Rural credit markets and their impact on vulnerability to poverty: Empirical evidence from Northeast Thailand

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Abstract

Living conditions in developing countries are often difficult. Since a large proportion of the population is engaged in farming activities, their income is not only low but also very volatile. As a result most people live in poverty or are threatened to fall into poverty. One important requirement to improve their situation is financial development. At the country level, functioning institutions and a broad range of products promote overall economic growth. At the household level, financial development enables people to bridge income gaps, save parts of their income and to undertake investments to improve production processes.

This research focuses on these so-called vulnerable people and examines how specifically rural credit affects their economic situation and contributes to reducing poverty in Thailand.

Chapter 2 examines a policy-induced microfinance programme which has been set up in Thailand in 2001. The data suggests that this programme successfully targets poor people and helps to improve their economic situation for a short period of time. However, it is questionable whether the subsidized loans have sustainable impacts since they do not substitute more expensive credit sources and do not affect lending behaviour of households.

Chapter 3 focuses on the segmentation of rural credit markets in which relatively expensive informal lenders still play an important role. By showing that poor as well as rich households demand informal loans but use them for different purposes, this chapter provides an explanation for market segmentation.

Chapter 4 examines loan terms and in particular collateral issues more closely. As a standard ingredient of loan contracts, collateral is often demanded but this demand cannot always be met by the poor. Collateral requirements depend on the riskiness of a borrower. Chapter 4 explains how different types of lenders (formal and informal) gain information on borrowers' risk and therefore are able to lower collateral requirements.

Keywords: Thailand, rural credit markets, microfinance, informal loans, collateral

Zusammenfassung

Menschen in Entwicklungsländern sind oft schwierigen Lebensbedingungen ausgesetzt. Viele von ihnen verdienen ihren Lebensunterhalt mit landwirtschaftlicher Tätigkeit, was häufig zu niedrigen und gleichzeitig schwankenden Einkommen führt. Folglich leben viele dieser Menschen in Armut, oder sind davon bedroht, in Armut zu fallen. Eine der Grundvoraussetzungen für die Verbesserung ihrer ökonomischen Situation ist ein entwickeltes Finanzsystem. Auf Länderebene kann dieses Wirtschaftswachstum fördern. Für Haushalte bedeutet ein entwickeltes Finanzsystem eine Möglichkeit, Einkommensengpässe zu überbrücken, sichere Sparmöglichkeiten zu nutzen und durch Investitionen den (landwirtschaftlichen) Produktionsprozess zu verbessern.

Diese Arbeit widmet sich den Menschen in Entwicklungsländern, die Gefahr laufen, in Armut zu fallen oder bereits in Armut leben. Dabei steht der ländliche Kreditmarkt in Thailand im Fokus und die Möglichkeiten, die dieser bietet, Armut zu reduzieren.

Kapitel 2 untersucht ein Mikrofinanzprogramm, das 2001 in Thailand eingeführt wurde. Aufgrund der ausgewerteten Datenlage lässt sich sagen, dass dieses Programm die Zielgruppe der besonders armen Haushalte erreicht und deren Situation kurzfristig verbessert. Allerdings ist es fraglich, ob diese subventionierten Kredite einen nachhaltigen Effekt haben, da sie weder teurere Kredite substituieren, noch Kreditentscheidungen von Haushalten anderweitig beeinflussen.

Kapitel 3 befasst sich mit dem stark segmentierten Kreditmarkt auf dem relativ teure informelle Kredite immer noch einen hohen Anteil haben. Es wird gezeigt, dass sowohl reiche, als auch arme Haushalte informelle Kredite nachfragen und dass sie diese Kredite für unterschiedliche Zwecke nutzen.

Kapitel 4 untersucht Kreditbedingungen und im Speziellen Kreditbesicherung. Kreditsicherheiten sind ein gängiger Bestandteil von Kreditverträgen, jedoch können viele arme Menschen keine solchen Kreditsicherheiten stellen. Je riskanter ein Kreditnehmer auf den Kreditgeber wirkt, desto wahrscheinlicher muss er Sicherheiten

stellen. Kapitel 4 zeigt, wie Kreditgeber durch mehr Informationen das Risiko besser einschätzen können und daher weniger Kreditsicherheiten verlangen.

Schlagworte: Thailand, ländliche Kreditmärkte, Mikrofinanzierung, informelle Kredite, Kreditsicherheiten

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1. Introduction

In developing countries people often face difficult living conditions. Especially households in the rural areas are often engaged in farming activities so that their income is very volatile and strongly dependent on weather conditions or world market prices of their products. Hence, households often live in poverty or are threatened to fall into poverty.

Financial development is a crucial issue, not only for promoting overall economic growth for the whole country but also for improving the economic situation of every household. Financial institutions and their products enable people to buy inputs for the next harvesting season, they help to bridge income shortcomings in lean times, offer possibilities for (agricultural) investments to improve the production process and provide safe savings opportunities.

One important precondition for financial decision making is that people have access to finance. Indeed, access to credit, potential savings and insurances have been identified to be a crucial issue for people in developing countries. Many attempts have been made to enhance access to finance. Microfinance institutions all over the world attest to the efforts of governments and non-governmental organisations in this respect. However, programmes often follow their own agenda and have different aims apart from helping the poor as recent discussions about commercialization of microfinance show. Therefore any microfinance programme should be evaluated carefully.

Although microfinance has been put into place, many households in developing countries still opt to borrow from informal credit sources which are often more expensive than banks or microcredit institutions. Furthermore, even if finance is available, people may be excluded from financial sources because lenders require collateral poor people are not able to pledge. Or, if they can bring up collateral, loans are still risky and a loss of collateral could mean further deterioration of their economic situation.

This dissertation examines how financial institutions influence the well-being of people by analysing several aspects of rural credit markets in developing countries. In particular, the following questions are addressed: How efficient are policy-induced microfinance programmes and what are their effects? Why and when do people choose to borrow from informal sources and how do informal loans effect their economic situation? When do households have to pledge collateral, and how can a reduction in asymmetric information ease collateral requirements?

In order to answer these questions appropriate data is needed. This research relies on data emanating the DFG-funded project "Impact of shocks on the vulnerability to poverty: consequences for development of emerging Southeast Asian economies" (Research Group FOR 756). Within this project a cross-sectional survey first took place between April and June 2007 in Thailand. This initial survey has been expanded for the years 2008 and 2010 so that a panel data set of three waves is available. The three provinces are Buri Ram, Nakhon Phanom and Ubon Ratchathani, which are located in the North-eastern part of Thailand, the poorest region of the country with low income and high agricultural activity. Household identification follows a three-stage stratified sampling procedure: within each province sub-districts were chosen with probability according to their size and two villages in each sub-district were randomly identified. Finally, 10 households of each village were randomly selected to be interviewed. The overall sample which is used in this research consists of 2,105 households that have been interviewed in all three waves. It is the large sample and the broad information basis that makes the data set very useful for the following research. In particular, there is information on household characteristics, their economic situation and finance-related activities, such as borrowing, saving, default history, credit rationing and lending. Furthermore a broad range of different lending institutions is operating in Thailand so that the data contributes to a better understanding of rural credit markets and households' borrowing decisions.

The dissertation is structured as follows: Chapter 2 examines a policy-induced microfinance programme, the so-called village funds (VF) programme, which has been

set up in all Thai villages in 2001. Former studies find that this programme targets people with lower economic status and improves access to finance. Furthermore it seems to increase income, asset endowment and household's expenditures. But given the high costs of this programme it is questionable whether the costs of approximately 1.5% of the GDP in 2001, or US\$ 1.8 billion, can be justified. The results in *Chapter 2* show that households who borrow from VF are more likely business owners, larger households with less land holding and unlikely to be farming. As a consequence they are limited in their income generation, especially regarding food production and have less land or other assets. With respect to the effect of VF loans, the results show that they seem to stabilise the economic situation of permanent VF borrowers in that income and overall asset endowment do not fluctuate much over time. The loss of a VF loan, however, leads to a downturn of economic variables. Concerning borrowing purposes, VF loans do not have great impact on borrowing behaviour on household level. Indeed, they seem to be a one-time event and do not substitute more expensive informal loans. Due to their limited maturity they cannot be used for long-term investments either.

Despite some efforts to enhance access to finance, poor as well as rich households in Thailand still borrow from relatively expensive informal sources which account for 19% of all credit contracts. Related literature finds that the decision to borrow from a specific lender depends on borrowing purposes. The common view is that formal loans are used for production or investment purposes whereas informal loans are used for consumption purposes. *Chapter 3* contributes to existing literature by looking at the effects of these loans across income groups of households: poor households increase their asset endowment and in particular farming assets after informal loans have been received. Rich households demand informal loans especially if they are hit by a shock or credit rationed in the formal sector. They use informal loans to increase their (food) consumption, especially if they are less likely farmers, hit by a shock and/or credit rationed in the formal sector.

Chapter 4 examines loan terms and in particular collateral issues more closely. Collateral is a standard ingredient of loan contracts but the rural poor are often not able

to meet collateral requirements which is why they are excluded from formal credit more often than others. Furthermore, the loss of pledged collateral may worsen their economic situation. Whether or not collateral is required depends on the riskiness of a borrower: the higher the observable risk the more likely collateral is required. This is known as the ex ante theory of collateral and is thoroughly examined in literature. In line with this theory there are some predictions regarding collateral for different types of lenders. One can broadly distinguish between formal lenders and informal lenders; informal lenders live nearby or among the rural poor and therefore have better information on their riskiness. As a consequence, given the same riskiness of a borrower, informal lenders would demand less collateral. Chapter 4 uses two measures to capture asymmetric information between lender and borrower: relationship duration in years and geographical distance between lender and borrower. The results show that an increase in information has different effects among lender groups. Relationship duration lowers collateral requirements for formal lenders because they can make use of additional information, whereas it does not lower collateral demanded by informal lenders. Short distances reduce collateral requirements only for informal lenders who can exploit their informational advantage via their proximity to borrowers.

According to the results the following implications can be drawn: firstly, microfinance institutions are no panacea since they do not always have long-lasting impacts on households. Setting up expensive programmes should be considered carefully.

Secondly, informal loans are in general an expensive source of credit but they serve specific purposes which are not limited to serving the very poor. Any programme that aims at reducing the reliance on informal lenders should take this into account.

Thirdly, informal lenders behave differently in setting collateral requirements since they have more information on borrowers' risks. Measures to develop the financial system should particularly strengthen formal lenders by providing informational networks and enhance transparency.