meanwhile, Sebstad and Cohen (2000) argued that the poor can be kept in a "poverty trap" because of their high vulnerability to risk. In particular, the poor often choose low-risk activities, and thus, generate low returns, which, in turn, results in low asset accumulation. In addition, the poor have few resources to draw on in order to cope with, and to recover from, shocks.

As different household members may feel the impact of microfinance differently, Chen (1997) outlined a framework for individual level impact assessment, consisting of four pathways through which impacts may be created, including material (e.g. income, assets), cognitive (e.g. knowledge, skills, awareness), perceptual (e.g. self-esteem, self-confidence), and relational (e.g. bargaining power, level of participation in household and community activities). However, this model did not mention the time-frame for each group of impacts. Since the classification of the above four pathways resemble Maslow's (1943) classification of needs, it is expected that impacts occur in a sequence. In particular, material changes are likely to occur sooner whilst other impacts tend to follow afterwards.

The most important extension to the Sebstad et al. (1995) model is the household economic portfolio (HEP) model introduced by Chen and Dunn (1996). The HEP model was based on important developments in household analysis, such as the emphasis on household as permeable and embedded in wider structures than a bounded unit. Thus, household activities such as consumption and production were influenced by internal as well as external factors. The HEP model consists of three elements: resources, activities, and the circular flows between resources and activities. In particular, households draw on human, physical and financial resources for consumption, production and investment activities. The surplus resources generated by activities then come back to the resource pool that can be controlled individually or jointly by household members. Chen and Dunn (1996) argue that loans from microfinance provide an additional financial resource that households can spend on any activity. The proportions of household loans spent on production, consumption or investment, depends on factors such as economic and social constraints, preferences, and intra-household decision processes.

The main advantage of HEP in impact assessment of microfinance is that it can cover the issue of fungibility of credit. In practice, a household can use loans from microfinance for consumption, production and investment. Thus, when focusing only on effects in production activities, impact assessments impose an implicit presumption that all credit provided to households are used solely for production purposes. This is not realistic, although many microfinance service providers restrict loans only for production

purposes. With the introduction of circular flows, HEP allows the formulation of hypotheses on impact of microfinance on different sectors of the household economy. In addition, it helps in the prediction of the causes of impacts of microfinance on households, individuals and enterprises.

According to AIMS (2001) the main limitation of the HEP model is that it is not a very useful tool to analyse the influences of external factors on households. The authors suggest that the sustainable livelihood framework, proposed by Scoones (1998) can be used in combination with HEP in order to assess development interventions and their effectiveness. The HEP model can be extended by incorporating the framework of Schreiner (1997) which can take into account the views of different stakeholders. Schreiner (2003) also provided an example of a useful tool to judge the worthiness of microfinance programs using cost-effectiveness analysis. In addition, impacts beyond households (e.g. to the whole economy) can be investigated with comprehensive frameworks, such as the wider impact model proposed by Zeller (1995), and the group dynamics model introduced by Marr (2002).

In short, there are a number of conceptual frameworks available which allow one to study the impact of microfinance. However, there appears to be no previous study on the theoretical framework, nor any empirical study focusing on the effectiveness of microfinance services. The framework proposed in this study aims to provide a simple and direct answer to the question whether microfinance is a worthwhile intervention from a social-welfare viewpoint.

1.2 Key Definitions of Effectiveness

In general, effectiveness means the capability of, or success in, achieving a given goal. Across fields, the definitions of effectiveness are quite similar, for example:

Social research: "effectiveness is the extent to which an activity fulfils its intended purpose or function" (Harvey, 2004).

- *Education*: "...a measure of the match between stated goals and their achievement" (Fraser, 1994).
- *Medicine*: "A measure of the extent to which a specific intervention, when deployed in the field in routine circumstances, does what it is intended to do for a specified population" (Wojtczak, 2002).

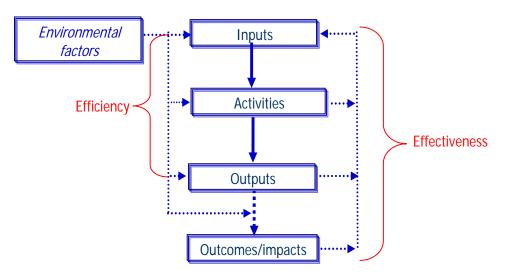


Figure 1: Efficiency and Effectiveness

The concept of effectiveness used in this study is consistent with the definitions above. In particular, the term "effectiveness" in this study refers to the way an intervention achieves its desired outcome. An effectiveness analysis may investigate the whole intervention process: mobilisation of inputs, organisation of necessary activities, production of outputs, and the achievement of desired outcomes. The logical linkages among elements of microfinance intervention (see Figure 1) are as follows:

- If inputs such as set-up funds and workers are available then some activities can be organised.
- If activities such as group formation and member training were organised, then some outputs can be produced.
- If outputs such as number of clients, number of borrowers, and loan portfolio are realised then the desired outcome, mainly poverty reduction, can be attained.

• Microfinance may create other impacts such as empowerment of women, improvement of health care, and changes in rural financial policies.

Apart from the above relationship, elements from microfinance interact through inverse linkages (i.e. inputs can be affected by activities, outputs and outcomes). For example, outputs such as the number of saving accounts and saving portfolio created can determine the availability of loanable funds (i.e. one input) for the next round of operation. In addition, all elements of an intervention (i.e. inputs, activities, outputs, outcomes) and their interactions are influenced by environmental factors such as the legal framework, location, demography and infrastructure. For example, the number of poor households participating in microfinance would tend to be higher in communities located closer to markets (i.e. more off-farm job opportunities). The objectives of microfinance programs are also important factors in an effectiveness analysis.

In short, analysing the effectiveness of an intervention helps one to identify the right decision to make (i.e., the best intervention to achieve the desired outcomes). Specifically, effectiveness analysis should answer the following questions:

• Has the desired outcome been achieved?

This question compares actual outcomes of an intervention with its objectives. For example, the objective of microfinance is poverty reduction, then its effectiveness analysis should first identify if poverty is reduced after the intervention.

• What is the significance of the achievement?

This question refers to the relative distance between stated and actual outcomes. For example if the objective of microfinance is to reduce poverty then the question of significance refers to an issue such as "what percentage of the poor moved out of poverty after receiving microfinance service?".

• What factors helped the achievement of desired outcomes?

This question aims to identify the factors that contributed to the achievement of the desired outcomes such as household characteristics, village characteristics, and the operational environment.

• What are the key impacts that the process has created?

This question looks for direct and important effects, which may be not have been planned in the beginning, that the intervention created. The selection of effects to investigate is depended on the objectives of the intervention and the research project.

• Was the intervention worthwhile given the achievement of desired outcomes, additional impacts created and level of inputs spent?

The answer to this question is based on the achievement of desired outcomes and other effects created by the intervention, given the time and resources spent for the intervention.

Based on the definition of effectiveness above, to the best of our knowledge, no previous study has analysed the effectiveness of microfinance. A few studies of effectiveness in microfinance have been conducted, including Chua and Llanto (1996), Schreiner (2003), and Maertens (2003). However, their definitions of effectiveness were different from that stated in this study. In particular, Chua and Llanto (1996), defined effectiveness as the ability of service providers to design and deliver financial products that meet the needs of the target clients. The measurement of effectiveness in their study was based on financial ratios and descriptive statements. Meanwhile, Schreiner (2003), compared the presentvalue social costs with the output of Grameen bank to analyse its cost-effectiveness, thus, effectiveness in his study referred to the unit cost of output. He argued that costeffectiveness analysis is a cheap (compared to cost benefit analysis) and reliable way to measure the performance of microfinance. Finally, Maertens (2003) used standard regressions to estimate the impact of microfinance on asset accumulation and income growth of client households. The author also descriptively argued that microfinance created other impacts such as reduction of vulnerability to poverty. It seems that the notion of impacts and effectiveness were not clarified in previous studies. Thus, the following section provides a brief description of the distinction between these two closely related but quite different concepts.

2. EFFECTIVENESS AND IMPACT ANALYSIS

2.1 Views and requirements of Stakeholders

The various stakeholders in microfinance may have different interests and viewpoints regarding microfinance intervention and the measurement of its performance. Schreiner (1997) classified the stakeholders of microfinance into six groups: the society, the poor, poor clients, investors, workers, and donors, each group having its own goals, characteristics and viewpoints on performance measurement. In particular, the society with a goal of maximising net benefits for all, could hope that microfinance intervention

will make the poor better-off. Meanwhile, donors are assumed to wish to maximize number of the poor served by microfinance services. Other stakeholders, including the poor, poor clients, workers and private investors seek to maximise their own net benefits.

Ideally, that the effectiveness of microfinance should be assessed on viewpoint of all groups. However, at least in the short-run, there is a trade-off among the goals of some stakeholders. For example, the profit maximisation goal of private investors may negatively influence poor clients who seek maximum benefits from financial services with low fees and low interest rates. In the long-run, synergy among goals of all groups may be achieved. For example, the self-sustainability of a microfinance institution will ensure its capacity to serve more customers longer. Hence, this study will focus on analysing the effects of microfinance on its clients and their families, nevertheless the effects on other stakeholders will also be investigated.

Serving the needs of different microfinance stakeholders using performance assessments is one of the distinguishing factors between effectiveness and impact studies. In particular, practitioners need assessments that can produce useful information to conduct routine management tasks such as prevention of arrear repayment. Donors on the other hand require assessments to identify whether scarce resources are being effectively used, and other stakeholders, such as clients, may require an assessment resulting in more flexible financial services. Hulme (2000) introduced two helpful terms for use in defining the objectives of assessments, namely "proving" and "improving". The "proving" assessment, often required by donors and policymakers, aims to produce conclusive evidence on the causality and significance between accessing microfinance and desired outcomes. Proving assessment prefers quantitative data with rigorous statistical/ econometric techniques.

The improving assessment, often used by practitioners, needs information on how to provide better financial services to clients. This type of assessment needs to be timely and low cost so it can be done on a regular basis (Simanowitz, 2004). In addition, the improving assessment gives priority to the participation of grassroots stakeholders such as fieldworkers and clients in the analysis process to develop internal learning systems.

Apart from the prove/improve dichotomy, there is a range of needs from other stakeholders, which results in differences in objectives, scale, scope and methodology of assessments. For example, academia may pursue large-scale quantitative analyses whilst practitioners may be keen on detailed small-scale qualitative assessments. It is often difficult to integrate all the needs of all the stakeholders into a single study. For example, an assessment at the national level cannot accommodate the detailed needs of all institutions. However, the needs of different stakeholders are not necessarily mutually exclusive either, for example, a proving assessment in microfinance can also provides insights that allow one to improve the performance of the industry. Therefore, before conducting an assessment, it is necessary to ensure that the study meets the needs of as many stakeholders as possible. This study focuses on meeting the needs of donors and policymakers, and the objective is to prove if microfinance in an effective tool to fight poverty.

2.2 Effects of microfinance

Before presenting the differences between an impact study and an effectiveness study, it is necessary to classify the effects of microfinance. In practice, the effects of microfinance can be classified into narrow and wider groups (McGregor et at., 2000). The terms "narrow" and "wider" differ mainly by the level (or domain) of effects. Although there are some slightly different views² on "wider" and "narrow", in this research the "narrow" notion refers to the effects at individual and household levels whilst the "wider" notion covers effects at community, regional and national levels. Effects can be classified into economic, social, cultural and political domains (Zohir & Matin, 2004).

² See, for example, McGregor et al. (2000), Kabeer (2003), and Zohir and Matin (2004)

Impacts on the economic domain are created mainly though the engagement between households and various markets (e.g., markets for labour, capital, goods and services). In the social domain the impacts are changes in the social relations between individuals and groups of individuals in a society. The political domain includes changes in the engagement between households and government agencies or between civil society and governments. Finally, effects in the cultural domain include changes in the perceptions, values and norms related to economic, social and political domains. It is expected that effects on economic domains occur sooner while social, cultural and political effects emerge in a longer period. In addition, at the "narrow" level, it is expected that economic and social effects of microfinance will be most prevalent while cultural and political effects are likely to be manifested at the "wider" level.

In short, microfinance interventions can create effects on its clients and various other agents, it can help the poor to have credit to invest in profitable projects, and thus increase income during the next period. However, microfinance may make local moneylenders unhappy because they could lose their clients. The effects of mirofinance can be classified into the "narrow" category, which focuses on analysing the effects at individual and household levels, and "wider" category, which investigates the effects at community, regional and national levels. Taking stock of effects of microfinance is the basis upon which one can differentiate effectiveness and impact assessments.

2.3 Differences between Effectiveness and Impact Analyses

Impact studies investigate all changes created in target groups and related agents by an intervention. In other words, impact studies are interested in what actually happened whether it is planned beforehand or not. Meanwhile, effectiveness studies focus on comparing the direct outcomes of an intervention with the planned objectives.

The difference between impacts and effectiveness analysis can be illustrated in Table 1, where effects are classified according to their relation with stated objectives (i.e. expected/unexpected), and causation types (i.e. direct/indirect). In particular, microfinance can create direct and expected effects (Quadrant I) by helping poor clients

to have enough capital to invest in profitable projects in order to earn more income. Microfinance may also create direct unexpected effects (Quadrant II) such as "debt trap" for borrowers whose investments failed to generate income. Since microfinance focuses on helping poor women to develop small businesses, it may also increase the workload for women and/or child labour, which may reduce time available for leisure and schooling for children. It is also expected that microfinance creates indirect effects (Quadrant III) such as borrowers employing non-borrowers in their projects. In addition, through mediation of group activities, microfinance may promote solidarity among community members. Finally, some indirect and unexpected effects (Quadrant IV) may be created such as formal banks becoming interested in joining the microfinance market. In addition, microfinance may help to create community-based institutions and through this mediation, the poor become more involved in policymaking dialogues.

Expected		Unexpected	
	Planned effects (I)	Unplanned direct effects (II)	
	e.g.:	e.g.:	
Direct	- Increase income/expenditure of	- Increase "debt trap" for borrowers	
	member households and	- Increase workload for women	
	individuals	- Possible increase in child labour	
	Effects through other channels (III)	Unplanned distance effects (IV)	
	e.g.:	e.g.:	
	- More jobs created for	- Increase participation of formal	
Indirect	non-members	banks in microfinance market	
	- Increase in solidarity in the	- More involvement of the poor and	
	community	their organisations in policy	
		making dialogues	

Table 1: Johari Wi	indow on Effects	of Microfinance
--------------------	------------------	-----------------

Source: adapted from Johnson (1998)

An effectiveness analysis focuses on the expected and direct effects created by microfinance intervention (Quadrant I). Meanwhile, an impact analysis also captures the

effects in quadrants II, III and even IV. Using the terms proposed by Hulme (2000), effectiveness analysis is similar to "proving impact assessment" whilst impact studies are similar to "improving impact assessment". That is, the former focuses on identifying if the desired outcomes were achieved while the latter also tries to discover other outcomes.

There is no doubt that a very thorough investigation of all four quadrants in Table 1 would reveal a clear picture about an intervention. However, the integration of all effects in an assessment may encounter the difficulty of combining views, assumptions and methodologies across disciplines such as economics, anthropology, sociology and political science (McGregor et al., 2000). In addition, some 'wider' impacts of a cultural and political nature would require a longer time to elapse, thus, it may not be practicable to look for some impacts if there has not been sufficient time for such impacts to have emerged.

In short, the complex and tenuous causal relationship between microfinance and some "wider" impacts may raise concerns on issues such as reliability and cost-effectiveness of full impact assessments. Therefore, depending on the objectives of the studies and constraints, such as time and resources, priorities should be placed on various impacts. Effectiveness studies, therefore, focus on analysing impacts at individual and household levels, although key impacts at wider levels may also be investigated.

3. THE CONCEPTUAL FRAMEWORK

3.1 Components and linkages

The conceptual framework in this study is based mainly on models developed by Zeller (1995), Scoones (1998), and AIMS (2001). In addition, Schreiner (1997) and Marr (2002) are used to analyse the scope, domains and causations of effects. In particular, the scope of analysis focuses on individual and household levels with the assumption of pooled

income³ (i.e. members act jointly to maximize the household utility). Household resources are classified into three groups: human capital, physical capital and financial capital. This resource pool includes the household endowment and that mobilised from external sources, such as microfinance and social networks. Households use their resource pool for three sets of activities: consumption, production and investment (see Figure 2). Consumption includes activities to satisfy needs and wants using items such as food, clothing, health care, education, and entertainment. Consumption activities often do not contribute directly to the accumulation of physical and financial capital of households⁴. However, consumption is important to maintain and increase productivity of human capital by ensuring good education and health status⁵. Production activities of households can be classified into two groups: income-generating activities (including crop cultivation, animal husbandry, small business and wage labour), and activities to generate goods and services that are for consumption within the household⁶. Investment includes activities to build up resources and the asset base of the household for future periods. Products of investment may be tangible items such as real properties (e.g. land, houses), physical stores of wealth (e.g. jewellery), financial stocks (e.g. savings account), and productive assets (e.g. machinery). Investment may also be available in an intangible form such as social capital (e.g. strengthen social networks) and human capital (e.g.

³ Non-pool income models such as Lundberg and Pollak (1993), assume that each household member cooperates to maximize his/her own utility subject to individual resource constraints, but this is beyond the scope of this study.

⁴ The exception may include the consumption of items such as antiques that can be more valuable with time or excess consumption of durable goods can accumulate as household assets. This linkage between consumption and assets and income is represented by the dotted line in Figure 2.

⁵ Health in this study refers to both physical and mental aspects. Consumption of food and drinks maintain physical health whilst consumption of other items such as entertainment, holidays, durables etc, may increase mental health (i.e. joyfulness, fulfilment and happiness).

⁶ In some studies such as Becker (1991), goods and services produced for a household's own consumption were termed Z-goods

pursuit of further education). The distribution of resources among activities depends on the household livelihood strategies⁷ which were built based on resources available, environmental conditions, and shocks.

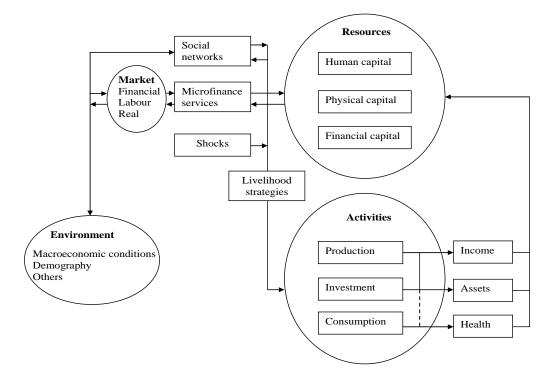


Figure 2: Microfinance and the Household Economic Portfolio

Source: compiled from Zeller (1995), Scoones (1998), AIMS (2001)

Household resources and activities are recursively related. In particular, household resources are used for income generating activities, housework or investment. In return, production and investment generate income and additional resources that flow back to the household. Consumption activities, although not expected to contribute directly to income and asset growth, play a crucial role in ensuring a healthy workforce for the

⁷ Livelihood strategies in this study refer to a combination of decisions and activities that households make and undertake to achieve their livelihood objectives (e.g. increase and stabilise income).

household. Overall, resources play both roles (i.e. as inputs and as outputs) of household activities.

In order to analyse the effects of microfinance on individuals, it is necessary to examine the interactions among household members in the decision-making process and activities. In particular, household activities can be conducted jointly or individually. Likewise, resources may or may not be shared among individuals in the household, for example, farm work is often shared equally between men and women while housework is mainly the sole responsible of women. In addition, members become involved in bargaining during the decision-making process on resource mobilisation, organising and conducting activities, for example, household heads are responsible for important decisions such as big investments, purchasing durable goods and marriage of children. These facts enable detailed investigations of the effects of interventions, such as microfinance services on individual household members. However, investigating all details of intra-households effects of microfinance are possible only by utilising qualitative methods. In order to investigate the effects on individuals using quantitative techniques, some assumptions may need to be made, for example, in this study it is assumed that household members cooperate in all activities so that consumption per adult-equivalent can be used as a proxy measure of economic effects of microfinance on individuals.

3.2 Effects of microfinance

Before analysing the effects of microfinance on households, it is helpful to summarise its main services. As can be seen in Figure 2, microfinance provides additional resources (i.e. credit) that can be used in a practical way for all household activities. The resources of households can also be used to generate safer and higher returns through the mediation of saving and insurance services. In addition, most microfinance programs provide "value added" services, such as training on bookkeeping and small business practices, to provide the household knowledge needed to develop better livelihood strategies.

Table 2: Effects of Microfinance

Material Personal income/expenditure: level, growth and stability Cognitive Perceived value of microfinance trainings and group meetings Perceived treatments by others Degree of involvement in decision making process at home, and social groups Perceiptual Degree of participation in community organisations Relational Degree of mobility (i.e. destination, purposes and frequency of travel) Level, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions) Actual and perceived return on long-term investment (e.g household relation Types and levels of interactions in decision making or household activities Distribution of income and consumption among household members Finance market: Changes in financial services for small households (i.e., competition, market share, quality of products) Labour market: changes in degree of competition, structure of economic activities, factor and output prices Degree of involvement of the poor and marginalised groups in social activities Distribution Degree of involvement of the poor and their organisation in policy making process	Levels	Types	Operational Measurement
TopologicalPerceivedPerceived treatments by others Degree of involvement in decision making process at home, and social groupsPerceptualDegree of participation in community organisations Degree of participation in community organisations Degree of mobility (i.e. destination, purposes and frequency of travel)RelationalDegree of mobility (i.e. destination, purposes and frequency of travel)EconomicLevel, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. household relationIntra- household relationTypes and levels of interactions in decision making or household activities Distribution of income and consumption among household members	Individual	Material	Personal income/expenditure: level, growth and stability
PerceptualDegree of involvement in decision making process at home, and social groupsRelationalDegree of participation in community organisationsDegree of participation in community organisationsDegree of participation in community organisationsRelationalDegree of mobility (i.e. destination, purposes and frequency of travel)EconomicLevel, growth and stability of income/consumption Acquisition of physical assetsEconomicStructure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. household relationIntra- household relationTypes and levels of interactions in decision making or household activities Distribution of income and consumption among household membersFinance FinanceFinance market: Changes in financial services for small		Cognitive	Perceived value of microfinance trainings and group meetings
RelationalDegree of participation in community organisationsRelationalDegree of mobility (i.e. destination, purposes and frequency of travel)EconomicLevel, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household members			Perceived treatments by others
RelationalDegree of participation in community organisationsRelationalDegree of mobility (i.e. destination, purposes and frequency of travel)EconomicLevel, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household members		Perceptual	Degree of involvement in decision making process at home,
RelationalDegree of participation in community organisationsRelationalDegree of mobility (i.e. destination, purposes and frequency of travel)EconomicLevel, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household members			
Populationtravel)EconomicLevel, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household members		Relational	
Pog BLevel, growth and stability of income/consumption Acquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making or household activities Distribution of income and consumption among household members			
PopulationAcquisition of physical assets Structure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household members			,
Pog BigEconomicStructure (motivation, methods, value) of saving Insurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household membersFinance Finance FinanceFinance market: Changes in financial services for small		Economic	
ProposeInsurance and risk management/coping means Structure of investment (i.e. types, proportions)Long-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household membersFinance Finance FinanceFinance market: Changes in financial services for small			
Portuge Structure of investment (i.e. types, proportions) Long-term Actual and perceived return on long-term investment (e.g. housing, education, health and fixed assets) Intra-household Types and levels of interactions in decision making on household activities Distribution of income and consumption among household members Distribution of income and consumption among household			
UnderstandLong-term livelihood strategyActual and perceived return on long-term investment (e.g. housing, education, health and fixed assets)Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household membersFinance Finance Finance Finance Finance FinanceFinance market:			
Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household membersFinance market:Changes in financial services for small	old		
Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household membersFinance market:Changes in financial services for small	seh	0	1 0 0
Intra- household relationTypes and levels of interactions in decision making on household activities Distribution of income and consumption among household membersFinance market:Changes in financial services for small	sno		housing, education, health and fixed assets)
Intra- household relation household activities Distribution of income and consumption among household members Finance market: Changes in financial services for small	H	strategy	
household relation Distribution of income and consumption among household members Finance market: Changes in financial services for small		household	
relation members Finance market: Changes in financial services for small			
Finance market: Changes in financial services for small			
Image: Prinance market: Changes in financial services for small households (i.e., competition, market share, quality of products)EconomicsEconomicsEconomicsLabour market: Changes in wages rate, income of small business, types and proportions of jobs Real market: changes in degree of competition, structure of economic activities, factor and output pricesSocialDegree of involvement of the poor and marginalised groups in social activities Development of community associations and networksCulturalHabit of saving and insurance Faith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their			
Indusenoids(i.e., competition, market share, quality of products)EconomicsLabour market: Changes in wages rate, income of small business, types and proportions of jobs Real market: changes in degree of competition, structure of economic activities, factor and output pricesSocialDegree of involvement of the poor and marginalised groups in social activities Development of community associations and networksCulturalHabit of saving and insurance Faith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their	(j	Economics	0
Image: Products)EconomicsLabour market: Changes in wages rate, income of small business, types and proportions of jobs Real market: changes in degree of competition, structure of economic activities, factor and output pricesViting Degree of involvement of the poor and marginalised groups in social activities Development of community associations and networksCulturalHabit of saving and insurance Faith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their	ona		
Image: TeconomicsLabour market: Changes in wages rate, income of smarket: business, types and proportions of jobs Real market: changes in degree of competition, structure of economic activities, factor and output pricesImage: Teconomic activities Degree of involvement of the poor and marginalised groups in social activities Development of community associations and networksImage: Teconomic activities Development of saving and insurance Faith in formal and semi-formal financial servicesImage: Teconomic activities Development of involvement of the poor and theirImage: Teconomic activities Development of saving and insurance Faith in formal and semi-formal financial servicesImage: Teconomic activities Development of involvement of the poor and their	atio		1 /
SocialDegree of involvement of community associations and networksCulturalHabit of saving and insurance Faith in formal and semi-formal financial services	gional, n		
SocialDegree of involvement of the poor and marginalised groups in social activitiesSocialDegree of involvement of the poor and marginalised groups in social activitiesOuturalHabit of saving and insurance Faith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their			
SocialDegree of involvement of the poor and marginalised groups in social activities Development of community associations and networksCulturalHabit of saving and insurance Faith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their			
SocialDegree of involvement of the poor and marginanised groups in social activities Development of community associations and networksCulturalHabit of saving and insurance Faith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their	, re	Social	
Output Social activities Development of community associations and networks Cultural Habit of saving and insurance Faith in formal and semi-formal financial services Types and levels of involvement of the poor and their	lity		
Image: Second constraint of constrainty associations and networksImage: Second constraint of constraint of constraint of constraints and networksImage: Second constraint of constraint of constraints and networksImage: Second c	Wider (commun		
SCulturalFaith in formal and semi-formal financial servicesTypes and levels of involvement of the poor and their		Cultural	
Image: Second			-
Types and levels of myoryement of the pool and then		Political	
Political organisation in policy making process			
			signmenter in porte, mining process

Source: adapted from Marr (2002), and Zohir and Matin (2004)

Table 2 presents a summary of the effects of microfinance, classified by types and levels. The effectiveness analyses focus at the household level, although key effects at wider levels may also be considered. At individual levels, the effects of microfinance include material, cognitive, perceptual and relational groups. It is expected that material (or economic) effects, such as the level, growth and stability of income/consumption. It is also expected that material effects can be achieved sooner than other effects.

Cognitive effects include changes in knowledge accumulated in training courses and experience exchanged with other members during group meetings and daily activities. Perceptual effects can be measured by the degree of participation in group and community activities, and perception of treatment by others. Finally, relational effects can be measured by the degree of participation in community and social organisations and the level of mobility. It is expected that microfinance provides more social outlets to its clients, and thus, members will be more involved in community organisations and activities.

At the household level, effects are classified into economic, long-term livelihood strategies, and intra-household relations. The economic effects include mainly the growth and stability of income/consumption. In addition, economic effects on households can be measured by the accumulation of physical assets, and the structure of saving and investment. The long-term livelihood effects of households are measured by the actual and perceived return on long-term investments such as housing, education, and fixed-assets. It is expected that efficient long-term investment portfolio ensures sustainable livelihood for households so that they can escape and do not fall back to poverty. Finally, effects on intra-household relations can be measured by the level of interactions among members in household activities, and the distribution of income/consumption.

The economic effects on household include three main elements: magnitude, growth and stability of income/consumption. The magnitude and growth effects on households are created mainly through production and investment activities whilst the stability effects are created through saving, insurance and other risk management strategies. Using loans from microfinance, households can expand the scale and/or scope of production and investment activities (relatively safe but low return) to new projects (relatively risky but more profitable) owing to sufficient access to financial services and new skills learnt from experience of group members and training courses provided by microfinance institutions. It is also

expected that the productivity of households will increase if there is a healthy workforce, which in turn, is a product of a sufficient and stable consumption bundle.

Wider level effects are classified into economic, social, cultural and political groups (Zohir and Matin, 2004). The economic effects are created through the financial, labour, and real markets. Financial market effects may include changes in the intensity of competition among service providers, changes in the varieties of products and quality of services. In addition, through the labour markets, microfinance may create changes in the rate of employment and wage rates. Finally, the development of microfinance may create changes in the real market, such as factor and output prices, and the structure of local economic activities. The social effects at the wider level may be measured by the involvement of the poor, women and marginalised groups in social and economic activities, and the development of social networks. Meanwhile, the cultural effects may include the shift from passive traditional savings, such as moneybox and jewelleries, into safe and productive saving accounts. Attitudes of the local community, especially the poor and women, towards semi-formal and formal financial service providers may also change after involvement in microfinance. Finally, the political effects of microfinance may include changes in perceptions of policymakers on the roles of grassroots stakeholders, and the level of involvement of civil society in policymaking dialogue. For example, practitioners in Vietnam have been invited to contribute to the decree on microfinance launched in March 2005.

4. METHODOLOGICAL CONSIDERATIONS

The conceptual framework proposed in this study has provided some insights into the causal relationships between microfinance intervention and its effects. A challenging issue that remains relates to data collection and analysis. This section describes choices of methodologies allow one to identify effects of microfinance and their attributes. If all information is available, judgements concerning the worthiness of microfinance could be made, based on benefits and costs of this intervention versus the best alternative development projects. However, judgements about the worthiness of microfinance is

beyond the scope of this study owing to the paucity of information on "best" development projects.

4.1 Effects and Attributes

Impact assessment methodologies range from participatory techniques to comprehensive scientific methods (Hulme, 2000). Each methodology has advantages and disadvantages. For example, the participatory approaches can generate quick results with low costs but their findings are mainly based on anecdotal evidence. In contrast, the scientific methods can generate sound statistical evidence but it is often costly, not timely, and can suffer from a lack of contextual knowledge to provide relevant interpretation of results Kabeer (1998). However, there is no compromise on the question "whose really counts?" as raised by Chambers (1995). The selection of methods should be based on the purpose of each study, and the time and resource constraints. This study uses a mixed approach with both qualitative and quantitative methods, an increasing trend in development studies (Rao, 2002; Rao & Woolcock, 2003). The mixed approach aims to exploit the advantage of both techniques, and in addition, the crosschecking among techniques can promote consistency in results.

The methodological choice in this study included participatory rural appraisal techniques (e.g. semi-structured interviews and groups discussions), econometric techniques, using data from the household survey conducted in this study and the secondary data from the Vietnam Living Standard Survey (VLSS) series. In particular, participatory techniques were used to explore issues such as operational environment, intra-household relationships, and perceptions of stakeholders on effectiveness.

The effects at household and individual levels were investigated using quantitative techniques with data from the above-mentioned household surveys. Ideally, that an impact assessment is conducted using the "double difference" comparison (i.e. compare clients with non-clients, and before and after participating in microfinance). The contribution of microfinance is measured by the changes in welfare before and after the intervention of clients and that of non-clients. However, because of the time constraint

for longitudinal surveys, comparison between clients and non-clients using crosssectional data is used more often in practice. The household survey in this study also contains only cross-sectional data on clients and non-clients.

There are two main issues in the assessment of microfinance impacts by comparing clients and non-clients: self-selection and non-random program placement biases. In particular, members of microfinance generally select themselves into the programs. Additionally, microfinance organisations generally select their project sites based on certain criteria, such as poverty incidence, availability of financial services and accessibility to the poor⁸. Regarding the self-selection issue, non-members and members of microfinance may have different risk attitudes and/or entrepreneurial skills, which can lead to differences in income (not related to the loan), which is a key indicator in impact studies. Similarly, with the selection criteria (e.g., poverty rate and locations), less 'dynamic' villages (e.g., those with poorer production skills) may be selected to join microfinance before other villages. Therefore, comparison of member villages and nonmember villages can provide biased results since the unobservable characteristics between these villages can influence the main impact indicators. To overcome these problems, this research has adapted Coleman's (1999) survey design, that compared member- with member-to-be households (i.e., those who meet the selection criteria but have not been provided the financial service).

Secondary data from three VLSS surveys in 1992, 1998 and 2002 is also used to analyse effects of accessing to credit and household income. This data series has several advantages. It has a national representation with large a sample size and sound sampling techniques. In addition, most households were surveyed in both VLSS 1992 and VLSS 1998, created valuable information for the "before-after" comparison. Although the VLSS surveys were not designed for control-treatment comparison, it is possible to use the national poverty line and loan-size information to differentiate households, for

⁸ For more discussions about these issues, see, for example, Hulme and Mosley (1996), Sebstad and Chen (1996), Hulme (2000), and Zeller and Meyer (2002).

example, the analysis will identify whether poor households who received micro loans in VLSS1992 were able to get out of poverty in VLSS1998.

4.2 Worthiness Judgements

Cost-benefit analysis (CBA), which compares costs with benefits of an intervention, is an ideal tool to assess performance of microfinance (Schreiner, 1997). Benefits and costs in CBA are converted to the present-value format. With the same discount rate (e.g. saving interest rate of banks) and time-span, CBA selects the intervention that generates highest net present value (NPV). However, CBA is generally applied in *ex-ante* assessments while effectiveness studies are often conducted *ex-post*. CBA also requires the quantification of benefits while in many interventions, benefits cannot be measured quantitatively or the quantification is difficult or questionable. In addition, the selection of proper discounting rates in CBA is difficult in many interventions. An alternative to CBA is the cost effectiveness analysis (CEA), which measures the unit cost of outputs, hence, is cheaper and simpler to conduct than CBA. Instead of making judgement on NPV, CEA simply supports interventions that can be conducted with least unit cost of outputs assuming all projects generate the same benefits.

There is no doubt that CBA or CEA are very good tools to evaluate the worthiness of interventions such as microfinance. However, this study is an *ex-post* evaluation of microfinance, thus a full CBA may not be necessary. Also, one practical issue in this study of the shortage of information on costs of alternative development projects, making even a full CEA difficult. Therefore, making judgement on the worthiness of microfinance will not be the main focus of this study. Instead, the study focuses on analysing the achievement of main objectives in microfinance and its determinants.

5. CONCLUDING REMARKS

This paper has presented a conceptual framework for analysing the effectiveness of microfinance by combining concepts of household economic portfolio and sustainable

livelihood system. The framework provides guidelines the prediction and interpretations of logical linkages between microfinance intervention and its effects to the target clients and other stakeholders. The framework helps to overcome the fungibility capital issue in microfinance assessment. Self-selection and non-random program placement biases in the assessment process are also discussed and methodological choices introduced to overcome theses issues. This framework can provide a clearer picture the roles of microfinance in poverty reduction.

REFERENCES

- AIMS. 2001. "Conceptual Framework for Assessing the Impacts of Microenterprise Services." Assessing the Impact of Microenterprise Services (AIMS), USAID, Washington D.C.
- Barnes, C. 1996. "Assets and the Impact of Microenterprise Finance Programs." AIMS project report, USAID, Washington D.C.
- Becker, G.S. 1991. *A Treatise on the Family: Enlarged Edition*. Cambridge, Massachuset: Harvard University Press.
- Chambers, R. 1995. "Poverty and Livelihood: whose really counts?" Brighton: University of Sussex: IDS Discussion Paper No. 347.
- Chen, M.A. 1997. "A Guide for Assessing the Impact of Microenterprise Services at the Individual Level." AIMS project report, USAID, Washington D.C.
- Chen, M.A. and E. Dunn. 1996. "Household Economic Portfolios." AIMS Project Report, USAID, Washington D.C.
- Chua, R.T. and G.M. Llanto. 1996. "Assessing the Efficiency and Outreach of Microfinance Schemes." Working paper No. 15, Enterprise Development Department, International Labour Organisation, Geneva.
- Coleman, Brett E. 1999. "The Impact of Group Lending in Northeast Thailand." *Journal* of Development Economics 60:105-41.
- Dunn, E., N. Kalaitzandonakes, and C. Valdivia. 1996. "Risk and Impacts of Microenterprise Services." AIMS Project Report, USAID, Washington D.C.
- Fraser, M. 1994. "Quality in higher education: an international perspective." in *What is Quality in Higher Education?*, edited by D. Green. Buckingham: Open University Press and Society for Research into Higher Education.
- Harvey, L. 2004. "Analytic Quality Glossary." vol. 2005: Quality Research International, <u>http://www.qualityresearchinternational.com/glossary/</u> (26.08.2005).
- Hulme, David. 2000. "Impact Assessment Methodologies for Microfinance: Theory, Experience and Better Practice." *World Development* 28:79-98.
- Hulme, David and Paul Mosley. 1996. *Finance Against Poverty*, vol. 1-2: Routledge: London.
- Johnson, S. 1998. "Programme Impact Assessment in Microfinance: the Need for Analysis of the Real Market." *IDS Bulletin* 29:21-30.
- Kabeer, N. 1998. "Money Can't Buy Me Love? Re-evaluating Gender, Credit, and Empowerment in Rural Bangladesh." Brighton, University of Sussex: IDS Discussion Paper No. 363.

- —. 2003. "Assessing the "Wider" Social Impacts of Microfinance Services: Concepts, Methods, Findings." *IDS Bulletin* 34.
- Luft, Joseph. 1970. *Group processes : an introduction to group dynamics*. Palo Alto, California: National Press Books.
- Lundberg, S. and R.A. Pollak. 1993. "Separate Spheres Bargaining and the Marriage Market." *Journal of Political Economy* 101:988-1010.
- Maertens, M. 2003. "Operational and Institutional Obstacles for the Efficacy of Microcredit Programs for Poverty Reduction in Rural Vietnam." Working Papers, Katholic University of Leuven, Belgium.
- Marr, Ana. 2002. "Studying Group Dynamics: An Alternative Analytical Framework for the Study of Microfinance Impacts on Poverty Reduction." *Journal of International Development* 14:511-34.
- Maslow, A.H. 1943. "A Theory of Human Motivation." *Psychological Review* 50:370-396.
- McGregor, J. A., P. Mosley, S. Johnson, and A. Simanowitz. 2000. "How can impact assessment take into account wider social and economic impacts?" Working Paper No. 3, Institute of Development Studies, University of Sussex.
- Rao, Vijayendra. 2002. "Experiments in Participatory Econometrics: Improving the Connection between Economic Analysis and the Real World." *Economic and Political Weekly*:1887-91.
- Rao, Vijayendra and Michael Woolcock. 2003. "Integrating Qualitative and Quantitative Approaches in Program Evaluation." Pp. 165-90 in *The impact of economic policies on poverty and income distribution: Evaluation techniques and tools.* Washington, D.C., Oxford and New York: World Bank, Oxford University Press.
- Schreiner, Mark. 1997. "A Framework for the Analysis of the Performance and Sustainability of Subsidized Microfinance Organisations." PhD Thesis, Ohio State University.
- —. 2003. "A Cost-Effectiveness Analysis of the Grameen Bank of Bangladesh." Development Policy Review 21:357-82.
- Scoones, I. 1998. "Sustainable Rural Livelihoods: A Framework for Analysis." Brighton, Institute of Development Studies: IDS Working Paper 72.
- Sebstad, J. and G. Chen. 1996. "Overview of Studies on the Impact of Microenterprise Credit." Report presented to AIMS Project, Washington D.C.
- Sebstad, J. and M. Cohen. 2000. "Microfinance, Risk Management, and Poverty." AIMS Project Report, USAID, Washington D.C.
- Sebstad, J., C. Neil, C. Barnes, and G. Chen. 1995. "Assessing the Impacts of Microenterprise Interventions: A Framework for Analysis." USAID.

- Simanowitz, A. 2004. "Isues in designing effective microfinance impact assessment system." Brighton: Working Paper NO. 8, Institute of Development Studies, University of Sussex.
- Snodgrass, D. 1996. "The Economic, Policy, and Regulatory Environment." AIMS Project Report, USAID, Washington D.C.
- Wojtczak, A. 2002. "Glossary of Medical Education Terms." vol. 2005: http://www.iime.org/glossary.htm (26.08.2005).
- Zeller, Manfred. 1995. "The Demand for Financial Services by Rural Households: Conceptual Framework and Empirical Findings." *Quarterly Journal of International Agriculture* 34:149-170.
- Zeller, Manfred and Richard L. Meyer. 2002. *The triangle of microfinance*: John Hopkins University Press.
- Zohir, S. and I. Matin. 2004. "Wider impacts of microfinance institutions: issues and concepts." *Journal of International Development* 16:301-330.