Accessing rural finance

The rural financial market in Northern Vietnam

Studies on the Agricultural and Food Sector
in Central and Eastern Europe

Edited by
Leibniz Institute of Agricultural Development
in Central and Eastern Europe
IAMO

Volume 36

Accessing rural finance

The rural financial market in Northern Vietnam

by
Thomas Dufhues

IAMO

2007

Bibliografische Information Der Deutschen Bibliothek
Die Deutsche Bibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.ddb.de abrufbar.

Bibliographic information published by Die Deutsche Bibliothek
Die Deutsche Bibliothek lists the publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the internet at: http://dnb.ddb.de.

This thesis was accepted as a doctoral dissertation in fulfillment of the requirements for the degree "Doktor der Agrarwissenschaften" by the Faculty Agricultural Sciences at University of Hohenheim on 29.06.2005.

Date of oral examination:	06.03.2006
Examination Committee	
Dean and Head of the Committee:	Prof. Dr. K. Stahr
Supervisor and Reviewer:	Prof. Dr. F. Heidhues
Co-Reviewer:	Prof. Dr. M. Zeller
Additional examiner:	Prof. Dr. J. Zeddies
Additional examiner:	Prof. Dr. G. Buchenrieder

Diese Veröffentlichung kann kostenfrei im Internet unter *<www.iamo.de/dok/sr_vol36.pdf>* heruntergeladen werden.

This publication can be downloaded free from the website *<www.iamo.de/dok/sr_vol36.pdf>*.

Leibniz-Institut für Agrarentwicklung in Mittel- und Osteuropa (IAMO)
Theodor-Lieser-Straße 2
06120 Halle (Saale)
Tel.: 49 (345) 2928-0
Fax: 49 (345) 2928-199
e-mail: iamo@iamo.de
http://www.iamo.de
ISSN 1436-221X
ISBN 3-938584-16-5

D 100 Diss. Universität Hohenheim

to Meike

"So close no matter how far…"

(Nothing Else Matters [Hetfield/Ulrich],
The Black Album, 1991, Metallica)

Preface

Transition economies have gone through a fundamental restructuring of their economy. This process was not without difficulties arising from the interruption of long lasting economic relations and the need to change institutional structures and responsibilities. Vietnam is no exception. During the transition, the adaptation of the financial system was one of the most challenging reforms in Vietnam. One of the major tasks of this reform was to expand the financial system's outreach to the newly emerging private sector and household economies, particularly in rural areas.

This research was carried out within the research program "Sustainable Land Use and Rural Development in Mountainous Regions of Southeast Asia" (SFB 564, Sub-project F2) of the University of Hohenheim. The work of Thomas Dufhues analyzes important features of the rural financial system in Northern Vietnam. The main research focus is on factors that impede or support access of rural households to the formal financial system on the one hand and the outreach of this system to rural households on the other. Access to financial products of the formal sector has a great potential for reducing poverty which is still widely spread in the northern uplands of Vietnam. Thus, conceptually, this research focuses on access and access constraints of rural households to the formal financial system.

The thesis comprises cumulatively four individual articles. Each article focuses on different aspects of the formal financial system. The first paper reviews the transformation process of the financial system in Vietnam, with special attention to the rural financial market. Methodologically, an in-depth literature review is carried out, supplemented by anecdotal evidence gathered during the field research. In the second article, the information polices of the Vietnam Bank for the Poor (VBP) as the main supplier of credit to the rural poor in Northern Vietnam during the years 2001 and 2002 are investigated by means of information economics analysis. Methodologically, secondary data from the VBP and the local administration are combined with qualitative evidence collected at the intermediary and household level. The third paper analyzes the poverty outreach of the formal financial intermediaries by a Principal Component Analysis; household access constraints to formal credit are assessed by a binary logit analysis.

Both analyses are based on quantitative rural household data. In the fourth article, client-adapted financial services are developed using a Conjoint Analysis approach, which is a marketing research tool that combines quantitative and qualitative data in its analysis.

Major results are that the rural households are well supplied with formal credits through the state-owned formal financial intermediaries. However, this outreach has been bought by immense amounts of subsidies and at the expense of institutional sustainability. Furthermore, formal savings, which are highly demanded by the rural population, are not offered by the financial intermediaries. Whether the enormous government subsidies channeled into rural credit contribute to poverty reduction, remains a subject for future research. It is clear, however, that these subsides bypass households that have no demand for credit, and these households are often the poorest. Finally, the highly subsidized credit interest rates imply low savings rates, which again affect the poor most, because they cannot assemble enough savings to buy lumpy, non-financial assets, such as land and buffaloes. The backlash of cheap credit is that the poor take a beating on their financial savings. The transformation polices of the Vietnamese government concerning the rural financial system are biased towards the supply of preferential credits and this policy discriminates against the poorest households; it hampers particularly their access to formal savings products. Thus, a paradigm change for the rural finance sector within is called for with a change from a 'credit only' to a 'full-intermediary' approach in the rural financial system.

Prof. Dr. Dr. h.c. Franz Heidhues
Director of SFB 564 2000-06
University of Hohenheim, Stuttgart

Prof. Dr. Gertrud Buchenrieder
Leader of sub-project F2, SFB 564, 2000-06
IAMO, Halle

Acknowledgements

"You will never walk alone…" I am not exactly an Elvis Presley fan, but this small song line is particularly true of my Ph.D. thesis. I have received the help of numerous people to whom I wish to express my deepest gratitude; without their support I would not have been able to complete my thesis. Although I cannot list the names of all those who supported, commented on and contributed to this work, I would like to thank them all.

My sincere gratitude goes first of all to Prof. Dr. Dr. h.c. Franz Heidhues, my adviser, for his support and valuable criticism. I am also grateful to Prof. Dr. Manfred Zeller for reviewing part of my work and serving on the thesis committee. I would also like to thank Prof. Dr. Dr. h.c. mult. Jürgen Zeddies and PD Dr. Gertrud Buchenrieder for serving on the thesis committee. I am particularly indebted to Gertrud: She was also the project leader of the research project within which this work has grown. Her encouragement at all stages of the study and her understanding of imponderables and her backing during the field work was essential for the success of my work. Her active support, enthusiasm, and constructive criticism were greatly appreciated. I am especially grateful to her for passing on to me her extensive knowledge about writing articles.

I want to thank the following persons for their comments on the articles or earlier drafts of the articles presented in this thesis: PD Dr. Gertrud Buchenrieder, Prof. Dr. Dr. h.c. Franz Heidhues, Dr. Daniel Müller, Prof. Dr. phil. Hans Dieter Seibel, Ph.D. Manohar Sharma, Dipl. agr. Insa Theesfeld and Prof. Dr. Manfred Zeller.

I am particularly thankful to my wife and former colleague Meike Geppert for a beautiful year together in Vietnam, for her valuable criticism, and for her understanding and encouragement during our eight months of unanticipated separation.

I wish to thank all my colleagues in the Department of Development Theory and Policy in the Tropics and Subtropics at the University of Hohenheim for their friendship, fruitful discussions and the pleasant working atmosphere. Special thanks go to Dr. Annette Luibrand, Judith Möllers, Rainer Schwarzmaier and Dr. Sabine Daude. I also want to express my gratitude to my colleagues from the

Uplands Program, Isabel Fischer and Ute Lemke. Particularly Ute and Judith were always available to listen to the problems and the sunny sides of my research work. Furthermore, I want to thank Dr. Harald Leisch for his invaluable work as a coordinator in Hanoi, and Dr. Jens Pape, Nicole Flick, Anne Schmepp, Gudrun Contag and Cornelia Schumacher for their work on administrative and accounting matters.

During my stay in Vietnam, I was supported by the Hanoi Agricultural University and by Thai Nguyen University of Agriculture and Forestry. Very special thanks go to my Vietnamese advisor Prof. Dr. Pham Thi My Dung for her invaluable support. Furthermore, I want to thank Dr. Nguyen The Dang for his organizational help in the research region of Ba Be.

My special appreciation goes to my Vietnamese research assistants and interpreters Mr. Hoang Dinh Quoc and Ms Nguyen Thi Thu Huyen. Quoc in particular, who became a close friend over the years, saved me many times from embarrassing situations during my personal clash of cultures and I am deeply indebted to him. While he helped me to eat 'inedible' things, I could at least help him to drink 'undrinkable' things and thus ease to some extent the debt I owe him. In addition, I want to say thank you to all the staff involved in my research project. I especially want to thank Le Minh Tuan and Vu Long for their outstanding work, but I also want to express my thanks to all the farmers who were patient enough to participate in the surveys.

Special thanks goes to my former flat-mates in Hanoi, Dr. Daniel Müller, Steffen Rehschwamm and Jeremy Cross, for fighting my bad moods and for being good company. Here I want to express special thanks to Daniel for his invaluable support with the logit regressions and to Steffen Rehschwamm for his help with setting up the database for my work. Further, I also want to thank Olaf Balding, Tobias Barisch, and Will Conroy for being, among other things, good company in the 'Bia Hoi's of Hanoi.

The research for this thesis was carried out within the framework of the German-Thai-Vietnamese Collaborative Research Program 'Sustainable Land Use and Rural Development in Mountainous Regions of Southeast Asia', also known as Uplands Program, within subproject F2 'Rural Financial Market Development'. Funding from the *Deutsche Forschungsgemeinschaft* (DFG) and co-funding from the Ministry of Science, Technology, and Environment of Vietnam is gratefully acknowledged.

Table of contents

List of tables

List of figures

List of abbreviations

ADB	Asian Development Bank
AusAID	Australian Agency for International Development
BRI	Bank Rakyat Indonesia
CA	Conjoint Analysis
CBC	Choice-Based Conjoint Analysis
CECARDE	Center for Consultation on Agriculture and Rural Development
CGL	Credit Group Leader
CIA	Central Intelligence Agency
CIEM	Central Institute of Economic Management
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
Danida	Danish Ministry of Foreign Affairs
DFG	Deutsche Forschungsgemeinschaft
DFID	Department for International Development
DSA	Development Studies Association
DSI	Development Strategy Institute
EIU	The Economist Intelligence Unit Limited
FAME	International Center for Financial Asset Management and Engineering
FCND	Food Consumption and Nutrition Division
FFI	Formal Financial Intermediary
FIA	Forschungsstelle für Internationale Wirtschafts- und Agrarentwicklung
GDP	Gross Domestic Product
GSO	General Statistical Office
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HAU	Hanoi Agriculture University No. 1
HH	Household
IAAE	International Conference of Agricultural Economists

IAES	International Atlantic Economic Conference
IFAD	International Fund for Agricultural Development
IFPRI	International Food and Policy Research Institute
IRIS	Institutional Reform and the Informal Sector
JSB	Joint Stock Bank
MARD	Ministry of Agriculture and Rural Development
MFI	Microfinance Institute
MIP	Ministry of Planning and Investment
MIT	Massachusetts Institute of Technology
MOLISA	Ministry of Labor, Invalids and Social Affairs
NBER	National Bureau of Economic Research
NIAS	Nordic Institute of Asian Studies
NIE	New Institutional Economics
OECD	Organization for Economic Co-operation and Development
PCA	Principal Component Analysis
PCF	People's Credit Fund
PR	Property Right
PRA	Participatory Rural Appraisal
PRB	Poverty Reduction Board
SBVN	State Bank of Vietnam
SGT	Saigon Times
Sida	Sweden International Development Agency
SME	Small and Medium Enterprise
SOCB	State-Owned Commercial Bank
SOE	State-Owned Enterprise
TC	Transaction Cost
UN	United Nations
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
VBARD	Vietnam Bank for Agriculture and Rural Development
VBP	Vietnam Bank for the Poor
VBSP	Vietnam Bank for Social Policies

VIR	Vietnam Investment Review
VND	Vietnamese Dong
VOV	Voice of Vietnam
VPSC	Vietnam Postal Savings Company

Abstract

During the transition of the Vietnamese economy, adaptation of the financial system was one of the most challenging reforms. A major task of this reform was to expand the financial system's outreach to the newly emerging private sector and household economies, especially in rural areas. Therefore, state-owned financial intermediaries such as the Vietnam Bank for Agriculture and Rural Development (VBARD) and the Vietnam Bank for the Poor (VBP) have been established. Despite general successes in terms of credit outreach, certain population groups, particularly the poorest, which are often identical to ethnic minorities, seem to have been bypassed by both banks. Furthermore, the strategy pursued by national rural financial policy has focused mainly on credit supply. Other financial services that potentially have a deeper outreach, e.g. savings products, have been neglected in the development efforts of the government and its development banks. The overall objective of this research study was to create knowledge on the factors that impede or support access of rural households in Northern Vietnam to the formal financial system. Access can be hampered at different levels of the financial system, namely macro/meso level, intermediary level and household level. Joint analysis of the three levels is therefore appropriate. This implies different methodologies and data collection methods. The data collection took place between March 2001 and 2002 in two provinces of Northern Vietnam. In total, 260 households were surveyed. In addition, several participatory methods were applied at all levels to collect qualitative data. Furthermore, secondary data was collected from relevant financial intermediaries and administrations. This cumulative thesis is divided into four main sections investigating different levels of the system and applying different methodologies. The second section reviews the transformation process of the financial system in Vietnam with special attention to the rural financial market. Methodologically, an in-depth literature review is carried out, supplemented by anecdotal evidence gathered during the field research. In the third section, the information polices of the VBP as the main supplier of credit to the rural poor in Northern Vietnam are investigated by means of an information economics analysis. Methodologically, secondary data from the VBP and the local administration are combined with qualitative evidence from the intermediary and household level. The fourth section analyzes the

poverty outreach of the formal financial intermediaries using a Principal Component Analysis, and it analyzes household access constraints to formal credit using a binary logit analysis. Both analyses are based on quantitative household data. In section fifth, client-adapted financial services are developed using a Conjoint Analysis approach, which is a marketing research tool and combines quantitative and qualitative data in its analysis. The rural financial market in Vietnam is still dominated by the aforementioned highly subsidized state-owned financial intermediaries, impeding the establishment of any viable financial services and hampering innovations. Through the creation of the Vietnam Bank for Social Policies (VBSP) (the successor of the dissolved VBP since 2003) the Vietnamese government has separated political lending from commercial lending. Evidence from development banks in other countries suggests that the VBARD, now freed from political lending, is likely to dismiss its peasant clientele and concentrate on wealthier farmers. The question is how long the Government can finance the VBSP, and who will serve the rural poor after the government stops the subsidies and the VBPS cannot carry on its operations? The sustainability of the financial system is still threatened by an accumulation of non-performing loans amassed by state-owned enterprises. In addition, the problem of non-performing loans is spreading to the private sector – including rural households. Apart from representing macro-economic threats to the financial system, this moral hazard behavior is hindering the establishment of any viable rural financial intermediation. The breadth of outreach of the formal rural lenders is immense. However, the poorest households are seldom clients. But general poverty (as captured in the poverty index) does not significantly influence access to formal credit. This means that the poorest households simply have much less demand for formal credit products. Improving credit products or offering new credit lines would only slightly improve the credit coverage of poorer households. A more promising approach would be to introduce a specialized pro-poor extension service to widen the scope of their investment ideas, combined with a general improvement in the infrastructure. A good market connection serves credit outreach in a twofold manner: First, households have better access to credit-relevant information; and second, through better market access they may find new investment opportunities. Nevertheless, the number of access-constrained households is surprisingly low, at 16%. One explanation may be the eradication of former access constraints through locally disbursed group credits. However, considering the anecdotal reports of very low repayment rates, the price of eradicating these access constraints has likely been a decrease in financial sustainability of the formal lenders. Nevertheless, some barriers to access continue to exist, particularly for ethnic minorities or female-headed households. To reduce these

access barriers, locally-oriented actions should be taken, catering to the specific needs of those households which lack access. The establishment of the VBSP represents an attempt to broaden access in general. But it is questionable whether households that do not have access today, or do not demand the existing products, will demand loans from the VBSP. A more sustainable way to promote outreach would be to improve the knowledge of fringe groups, such as ethnic minorities or female-led households, about credit application procedures. The supply of essential credit information to these groups is impeded by the supply-oriented flow of information and by relying for the dissemination process on local authorities, which favor the ethnic majority. Ethnic or gender diversification of bank staff could broaden the information networks available and could create more awareness of those groups inside the institution. In contrast to the enormous credit outreach, formal savings are rarely used by rural households. However, this low effective demand for savings is due to inappropriate services and not to lack of willingness of the rural population to save. Thus, the most appropriate tool to incorporate poorer households into the formal financial system would be mobilization of savings by providing adapted services.

Deutsche Kurzfassung

Während der Transformation der vietnamesischen Wirtschaft war die Anpassung des Finanzsektors eine der anspruchvollsten Reformen. Eines der wichtigsten Ziele dieser Reform war es, den neu entstandenen privaten Betrieben und den privaten Haushalten Zugang zu formalen Finanzdienstleistungen zu verschaffen, wobei hierbei der ländliche Raum spezielle Förderung erfuhr. Für die Erreichung dieses Zieles wurden staatliche Entwicklungsbanken wie die Vietnamesische Bank für Landwirtschaft und Ländliche Entwicklung (VBARD) und die Vietnamesische Bank für die Armen (VBP) gegründet. Diese beiden Institutionen haben den Zugang der ländlichen Bevölkerung zu formalen Krediten erheblich verbessert. Allerdings haben bestimmte Randgruppen wie ethnische Minderheiten, welche häufig identisch sind mit den ärmeren Bevölkerungsschichten, oft keinen Zugang zu diesen staatlichen Krediten. Ein weiteres Problem ist die Fokussierung der Regierung und der staatlichen Entwicklungsbanken auf Kredite als primäre Dienstleistung. Die Entwicklung anderer Finanzdienstleistungen wie unterschiedliche Spar- und Versicherungsprodukte, welche einen potentiell besseren Zugang zu marginalisierten Gruppen haben wurde, im ländlichen Finanzsystem völlig vernachlässigt.

Das Ziel dieser Arbeit ist es, herauszuarbeiten, welche Faktoren den Zugang ländlicher Haushalte zu formalen Finanzdienstleitungen behindern oder fördern. Der Zugang zu Finanzdienstleistungen kann an verschieden Stellen des Finanzsystems behindert werden, zum Beispiel auf der Haushaltsebene, der Ebene der Finanzdienstleister oder durch gesetzliche Rahmenbedingungen. Deswegen ist eine gemeinsame Betrachtung dieser verschieden Ebenen notwendig. Dies impliziert wiederum unterschiedliche Analyse- und Datenerhebungsmethoden. Die Datenerhebung, die der Datenbasis zu Grunde, liegt fand zwischen März 2001 und März 2002 in zwei verschiedenen Provinzen in Nordvietnam statt. Insgesamt wurden 260 Haushalte mit einem standardisierten Fragebogen interviewt. Zusätzlich wurden zahlreiche partizipatorische Erhebungstechniken angewandt, um weitergehende Einsichten in die Haushalte, die Finanzdienstleister und andere relevante Institutionen zu bekommen. Des Weiteren wurden Sekundärdaten von den Finanzdienstleistern und den lokalen Verwaltungen gesammelt.

Diese kumulative Doktorarbeit ist in vier Hauptkapitel (Analysekapitel) unterteilt. In jedem dieser Kapitel liegt der Schwerpunkt auf einer anderen Ebene des Finanzsystems, entsprechend werden schwerpunktmäßig unterschiedliche Analysemethoden angewandt. Das erste Kapitel beschäftigt mit dem ländlichen Finanzsystem in seiner Gesamtheit. Hier wird der Transformationsprozess des ländlichen Finanzsystems untersucht. Methodisch wird eine Literaturanalyse mit auf Fallstudien beruhenden Aussagen, die während der Feldphase erhoben wurden, verknüpft. Das zweite Kapitel beschäftigt sich mit dem größten Kreditgeber an arme ländliche Haushalte in Nordvietnam, der VBP. In diesem Kapitel werden Sekundärdaten der VBP und der lokalen Administration in Kombination mit qualitativen Erhebungen und Experteninterviews gemeinsam unter Gesichtspunkten der Neuen Institutionenökonomie analysiert. Hierbei liegt der Schwerpunkt auf Informationsfluss, Transaktionskosten und Prinzipal-Agenten-Systeme. Das dritte und vierte Analysekapitel behandelt hauptsächlich die Haushaltsebene. Im dritten Kapitel werden die Breitenwirkung der staatlichen Finanzdienstleister anhand einer Prinzipal-Komponenten-Analyse untersucht und Zugangsbeschränkungen der Haushalte zu formalen Krediten durch eine Logit-Regression analysiert. Beide Analysemethoden basieren weitestgehend auf quantitativen Haushaltsdaten. Das letzte Analysekapitel entwickelt mit Hilfe eines Marktforschungsinstrumentes, der Conjoint Analyse, angepasste hypothetische Finanzprodukte. Hier werden quantitative Haushaltsdaten mit partizipativ erhobenen qualitativen Daten in der Analyse kombiniert.

Der ländliche Finanzmarkt in Nordvietnam ist immer noch stark dominiert durch hoch subventionierte staatliche Finanzdienstleister. Dadurch wird jeder Wettbewerb und das Entstehen von nachhaltigen Finanzprodukten sowie die Entstehung von Innovationen im Bereich Finanzdienstleistungen stark behindert. Durch die Gründung der Vietnamesischen Bank für Sozialpolitik (VBSP), welche die legale Nachfolgerin der VBP ist, wurden die kommerziell ausgerichteten staatlichen Banken, insbesondere die VBARD, von ihren sozialen Aufgaben befreit. Erkenntnisse aus anderen Entwicklungs- und Transformationsländern haben gezeigt, dass Banken sich aus Kostengründen auf größere und reichere Kunden konzentrieren. Daher wird vermutlich die VBARD ihren Kleinkundenanteil stark zurückfahren. Diese werden nun von der VBSP bedient werden müssen. Hier kommt die Frage auf, wie lange kann die vietnamesische Regierung die defizitäre VBSP finanzieren und werden arme Kleinbauern, falls die VBSB ihren Betrieb einstellen muss, keinen Zugang mehr zum formalen ländlichen Finanzmarkt haben? Die Nachhaltigkeit des gesamten formalen Finanzsystems ist bedroht durch ein ungelöstes Problem von schlechten Krediten, die hauptsächlich von Staatsunternehmen gehalten werden. Es sind jedoch Hinweise

zu finden, dass dieses Problem langsam auch auf den privaten Sektor übergreift, insbesondere auf ländliche Haushalte. Abgesehen von den makroökonomischen Folgen der schlechten Kredite, verhindert dieses staatlich tolerierte Verhalten von "Moral Hazard" das Entstehen von nachhaltigen Finanzinstitutionen.

Die staatlichen Finanzinstitutionen im ländlichen Raum haben eine außerordentliche Breitenwirkung. Jedoch nehmen die ärmsten Haushalte nur selten einen Kredit bei diesen Institutionen auf. Nichtsdestotrotz hat Armut, gemessen an einem Index (zusammengesetzt aus unterschiedlichen Armutsindikatoren), keinen signifikanten Einfluss auf den Zugang zu Kredit. Das bedeutet, dass die ärmsten Haushalte wahrscheinlich eine geringere Nachfrage nach formalen Kreditprodukten haben. Eine einfache Verbesserung der Kreditprodukte oder die Bereitstellung von komplett neuen Kreditlinien würde also nur geringfügig den Zugang ärmerer Haushalte zu formellen Krediten verbessern. Ein vernünftigerer Ansatz wäre die Schaffung eines auf ärmere Haushalte spezialisierten Beratungsdienstes kombiniert mit einer verbesserten Infrastruktur bzw. Marktanbindung. Eine verbesserte Marktanbindung kreiert nicht nur mehr Investitionsmöglichkeiten, sie verbessert auch gleichzeitig den Zugang der Haushalte zu kreditrelevanten Information und somit auch deren Zugang.

Insgesamt ist die Zahl der zu kreditzugangsbeschränkten Haushalte jedoch sehr gering und die Anzahl der Haushalte mit einem formalen Kredit sehr hoch. Dies ist zurückzuführen auf die Eliminierung von früheren Zugangsbeschränkungen, z.B. durch eine breite Vergabe von Landnutzungstiteln, durch die Einführung von Gruppenkrediten mit Gruppenhaftung und durch die hoch subventionierten Zinssätze. Einerseits hat die Verringerung der zugangsbeschränkten Haushalte aber auch dazu geführt, dass eine große Anzahl von nicht kreditwürdigen Haushalten Zugang zu Kredit erhalten. Andererseits hat sich durch den sozialen Charakter der staatlichen Finanzintermediäre eine schlechte Rückzahlungsmoral verbreitet. Das deutet daraufhin, dass der Preis für die enorme Breitenwirkung der staatlichen Finanzintermediäre eine verringerte Nachhaltigkeit dieser Institutionen ist.

Trotz dieser enormen Breitenwirkung haben vor allem ethnische Minderheiten und von Frauen geführte Haushalte immer noch Schwierigkeiten, Zugang zu Kredit zu erlangen. Um den Zugang für solche Randgruppen zu verbessern, sollten allerdings keine generellen Schritte unternommen werden, sondern speziell auf diese Haushalte abgestimmte Maßnahmen durchgeführt werden. Die Gründung der VBSP geht jedoch genau in die entgegengesetzte Richtung. Hier wurde versucht, die schon ohnehin sehr große Breitenwirkung, durch generelle Maßnahmen noch zu vergrößern. Allerdings ist es fraglich, ob die Haushalte, die bis

heute die Kredite nicht nachgefragt haben bzw. zugangsbeschränkt waren, die Kredite von der VBSP nachfragen werden. Eine nachhaltigere Vorgehensweise, um den Kreditzugang dieser Randgruppen zu erhöhen, könnte ein verbesserter Zugang zu kreditrelevanten Informationen sein. Es hat sich gezeigt, dass Randgruppen oftmals einfach dadurch zugangsbeschränkt sind, dass sie entsprechende Informationen nicht oder nicht rechtzeitig erhalten haben. Die staatlichen Finanzintermediäre verlassen sich bei der Verbreitung dieser Informationen zu sehr auf ein Netz aus lokalen Beamten, die allerdings über keine Bankausbildung verfügen und dazu tendieren, bestimmte Bevölkerungsschichten zu übergehen. Hier könnten zum Beispiel speziell ausgebildete und bei den Banken angestellte Frauen bzw. Angehörige von ethnischen Minderheiten einen besseren Informationszugang bzw. eine besseres Bewusstsein für die Probleme dieser Randgruppen in den Institutionen schaffen.

Im Gegensatz zu der enormen Breitenwirkung von formellen Krediten sind formale Sparprodukte fast nicht verbreitet. Dies ist jedoch nicht in der Unfähigkeit der ländlichen Bevölkerung zu sparen begründet, sondern darin, dass die angebotenen Sparprodukte nicht den Bedürfnissen der ländlichen Bevölkerung entsprechen. Lokal angebotene Sparprodukte besitzen das größte Potential und sind die nachhaltigste Maßnahme, um Haushalte, die derzeit keine formale Kredite nachfragen, in das formale Finanzsystem zu integrieren.

1 Introduction

Vietnam has been engaged in a transition process enhancing the role of market forces in the economy since the mid-1980s. Within this process, known as 'Doi Moi' (renovation), a change took place from a centrally planned economy to a market-oriented economy with a socialist face (BRYANT 1998). During this transition, the adaptation of the financial system was one of the most challenging reforms Vietnam had to undertake (TEUFEL 1997; TRAN and DANG 1996). One of the major tasks of this reform was to expand the financial system's outreach to the newly emerging private sector and household economies, not only in urban but also in rural areas (WORLD BANK 1995; WORLD BANK 1998).

As various scholars have pointed out, broad access to appropriate and sustainable financial services has vast potential for poverty reduction (BUCHENRIEDER and HEIDHUES 2003; HEIDHUES 1995; KANBUR and SQUIRE 2001; SCHRIEDER 1996; SCHRIEDER and SHARMA 1999; SHARMA 2001; ZELLER *et al.* 1997; ZELLER 1999). Thus, the Vietnamese government proposes financial services as a powerful tool for poverty reduction, too (SIDA-MARD 1998). Therefore, state-owned and administered formal financial intermediaries (FFIs) such as the Vietnam Bank for Agriculture and Rural Development (VBARD), the Vietnam Bank for the Poor (VBP), and the People's Credit Funds (PCFs) were established and promoted to provide credit to the rural population.[1] Evidence from other developing countries suggests that the poorest population groups are excluded from formal financial services, especially credit.[2] This observation appears to apply to Vietnam, too. Despite general successes in terms of credit outreach, certain population groups, particularly the poorest, which are often identical to ethnic minorities,

---

[1] On March 11 2003, the VBP and the PCFs were replaced by the Vietnam Bank for Social Policies (VBSP) (VIETNAM ECONOMY 2003; WORLD BANK 2003).

[2] For instance, AMIN *et al.* (2003) find that microcredit programs in Bangladesh do not reach the credit-constrained.

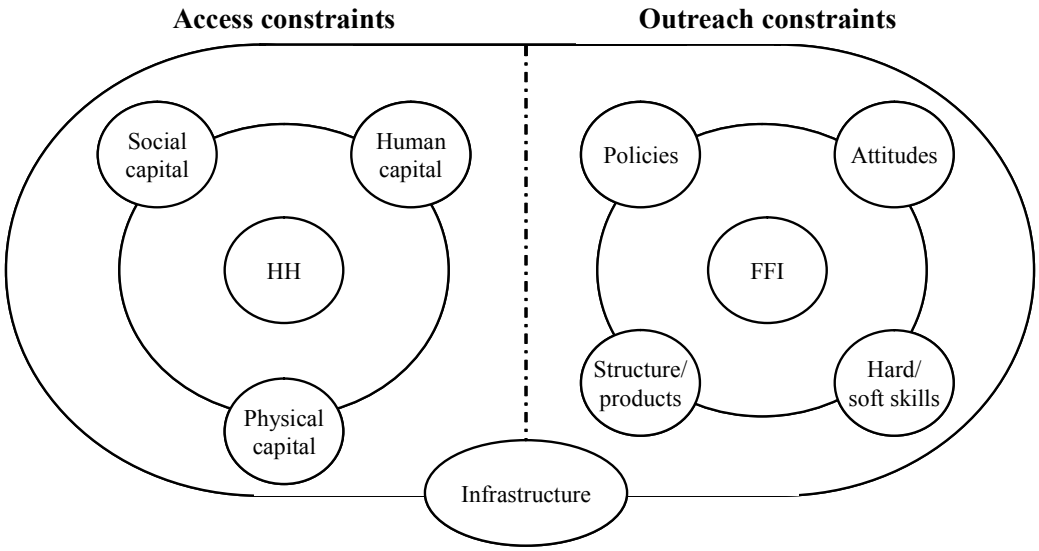
seem to be bypassed by the above mentioned financial institutions (NEEFJES 2001; WORLD BANK 2003). Furthermore, the strategy of the national rural financial policy has focused mainly on credit. Other financial services that potentially have a broader outreach to the poorer market segment, such as different savings or insurance products, have been neglected in the development efforts of the government.

1.1 Conceptual framework and objectives

The overall objective of this research work is to create knowledge about the factors that impede or support access of rural households in Northern Vietnam to the formal financial system on the one hand, and the outreach of this system to rural households on the other. Thus, the conceptual framework of this research centers on access and access constraints of rural households to the formal financial system.

Access can be hampered at different levels of the financial system. For instance, rural households may be actively (e.g. due to particular policies or due to self-exclusion because of a low risk-bearing capacity) or passively (e.g. due to unsuitable financial services) excluded from access to the formal financial system. Equally, an inadequate infrastructure hampers access and outreach, as transaction costs (TCs) rise for households and lenders alike. Figure 1-1 presents the conceptual framework of access and outreach constraints analyzed in this research. In this context, the focus is more on the household side (access) as previous research focused mainly on the supply side (outreach). However, knowledge about the formal financial system and its institutions is also preeminent for the analysis.

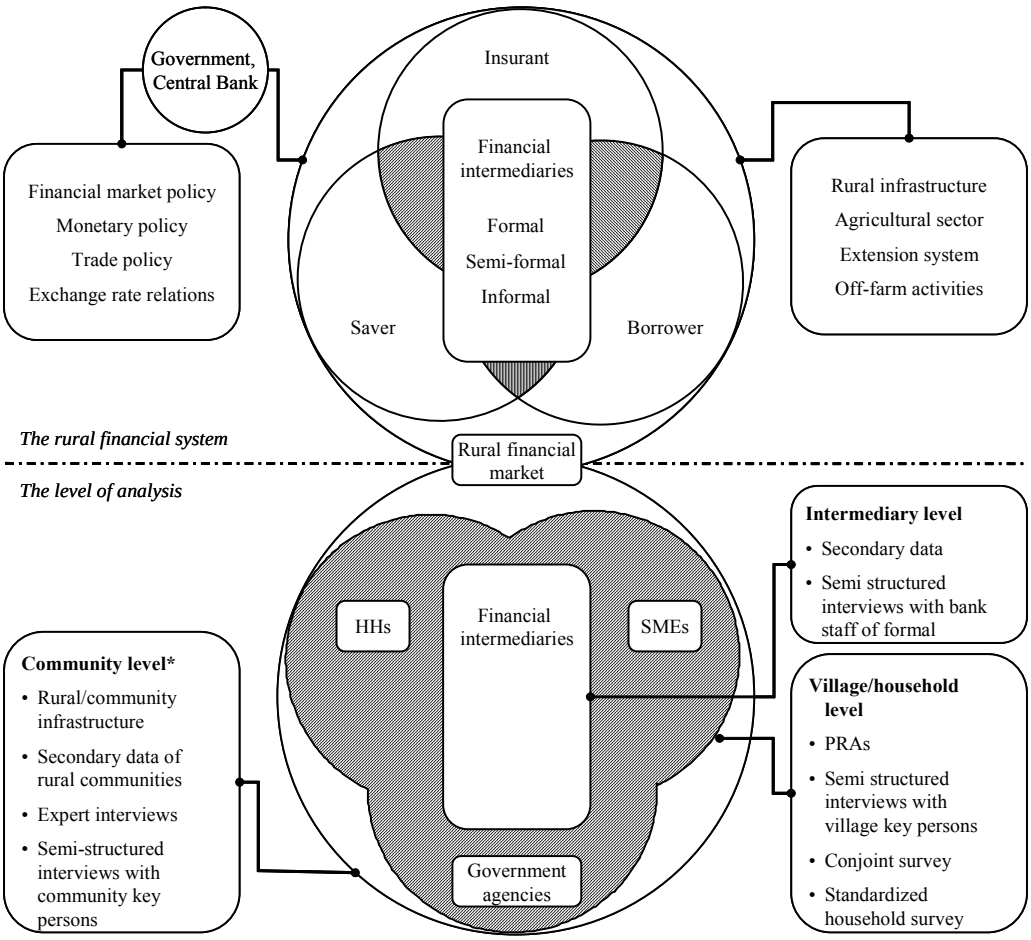
Figure 1-1: Factors of access and outreach relating to the financial system



Source: Own Figure, based on considerations made by EVANS *et al.* (1999) and VAESSEN (2001).
Notes: HH = household; FFI = formal financial intermediary.

Figure 1-2 illustrates the formal financial system and the different research levels that were suggested by the conceptual framework. The upper part of Figure 1-2 depicts the rural financial system in general with its various actors, while the lower part presents the different research levels and the corresponding data collection methods. As Figure 1-1 has demonstrated, access/outreach barriers exist at different locations in the formal financial system, and so a joint view/analysis of the three levels depicted in the lower part of Figure 1-2 is necessary.[3]

Figure 1-2: The rural financial market and the levels of analysis



Source: Own figure.

Notes: * The community level is defined as all institutions, policies, and infrastructure above village level. PRA = Participatory rural appraisal, HH = Household, SME = Small and medium enterprise.

[3] As the formal insurance sector plays only an insignificant role in rural Vietnam (DUFHUES *et al.* 2004b), this research work covers mostly the credit and savings sector.

The overall condition of the Vietnamese financial system is of particular importance as the transformation of the system is still going on. Failures within the transformation process are likely to weaken the sustainability of the financial system. A sustainable financial system with likewise sustainable financial intermediaries supports the long-term access of households to the formal financial market.

As pointed out above, access constraints can also be found on the side of the financial intermediary. The VBP has been the main supplier of credit to the rural poor in Northern Vietnam (VBP 1999b). However, it is reported that households are often access-constrained simply because they lack sufficient information about the credit application procedure or about the availability of funds. KANBUR and SQUIRE (2001) state that information deficits undermine the access of marginalized groups to credit. It appears that this information deficiency contributes to resource misallocation in the sense that potential borrowers with profitable investments are excluded due to a lack of information.

From the point of view of the household level, it is crucial to know who is actually being access-constrained and why? For instance, HULME and MOSLEY (1996) point to increasing evidence from other developing countries that the poorest 20% of the population are effectively excluded from microcredit programs. While the Vietnamese government has so far failed to create sustainable rural financial institutions, it has succeeded in providing a huge part of the population with formal credit. Nevertheless, the questions remain: Did they succeed in reaching the poor and do groups of people exist who are still access-constrained?

There is a universal tendency by government officials in developing countries to assume that they know what the poor need, and to seek control over how these needs are met, which very often results in services with very limited outreach as these services often fail to meet the true needs of the rural population (GIBBONS *et al.* 2000). Thus, there is a pressing need to examine participatory ways of designing and introducing new financial services into microfinance institutes (MFIs) to improve their outreach and access to them (RUTHERFORD 2000; WRIGHT 1999). This is especially true for Vietnam, where almost all decisions are made using an top-down approach and local inhabitants have no impact on decision making or on policy (DU 2001; FFORDE 2004).

The central hypothesis of this study is that the transformation polices of the Vietnamese government concerning the rural financial system are biased towards the supply of preferential credits, and that this policy discriminates against the poorest households. Derived from the central hypothesis, the specific objectives of this thesis are:

- To describe and review the current transformation of the financial system in Vietnam in terms of its sustainability, with a special focus on the implications of the financial transformation for the rural financial market.
- To reveal information deficiencies in the credit procedures within the VBP by identifying crucial gatekeepers of important credit information and by describing the formalized and non-formalized information channels.[4]
- To determine the poverty outreach of the FFIs in Northern Vietnam and to analyze which population groups are still access-constrained as regards the formal system.
- To analyze the supply of formal financial services, and to design client-oriented financial services by means of participatory research.

1.2 Organization of the study

The thesis is organized in a cumulative style based on four individual articles published in different journals. Each of the main sections represents one article. Section two reviews the transformation process of the financial system in Vietnam, with special attention to the rural financial market. Methodologically, an in-depth literature review is carried out, supplemented by anecdotal evidence gathered during the field research. In the third section, the information polices of the VBP as the main supplier of credit to the rural poor in Northern Vietnam are investigated by means of information economics analysis. Methodologically, secondary data from the VBP and the local administration are combined with qualitative evidence from the intermediary and household level. The fourth section analyzes the poverty outreach of the FFIs by a Principal Component Analysis (PCA) and household access constraints to formal credit by a binary logit analysis. Both analyses are based on quantitative household data. In the fifth section, client-adapted financial services are developed using a Conjoint Analysis approach, which is a marketing research tool and combines quantitative and qualitative data in its analysis. Finally, the thesis ends by drawing general conclusions.

---

[4] As already mentioned above, the VBP has been replaced by the VBSP. However, results can be easily extended to the VBARD, which were closely related to the VBP, and to the new VBSP as well, as main structures seem to be similar compared to the old VBP/VBARD concept.

2 The transformation of the financial system in Vietnam and its implications for the rural financial market – An update[5]

The following section describes the transformation of the financial system in Northern Vietnam. Special emphasis is given to the rural financial market.

2.1 Introduction

The transition process of Vietnam is well known in the economic world as 'Doi Moi'. Doi Moi literally means 'change' and 'newness' and is the Vietnamese term for reform and renovation. It is aimed at restructuring Vietnam's legal, regulatory, administrative, investment and foreign trade apparatus and policies to transform its centrally planned economic system into a market economy with 'socialist characteristics' (BRYANT 1998).

The change from a centrally planned to a market-oriented economy in the 1990s proved to be a difficult process and one that was anything but self-implementing. In contrast to other regions in transition, e.g. the former Soviet Union, Vietnam emphasized gradualism over radical change, with economic restructuring to come before privatization (CHIN and GUAN 1996; MONTES 2001). Political pluralism or democratization were not promoted and the Communist party has still retained its political monopoly of power (LUIBRAND 2002). However, the reforms have achieved impressive results. The most remarkable feature of the transition in Vietnam is the avoidance of a decline in output and immediate significant growth in agriculture, industry, and services resulting in average growth rates in gross domestic product (GDP) of 8.1% between 1990 and 1999, a decline in

---

[5] This section is based on the following article: "The transformation of the financial system in Vietnam and its implications for the rural financial market – An update", written by Thomas Dufhues and published 2003 in the *Journal for Institutional Innovation, Development and Transition* 7: 335-362. I would like to thank Dr. Gertrud Buchenrieder for her helpful comments on this article.

inflation to the single-digit range, and foreign direct investment flooding into the country (WORLD BANK 2000a).

Looking at the impressive economic accomplishments of the last decade, one might be persuaded to believe that Vietnam has already laid the foundation for a dynamic, prosperous market-oriented economy. However, this would be a mistake (RIEDEL 1999). Critical voices concerning the speed of transition in Vietnam started to emerge in the last few years. The reforms that were launched have slowed down, or in some cases have even been discontinued (LUIBRAND 2002). Besides, doubts have been raised as to the government's general commitment to push economic reforms any further (RONDINELLI and LITVACK 1999). Vietnam's current party leaders see a 'New' Doi Moi as potentially more threatening than the status quo (THAYER 2000). Nevertheless, it is well recognized, both inside and outside the government, that without further reforms the strong performance of the past cannot be sustained (RIEDEL 1999).

The structural features of transition economies differ in some important respects, but they share similar fundamental conditions that give rise to a similar set of reform issues. Worldwide experience since the early 1980s indicates that a variety of institutions must be developed for transition (LUIBRAND 2002). This is particularly true for the financial sector or, in the words of WOLFF, (1999:59): "The reform of the financial sector in a transforming economy primarily means institution-building."

In the transition process, the reform of the national financial system plays a key role because the efficiency and the speed of the reforms have a decisive influence on the success of the transformation process in the other sectors (SCHRIEDER and HEIDHUES 1998). Adaptation of the financial sector was one of the most challenging reforms that Vietnam had to undertake. After a decade of financial sector reforms, Vietnam expected to see the emergence of an effective and efficient banking system (TEUFEL 1997; TRAN and DANG 1996). However, the financial sector is still weak, legislative issues are incomplete and it suffers from a substantial amount of bad debt (LUIBRAND 2002).

This paper aims at describing and reviewing the transformation process and status of the financial system in Vietnam. Moreover, possible future developments are presented and evaluated. Special attention is given to the implications of the financial transition for the rural financial market. Methodologically, this research is based on an in-depth literature review combined with anecdotal evidence gained during field research in Vietnam from 2000-2002.

2.2 The financial landscape in Vietnam

In 1990, the former mono-bank system was changed to a two-tier banking system consisting of the State Bank of Vietnam (SBVN) as central bank and supervisory institution (tier 1), and an operating system (tier 2).

The central bank, SBVN: Until the early 1990s, independent central banks were assumed as important for growth and particularly for ensuring low inflation (TOMPSON 1998). Few institutional recommendations by economists have gained such rapid and wide acceptance as that of granting central banks independence from short-term political control.[6] However, while central bank independence has a clear correlation with low rates of inflation, there is no causal link between the two. Independence of a central bank alone does not make it an effective institution. Its independence must receive the support of the political system (POSEN 1993). The policy implementation for developing countries is that, in order to ensure low inflation, the best course of action is to undertake financial sector reforms (e.g., liberalization and privatization) rather than instituting easily reversible and practically meaningless changes in their legal/institutional structures (MAS 1995).[7]

KOVSTED *et al.* (2003) assess the SBVN as politically and operationally dependent upon support from government agencies. In some cases, the SBVN has not made decisions even on issues that were within its power, but has instead relied on guidance from the government. This indicates that the SBVN still does not have the status to independently execute national monetary policies. Obviously the binding constraint is not the lack of legislative independence. Therefore, an indirect route to obtain central banks independence by gradually building and strengthening a non-governmental lobby for an independent central bank could be more promising than relying solely on the legislative transformation. The preliminary plans for equitization of the state-owned banks represent an important step in this direction, as does the continued presence of foreign banks in Vietnam.

---

[6] BOWLES and WHITE (1994), however, note that scholarly proponents of central banks independence are less likely to take the case as proved than policy-makers and financial journalists. Moreover, among academics the degree of independence of a central bank is still the subject of much controversy (STIGLITZ 2002).

[7] This might explain why the SBVN has been very successful in fighting inflation in the past decade, despite its strong dependence on and close relations with the government (KLUMP and SPITZENPFEIL 1998).

***State-owned commercial banks (SOCBs)*:** There are four large SOCBs in Vietnam: The Foreign Trade Bank of Vietnam (Vietcombank), the VBARD, the Industry and Commerce Bank of Vietnam (Incombank), and the Vietnamese Bank for Investment and Development. Before the financial reform (1988-1990), the SOCBs were departments of the SBVN. These financial institutions are the leading banks of the banking system and have a total of more than 1,200 branches in Vietnam. Altogether, the number of staff working for the SOCBs is around 40,000 (KOVSTED *et al.* 2003). In the past, these banks solely served their specified sectors. Today, these strict sector constraints have been abolished.

Policy Bank: The VBP was established in 1995 as the poor people's lending outlet of the VBARD.[8] The VBP is called a policy bank, because the government-mandated purpose of the VBP is not to maximize profit but to reduce poverty (VBP 1999b). The VBP specializes in lending to poor households, primarily the rural poor.[9] The bank basically consists of a head office and has no physical structures of its own below this level. The VBP uses the operational facilities and staff of the VBARD and of local authorities in extending its services. Nevertheless, due to its highly subsidized interest rates, many international agencies consider the VBP to be financially unsustainable.[10]

***Joint Stock Banks (JSBs)*:** At present, 36 commercial banks exist in the form of JSBs (VIET NAM NEWS 2002a). The first JSBs were founded in 1989. The majority of JSBs were quickly established in the years following the initial liberalization of the financial sector. Some of them are owned jointly by the state and private groups and individuals; others are completely in private hands. In the beginning the majority of stock was held by state-owned enterprises (SOE), which were trying to diversify their business activities (KLUMP and SPITZENPFEIL 1998).

Foreign Banks and Joint Venture Banks: There are 15 branches of foreign banks and four joint venture banks. In addition, 62 representative offices from 20 nations operate in Vietnam; these include major international banks such as

---

8 As mentioned before, the VBP was replaced by the VBSP.

9 Only a certain portion of the population is eligible to obtain a loan, namely the rural poor. The Vietnamese government classifies every household into one of five classes according to its living standard: Hungry, poor, medium, better-off, or rich (DUFHUES *et al.* 2002).

10 The VBP has been recognized as loss-making since the late 1990s (VBARD and DANIDA 1999).

Deutsche Bank, or Bank of America and CitiBank. The existing legislation, however, still blocks foreign banks from becoming fully fledged participants on the Vietnamese financial market. Despite recent progress, the Vietnamese govern ment has yet to establish a level playing field for competition between foreign and domestic banks (KOVSTED *et al.* 2003).

People Credit Funds (PCFs): After the collapse of the rural credit cooperatives in the early 1990s, it was quickly realized that the VBARD could not fill the void left. The system of PCFs was established in 1993 to fill the gap (WOLZ 1999). In June 2001, a total of 947 PCFs existed, supervised by the SBVN, and having a total of about 714,000 members (GTZ 2002). The intention underlying the creation of the PCF system was to create a three-layer organization in order to achieve a combination of close local contacts and connections while minimizing the risks associated with seasonality and regional shocks. As a consequence, all local credit funds were handled and directed by regional funds, which in turn would be supervised by a central credit fund handling the supply and balancing liquidity among the regional funds. The deposit and credit market shares of the PCF system are relatively small, amounting to a mere 1-2% of total market volumes (KOVSTED *et al.* 2003).

Insurance and leasing companies: Up to the present, 18 insurance companies (state-owned, joint ventures and foreign companies) exist in Vietnam (DUNG 2002). A new Law on Insurance Business became effective in April 2001. Although the private sector's market share is on the rise, the state-owned insurer remains the dominant player, with non-life and life market shares of approximately 47% and 55% respectively. Coverage is low, with annual insurance premiums amounting to 1% of GDP. But premiums have grown at an average rate of 30% per year, reaching an estimated 321 million US$ in 2001. Vietnam also has eight finance leasing companies, three of which are either joint ventures with foreign investors or wholly foreign-owned. Five are subsidiaries of the SOCBs. In 2001, the value of leased assets amounted to 131 million US$ (WORLD BANK 2002b).

Postal savings service: The Vietnam Postal Savings Company (VPSC) was established in 1999 and operates under the authority of Vietnam Post and Telecom. Its main function is to provide a savings product, thus mobilizing savings for government development investments. The operating costs of the VSPC are de facto subsidized by the Vietnam Post and Telecom through the use of its staff, as the VSPC itself employs only 100 persons. The VPSC sees computerization as its biggest obstacle and opportunity. Moving from paper-based to computerized operations would be an expensive endeavor. This has, however, been identified as a priority to increase the value of existing services and would facilitate the expansion of services to include money transfers between accounts, payment of utilities, etc.

A money transfer service between savings accounts within the VSPC has been launched in Hanoi and extended to northern provinces. Recently, expansion to Ho-Chi Minh City was started, and the service is to be extended nationwide by the end of the year (WORLD BANK 2002a).

Stock exchange: Vietnam has been endeavoring to establish a stock exchange since 1992. However, the differences between reform-oriented and conservative politicians have repeatedly delayed important decisions concerning the stock market. An essential step towards the creation of a stock exchange was the building of the State Securities Commission in 1996, which is responsible for the planning, implementation and performance of the stock exchange. After the Asian Crisis in 1997, the conservative politicians gained the upper hand and the establishment of the stock exchange was postponed again. In 2000, however, a stock trading center was opened in Ho-Chi-Minh-City, which is a strong signal of change in the direction of a market economy. Nevertheless, this stock trading center is highly regulated by the government (NGUYEN 2002). Currently 19 companies and 18 bonds are listed, with a total market capitalization of 105 million US$. All companies listed are former SOEs that have been transformed into joint-stock companies. Trading was upgraded in December 2001, and a clearing and settlement system consistent with best international practices will be introduced by 2005 (WORLD BANK 2002b).

2.3 Reforms in the financial market

Prudential reforms of the financial sector are most successful in countries with economies similar to Vietnam's economy today. A banking system with some problems, but without disasters, is most capable of pursuing reforms. Vietnam therefore offers a good starting position for further reforms in the financial sector (ARDREY *et al.* 1999).

2.3.1 Reforming steps in the banking sector

The unwillingness of the authorities to undertake thorough reform of the financial sector in the past is a result of their continuing desire for a 'market economy with a socialist orientation', in which the state occupies the 'commanding heights' of the economy. Although private banks have been allowed to operate, reforms so far have been careful not to threaten the dominant position of the state-owned banks. There appears, however, to be a growing recognition on the part of state authorities that the financial sector cannot be managed the same way as other sectors because mistakes reverberate throughout the entire economy, threatening not only financial institutions, but the economy as a whole

(RIEDEL and TURLEY 1999). Despite recent reforms (e.g. deregulating the interest rate regime or putting in place restructuring plans for SOCBs), the WORLD BANK (2002b) states that the efforts to transform the banking sector into a commercially-based operation are still in their early stages.

2.3.1.1 Competition

The previous banking reforms implemented in Vietnam during 1988-92 were substantial and contributed to solid macroeconomic performance. By 1994 (see Table 2-1), the banking system had changed considerably, in the sense that other banks began to take a growing portion of banking assets (WORLD BANK 2000c). But the speed of introduction and implementation of reforms declined at the end of the 1990s, leaving the banking sector to be dominated by SOCBs (LUIBRAND 2002).

Table 2-1: Increasing number of players in the banking sector

	1990	1994	1999
SOCBs[1]	4	4	5
JSBs	0	36	48
Joint venture banks	0	3	4
Branches and rep. offices of foreign banks	0	41	103

Source: WORLD BANK (2000c).

Notes: [1] Including the policy bank, VBP.

The competitiveness of the Vietnamese financial system is ranked very low (UNIDO *et al.* 2003). SOCBs dominate the financial sector in Vietnam more than they do in other developing countries, where governments usually control only around half of the banking system (THAI 1998). According to OH (1999) and WORLD BANK (2000c), the major SOCBs hold approximately 75-80% of total assets in the banking sector. In addition, the SOCBs are large shareholders in the JSBs and, as markets for SOCBs and JSBs are completely separate in terms of depositors and borrowers, the share of assets under complete or partial government control could be much higher. Due to the segmented financial markets, competition is not of great concern to SOCBs. After all, the Vietnamese domestic financial market remains highly distorted and segmented (MCCARTY 2001).

Given that the concentration in the Vietnamese financial market coincides with substantial state ownership, one option to enhance competition would be privatization of the four major SOCBs. This, however, is a lengthy process, starting with the recently completed international audits and subsequent attempts to address the non-performing loan problem in the SOCBs, which must precede any attempt to recapitalize the major SOCBs (see section 2.3.2). Only after this

has taken place would it be realistic to consider any form of privatization of the SOCBs. Another approach to making financial markets more contestable is liberalizing the comparatively strict entry requirements. Nevertheless, due to potential risks associated with foreign bank entry, introducing foreign competitors may require an initial transition period, to allow time for efficiency adjustments in the domestic sector and for improvements in prudential regulation and supervision. Because bank failures will almost inevitably occur during this process, the government needs to establish transparent rules for bank exit. As a consequence, any liberalization of the entry process must be both managed over time and transparent (KOVSTED *et al.* 2003). The development of a competitive banking sector in Vietnam will not only promote increased efficiency of the banks and improved banking services but also promote the development of a competitive private business sector, because borrowers will not be limited to a few banks that serve only selected clients (THAI 1998).

The lack of competition in the rural financial market is even more severe than in the urban financial market. Here, the state-owned banks (VBARD/VBP) are the main (only) supplier of financial services.[11] The VBP is completely dependent on the VBARD as they use the same staff below headquarters level. The VBARD serves the better-off clientele in the rural market, while the VBP serves the poorer market segment.[12] There is thus no real competition between the two (DUFHUES *et al.* 2004a). It is not possible for other financial organizations (e.g. non-governmental organizations, PCFs) to compete with the VBARD/VBP, which are recipients of huge state subsidies covering both operating and financial costs. Under such circumstances, financial innovations are unlikely to occur and no market inducements are given to the quasi-monopoly market leaders, VBARD/VBP, to improve their performance. But as LLANTO (2000) states, the subsidies enable the VBARD and VBP to penetrate poor areas. However, they

---

[11] PCFs do not exist in every province and have very limited outreach compared to the VBP/VBARD.

[12] The orientation to a special market segment reduces portfolio diversification, which can endanger the long-term sustainability of a bank. The situation is aggravated by the fact that the rural banks in Vietnam mostly financed investments related to agricultural production. Possibilities for diversifying the portfolio of rural financial institutions in post-socialist economies are generally limited as only a few small and medium enterprises existed during the centrally planned era (SCHRIEDER and HEIDHUES 1998).

are doing so at great expense to the taxpayer and at great cost to the development and implementation of sustainable financial services.

2.3.1.2 Interest rate policy

Countries that do not possess highly developed financial sectors may use interest-rate ceilings as a means of protecting emerging institutions. As financial sectors mature, restrictions on competition can be removed provided that adequate systems of prudential supervision and control of monetary growth are in place (COLLIER and MAYER 1989). In making this decision, it is important to consider how far advanced the country is in reforming the state enterprise sector and in establishing a 'credit culture' – that is, the extent to which banks have become accustomed to using market principles in assessing credit risks. Countries with inadequate regulatory and supervisory frameworks, or whose financial institutions are insolvent, are likely to run into serious problems if they liberalize interest rates too early or too rapidly. For interest rate liberalization to succeed, the main economic players need to be subject to hard budget constraints so that they will avoid borrowing and lending unwisely. Otherwise, credit could be directed to so-called pathological borrowers – those who would like to take the greatest risks and who would borrow no matter how high the cost (MEHRAN and LAURENS 1997). When financial deregulation is implemented – and especially where non-performing loans are inherited from the pre-reform era – interest rate liberalization should be accompanied by structural reforms, including restructuring bank balance sheets to remove bad debt, privatizing state-owned banks, and introducing measures to promote competition in the banking sector (PILL and PRADHAN 1997).

During the last decade, the Vietnamese Government has set an interest rate ceiling through the SBVN. In recent years, greater flexibility in the management of loan interest rates has been introduced, e.g. the interest ceiling on foreign loans has been abolished. For lending in dong, banks have for some time been allowed to offer interest rates up to a new ceiling rate, defined as the base rate plus 0.3% per month for short-term loans and 0.5% for medium-term loans (WORLD BANK 2001). However, the real interest rate was lowered every year since they became positive (SENANAYAKE and HO 2001). While the standard interest rate was relatively high in real terms, the various preferential rates were close to the actual inflation rate and often below (DIEHL 1998). Finally, after a decade of pre-fixed interest rate ceilings, the SBVN has removed the lending rate ceiling (WORLD BANK 2002a).

There is little experience as yet on what the true impact of the recently implemented rate liberalization will be on banks' rate-setting behavior, and thus on their future profitability. For now, differentiation between banks and types of borrowers remains limited (WORLD BANK 2002b). Despite the possibility of raising

lending rates under the past interest rate cap regime, the rates stayed quite inelastic and unresponsive to increased demand. The large SOCBs were and are clearly the rate-setters. The SOCBs explain this inelasticity as a fear of competition and a perceived duty to advance their clients' business prospects through providing good rates. This could imply quite an unusual type of pricing by the large SOCBs, maintaining lending rates at concessional levels despite their own interest margins possibly being insufficient to cover their costs. As interest rate liberalization is a very recent phenomena, it is understandable that the banks are wary of taking aggressive steps towards a more market-driven competitive approach (WORLD BANK 2002a). Nevertheless, similarly to the central bank, the decision makers within the SOCBs do not fully exploit their opportunities. The transformation to a market-oriented economy obviously needs more than an enabling legal or regulatory framework; it also needs business actors who are willing and able to carry out these reforms.

Interest rates of rural credit institutes are still highly subsidized and subject to close government control.[13] The provision of subsidized interest rates to the rural population has for a long time been the subject of debate between international donors and the government of Vietnam. The donors point to international experience with subsidized rural credit programs having resulted in massive loan losses, low savings mobilization, and bank failures.[14] In the past, subsidized interest rates led to a rush for loans from VBP and VBARD, resulting in the common impression that subsidized loans are a right rather than a contractual agreement. In addition, the perception that loans at a higher rate are exploitative makes a shift to market-based rates increasingly difficult (KOVSTED *et al.* 2003).

The cap on lending rates during the last decade and the view of decision makers that savings are not important for rural development have led to a situation where credit-oriented rural financial institutes, VBARD/VBP and now the Vietnam Bank for Social Policies (VBSP), leave the rural population without access to saving products. The main challenge will be to implement a safe, attractive and cost-covering deposit collection system at the local level. However, before this can happen, a paradigm change is called for. The official policies in Vietnam

---

[13] The VBARD was only recently freed from lending at preferential interest rates.

[14] A detailed overview of the negative effects of subsidized credits on rural development can be found in (ADAMS *et al.* 1984).

need to recognize the capability and the demand of the rural population to save. The implementation of the VPSC is a step in the right direction and it has, at least potentially, the possibility to achieve very deep outreach.[15] Nevertheless, the policies of VBARD and VBSP have not changed so far in this regard.

2.3.1.3 Political lending

Historically, the state-owned bank sector was used as an instrument of public policy, and during the 1990s much of its lending was still influenced by social and political rather than commercial objectives (GOTTWALD and KLUMP 1999). Nevertheless, over the past decade the four large SOCBs have slowly started to evolve from specialized political lending vehicles to more commercially-oriented financial intermediaries, with the greatest progress seen in 2001 and 2002 (WORLD BANK 2001). Recent steps to separate political lending from commercial lending at SOCBs resulted in the establishment of the VBSP, the successor of the VBP. The VBSP has a branch network in all provinces. It enjoys privileges such as having its liquidity and solvency guaranteed by the government, and being exempt from deposit insurance and tax regimes (WORLD BANK 2002b). The VBSP will take over all political lending from the VBARD. Thus, the VBARD, now freed from political lending, will concent-rate purely on market-oriented lending. This separation aims at enhancing financial transparency in the country's banking system (SGT DAILY 2003). Through the VBSP, the Vietnamese government will continue its policy of providing preferential credits to 'disadvantaged' groups. As the interest rates are not cost-covering, it is also quite reasonable to assume that the VBSP will be one of the future holes into which public funds will drain. KOVSTED *et al.* (2003) suggest taking the influence of the government on credit allocation as an indicator for the progress of the transition from a centrally planned economy to more market-based economy in Vietnam. The question is how many funds will be channeled through the VBSP and to whom?

However, there is still no clear distinction between profit-orientation and the social duties of banking, and the uniqueness of banks as financial intermediaries is not well recognized in Vietnam. A bank is regarded as either a

---

[15] In a country where 80% of the population lives in rural areas, even the branch network of the VBARD cannot reach widely or deeply enough among the population at large. The postal savings system offers the use of a structure that is obliged to have equal

safe or a broker, or a distributor of government funds. This also affects the general perception of banks and banking functions, especially among rural households (KOVSTED *et al.* 2003; OH 1999). The founding of the VBSP may be a step in the right direction. As political lending will be separate from commercial lending, bank staff will at least have a clear view of each operation. As the target group of the VBSP has been widened enormously, it seems fair to assume that the VBSP will become the main supplier of credit to rural households and may even outdo the VBARD.[16] It is therefore also reasonable to suggest that the rural population is unlikely to change its perception of rural financial institutes as social welfare institutions.

All policy interventions of the Vietnamese government in the rural financial market have the aim of extending credit outreach to the population. The reason behind this policy objective is a centrally fixed production target. For instance, the Vietnamese government has set as its target to provide 90% of poor households with credit, regardless of whether there is a demand for it. This is reminiscent of old socialist production planning. In a recent study, BUCHENRIEDER *et al.* (2003) found that most rural households in Vietnam are well served with credit facilities. Less than 15% of rural households are access constrained. Attaining the aforementioned target will therefore be an immense drain on public resources. As it is connected to political lending, it will probably also create a large number of non-performing loans and a business culture that will likely hamper the creation of any sustainable rural financial institution for years.

2.3.2 State-owned enterprises and non-performing loans

SOEs: The most difficult reforms that now confront Vietnam relate to the reform of SOEs and their dependence on state credit (MONTES 2001; SHIMOMOTO 2003). The explicit subsidies from the budget of the SOEs were stopped during the 1990s but were partly replaced by increased credit from the banks (WORLD BANK 2000c). After the establishment of the two-tier banking system, all enterprises were able to borrow at the same interest rate. However, SOEs still continued to soak up the bulk of domestic lending (MONTES 2001). The former interest rate policy of

geographic distribution (WORLD BANK 2002a).

[16] Instead of serving only the 'poor', other disadvantaged groups, e.g. students, are now also eligible for a loan.

granting preferential credits to SOEs squeezed banks' profits (see Section 2.3.1.2). This encouraged SOEs to accumulate excess liquidity beyond proper investment opportunities, as capital costs were low. At the same time, it led banks to lose motivation for profit-taking businesses (OH 1999; SHIMOMOTO 2003). Nevertheless, the share of credits to SOEs has been lowered continuously from more than 90% in 1990 to 25% in 2002 (WORLD BANK 2002b). The rationalization of interest rates is also an important step in paving the way for increased lending to private small and medium enterprises (SMEs), which may not have an adequate credit history or collateral to secure loans at administratively set low interest rates (WORLD BANK 2001).

While efforts to transform and restructure SOEs have stayed on track so far, the process appears to be slowing down. At present, the reform mechanisms in place amount to an option, rather than a mandate, for enterprises to divest (WORLD BANK 2002b). It is necessary to prevent badly performing enterprises from obtaining new credit and to collect outstanding loans. So far, however, this measure has been considered more from a political than an economic perspective, as to do so might press SOEs into bankruptcy. Only few liquidations have so far taken place (WORLD BANK 2000c). According to MCCARTY (1999), the reluctance to close down SOEs may be influenced not only by fear of creating an unemployment problem or by resistance on the part of enterprise management due to fear of losing power; it may also be influenced by the Vietnamese vision that can be traced back to the economics of Marx and Lenin, which is one of steady accumulation: Step-by-step, more of everything. This is in contrast to more contemporary arguments based on an understanding of scarcity, opportunity costs, and the pace of the technological change. The crucial ingredient for a successful modern economy is the ability to change – to open new businesses, and to close down old ones.

Non-performing loans: Past emphasis on policy and direct lending has led to a high share of non-performing loans among the SOCBs. An inappropriate regulatory and supervisory system, one that did not focus sufficiently on risk and loan quality, permitted JSBs, for example, to conduct related-party and high-risk lending (WORLD BANK 2000b). According to the SBVN (2001), 13% of all outstanding bank loans are non-performing, though some experts suggest the figure could be

as high as 30% if international accounting standards were applied.[17] A significant portion of these non-performing loans was given to SOEs. Many of these loans may never be recovered. While the exact value of non-performing loans is difficult to estimate, the current situation amounts to a claim by the state sector on future capital accumulation (WORLD BANK 2002b). The heavy reliance of the JSBs on SOEs as a source of deposits and for lending and the strong interdependence of the SOCBs and the SOEs may put the whole financial system in jeopardy (LEUNG and RIEDEL 2000, WARNER 2001). The SBVN took some initial steps towards improving the situation and closed several JSBs. Progress with resolving old non-performing loans has been slow but steady. The main difficulty is with unsecured loans, mainly to SOEs. SOCBs find it difficult to meet their resolution targets, owing to delays in SOE reform. Although progress with the resolution of non-performing loans varies across the four large SOCBs, a first round of re-capitalization provided resources to each of them. It is not clear, however, that the portfolio of the banks is seeing significant improvement. The lack of a timely resolution process for non-performing loans hampers the creation of a credit culture of repayment (WORLD BANK 2002b). However, in some areas restructuring efforts have already begun. The government has, for example, already developed a detailed restructuring plan for the Vietcombank. During the next couple of years, a detailed restructuring plan for the VBARD, Incombank and the BIDV will be developed on the basis of the recently completed international accounting standard audits.[18] Asset management companies will be established for each SOCB to solve the problem of non-performing loans (KOVSTED *et al.* 2003). Despite such instances of progress, the large quantity of non-performing loans still threatens the whole financial system.

Most of the credit expansion in the last years has come from the SOCBs. In view of their already high levels of non-performing loans and generally poor expertise in credit risk assessment, such rapid expansion will further weaken the

---

[17] Vietnam uses its own definition to classify loans as non-performing. Interest accrual on non-performing loans is allowed for up to 180 days for unsecured loans and 360 days for secured loans. Loans overdue for 90 days are not adequately classified. The classification system, moreover, does not reflect the credit risk based on the borrower's repayment capacity, collateral coverage, and other factors (KOVSTED *et al.* 2003).

[18] The restructuring of the VBARD has already begun with the separation of the VBSP from VBARD.

asset quality of these banks (WORLD BANK 2001).[19] In 2000 and 2001, a substantial part of the credit allocation to non-state sectors reflects the government's decision to ask SOCBs to extend loans for rural development purposes (WORLD BANK 2001; WORLD BANK 2002b).[20] These loans were usually soft loans. One can assume that many of these recently disbursed loans to rural households will end up as non-performing loans. Nevertheless, as stated above, the VBSP will take over all policy loans from VBARD and VBP. Therefore, the VBSP will start out with a huge burden of bad debts, casting great doubts on its financial viability and on the statement made by Prime Minister Phan Van Khai to the VIET NAM NEWS (2003), saying that the VBSP should not operate like a subsidized financial body.

Due to the small profit margins, the VBSP will probably seek, as did the VBP and VBARD, to shift obligations (training, screening, monitoring, etc.) to clients or local authorities in order to save costs, leading to a less focused development of skills and knowledge within the financial institutions (DUFHUES *et al.* 2002; KOVSTED *et al.* 2003). One problem resulting from this practice is the lack of contact between professional bank staff and the borrower. Hence, many households that are not creditworthy are assessed as creditworthy, resulting in massive rescheduling of loans and ultimately adding to the amount of non-performing loans (BUCHENRIEDER *et al.* 2003; IZUMIDA and DUONG 2001).

2.3.3 Legal environment

The transformation process includes the reshaping of the legal environment. So far, the changes in the legal system of Vietnam have been unable to keep up with the developments of the economic reforms (DIEHL 1998; DUCKETT 2001). The findings of a number of studies show that countries with legal systems that enforce contracts more effectively have more highly developed financial systems. In Vietnam, the

---

[19] As a source of overdue loans, SOEs and non-SOEs have shown a similar trend. The increase in the proportion of overdue loans partly reflects the loss of impetus in the reform process. The private sector's share of overdue credits rose to 67% in 1997 from 41% in 1994, with the bulk concentrated in VBARD (OH 1999).

[20] Of the SOCBs, it is mainly the Vietcombank and the VBARD that lend to private enterprises. The reason for this is that these two banks have an extensive branch network, and that their respective areas of specialization are in sectors that have seen rapid growth following the initiation of the Doi-Moi reforms (KOVSTED *et al.* 2003).

financial system is relatively weak. This weakness becomes evident in the difficulty borrowers have in giving and lenders have in enforcing pledges and mortgages (RIEDEL 2000; UNDP 1999). Thus, the underdeveloped legal framework does not prove adequate for the use of risk management tools such as collateral (GOTTWALD and KLUMP 1999). From a banking perspective, the focus of legal reforms should be on the clarification of legal concepts. These include ownership and transfer of land use rights, collateral registration procedures, mortgage laws and title deeds (OH 1999).[21] Banks are not allowed to seize land from defaulting farmers. It is more or less impossible to evict farmers and auction their land (WOLZ 1997). However, the VBARD still insists on land use rights as collateral, but only few cases exist where land has been liquidated in the event of a farmer's collapse (DUONG and IZUMIDA 2002). The already high share of non-performing loans will be pushed up further if the assets of defaulters cannot be liquidated. The idea that almost all loans of the VBARD are in fact unsecured is quite alarming.

The government has recognized private lending as a legal business and has given private lenders the legal right to sue a borrower in the event of default (NGUYEN 1998). The practice has shown that private lenders rarely go to the court for dispute settlement. Particularly in rural areas (and especially at village level), the Civil Code is not well understood and it is time-consuming and costly to go through court settlement procedures, particularly in the case of small loans (HUNG and GIAP 1999). The major goal in improving the legal framework is to clarify contractual rights and to disseminate this information to all necessary levels.

A Registry Center has recently been set up under the Ministry of Justice, which should in principle reduce future disputes among creditors regarding claims on secured transactions with movable assets. The registration process has the potential to increase the transparency of lending transactions and of ownership of the underlying collateral. However, the Registry Center does not yet have an electronic filing system capable of tracking, recording and providing information on a timely basis. A Credit Information Center was also established to provide creditors with information on borrowers. This Center, too, is at an early stage of

[21] Foreign banks have recently been allowed to accept land use rights as collateral. This is a vast improvement over the situation during the 1990s, where regulations explicitly prohibited foreign banks from accepting land use rights as collateral (KOVSTED *et al.* 2003).

operation, but it could become a crucial tool for banks to reduce risk in their future lending. The related rights and duties of the parties involved should be clearly backed by legislation with adequate sanctions for breaches, thus protecting the data collected from unauthorized use (WORLD BANK 2002b).

Enactment of a bank secrecy law would very positively influence the use of deposit accounts (RIEDEL 2000). The current law, however, does little to protect bank secrecy. First, it is the credit institution and not the customer that has the right to maintain confidentiality about the customer's account. Therefore, the credit institution can give out information about the customer if the institution so chooses. Second, the credit institution is obliged to give out the information on the request of a 'competent state authority'. Since the term 'competent state authority' is not defined, the door is open potentially to pass confidential banking information to hundreds of state agencies at any level (UNDP 1999).

2.3.4 Regulatory environment

The degree of government involvement in banking regulation is still the subject of vigorous debate among academics. However, there is broad agreement that liberalization of financial markets without adequate banking regulation will most likely lead to macroeconomic instability. Unregulated financial markets are dangerous, as events in Russia and some Asian countries have indicated (PILL and PRADHAN 1997; STIGLITZ 2002). Safeguarding financial markets and institutions from shocks that might pose a systemic risk is the prime objective of financial regulation. The failure of one non-bank firm often improves business prospects for the remaining firms in the industry. In contrast, a shock that seriously damages one bank can spread to other banks (HERRING and SANTOMERO 2000).

One regulatory measure often recommended by academics to encourage development of the banking system is the adoption of a deposit insurance scheme (RIEDEL 2000). In Vietnam, the Deposit Insurance Agency began operating in 2000 (WORLD BANK 2002a). However, the implementation of a deposit insurance scheme is a matter of controversy among academics. BARTH *et al.* (2002) found a strong link between the generosity of the deposit insurance system and bank sector fragility. This result is consistent with the view that deposit insurance

may not only substantially aggravate moral hazard but can also produce deleterious effects on bank fragility. The results suggest that the reverse effects from deposit insurance overwhelm any stabilizing effects that these safety nets may also have.[22] DEMIRGÜC-KUNT and KANE (2001) showed that where effective bank regulation is lacking (as it is in Vietnam), deposit insurance can do more harm than good.[23] In general, if the government is too willing to help insolvent banks, this will create the impression that it will continue to do likewise in the future (SCHRIEDER and HEIDHUES 1998). It is not clear, therefore, that implementation of a deposit insurance scheme in Vietnam will have beneficial effects on bank development (KOVSTED *et al.* 2003).

Vietnam is still a cash economy, with cash accounting for about 50% of the M3 money supply.[24] This may reflect a popular reluctance to use the banking system. Experience elsewhere has shown that a sound banking system in which business and ordinary people have confidence is an essential mechanism for mobilizing domestic savings for productive investment (UNDP 1999; WOLFF 1999). One of the major tasks ahead is to strengthen popular faith in the financial system. The very low degree of financial deepening, as well as the prevalence of US dollar holdings in Vietnam, indicate that the degree of information opaqueness is well below the intermediate range. The government therefore needs to promote regulations relating to the dissemination of financial information. This would include laws relating to the regular issuance, on the part of publicly traded companies, of financial information on a standardized basis using internationally accepted accounting and auditing practices (LEUNG and RIEDEL 2000). Accounting and auditing standards in Vietnam, which differ from international practice, are another element that undermines confidence in the banking system (UNDP 1999). Up to now, SBVN banking supervisors fail to act in line with international standards because they lack

---

[22] Banks do have a reason for taking on more risk than they should. The reason, paradoxically, is the safety net that governments put in place to prevent bank failures. By trying to make banks safer, governments give banks the means and motive to behave recklessly (THE ECONOMIST 2003).

[23] The biggest problem with Vietnamese regulations is the lack of enforcement. To effectively implement the banking laws and regulations, a much stricter and standardized penalty system must be established (TAM 2000).

[24] M3 = Currency in circulation + Short-term deposits + Time deposits.

the power and competence to change bank accountancy standards accordingly.[25] Providing greater transparency and reliable information is essential to strengthen the faith of the population in the financial system.

Rural finance in Vietnam basically means microfinance. So far, there is no special law regulating microfinance activity in Vietnam. MCGUIRE *et al.* (1998) state that a number of prudential banking standards applied to normal banks may not be appropriate for MFIs. This was confirmed by an SBVN official, who acknowledged that the existing regulations are too strict and narrow for the microfinance sector (NHGIA 2001). Governments should ensure that capital requirements for establishing financial intermediaries are realistic for small institutes operating at the local level, and that there are no other restrictions affecting the establishment of such entities (MCGUIRE *et al.* 1998). Like all types of regulation, banking regulation can do more harm than good if it is not well designed. The policy of more restrictive banking regulation impedes the most promising initiatives in microfinance (SCHMIDT 1999). In general, the question is not so much whether or not MFIs should be included in formal banking regulation, but rather when and how (CHRISTEN and ROSENBERG 2000). There is thus room for improvement and, as mentioned before, particularly as regards reducing market entry barriers for MFIs to promote competition in the rural financial market. However, it is very unlikely that any viable financial intermediary will emerge as long as the government continues to supply highly subsidized loans to the rural population through the VBSP.

2.4 Conclusions and policy recommendations

After the slow-down in financial sector reforms in recent years, the WORLD BANK (2001) states that Vietnam's banking system reform is back on schedule. The government has adopted a comprehensive banking reform program focusing on the restructuring of banks and on improvements in the regulatory and supervisory framework. The past decade has witnessed rapid deepening in the level of

[25] In Vietnam, the bank accounting system is determined by the Ministry of Finance. The process of changing the overall accounting principles to bring them into line with international standards has been initiated and is currently under way. It is a process that will take time, however, as it involves formulating a chart of accounts, developing an entire accounting methodology, and training staff (KOVSTED *et al.* 2003).

monetization of the Vietnamese economy. The ratio of bank credit to GDP increased from 13% in 1990 to 27% in 1995, with a further increase to 44% in the year 2000. The growth of the non-banking financial sector, and especially of the insurance business, has also been remarkable, even if the size of the sector remains small in absolute terms (WORLD BANK 2002b). The liberalization of interest rates is an important step in the continuing transformation of the financial market in Vietnam. Nevertheless, it is not yet clear within the regulatory environment whether this step will have positive effects, or whether it was premature and will thus destabilize the whole financial system.

The government will continue to supply huge sections of the population, mainly rural, with subsidized credits through the VBSP. While the liberalization of interest rates offers the potential for financial intermediaries to offer cost-covering services, it is unlikely that, except for some local non-governmental organizations, any viable services will be provided in the rural financial market that will serve a market not reached by the VBSP.

Another area of progress is the recognition of rural savers, including women and the poor, by the government of Vietnam. The VPSC was funded to develop the potential of the rural deposit market. However, the network of the VPSC is still small in comparison to the VBARD. Moreover, the VBARD has never reached deep enough into the country to attract rural savings. Furthermore, the VBSP does not demonstrate any intention to offer savings to its customers. Despite this, the founding of the VPSC may be the beginning of a paradigm change, namely acceptance of the demand of the rural population for deposit facilities.

The huge quantity of non-performing loans in SOCBs mostly owned by SOEs is not new and they threaten to destabilize the banking system. However, there are strong indications that this problem is spreading to the private sector, and particularly to rural households. This behavior of moral hazard is leaving behind burnt soil for the establishment of any viable rural financial intermediation.

Freed from political lending, the VBARD is likely to throw overboard its peasant clientele and concentrate on more lucrative business with bigger and wealthier farmers. The VBSP will offer subsidized loans on a broad scale and will obviously be a drain on public resources. The question is how long the Vietnamese Government can finance the VBSP, and who will serve the rural poor the VBSP collapse?

Finally, the transformation of the financial institutions has clearly proceeded more quickly than that of its decision makers or employees. Often, actors within the financial system have not fully exploited the competence margin assigned to them by the government and continue to wait for additional approval from the

government. Further training of decision makers within the financial system thus appears to be a key issue. Most desirable would be a reforming lobby within the Vietnamese financial system. However, this would require more than just training officials.

3 Information and targeting policies and their principal-agent relationships – The case of the Vietnam Bank for the Poor[26]

In the following section, the targeting policies of the VBP are discussed in the light of the principles of the New Institutional Economics. In this context, special attention is given to TCs and agency relationships.

3.1 Introduction

A broad access to appropriate and sustainable financial services has been pointed out repeatedly to be important for poverty reduction. It contributes to higher income and better food security (ADB 2000; BUCHENRIEDER and THEESFELD 2000; SCHRIEDER 1996; ZELLER *et al.* 1997). Many poor households are faced with transitory food insecurity, even though their incomes seem to provide a sufficient livelihood base over several years. Thus, there is a potential demand for savings, credit, and insurance services to stabilize consumption more effectively and to enhance the ability to escape chronic poverty (KANBUR and SQUIRE 2001; ZELLER 1999).

Hunger eradication and poverty alleviation, particular in the northern uplands, is of enormous concern to the Vietnamese government (AHMED and GOLETTI 1997; VBP 1999b). The Ministry of Agriculture and Rural Development (MARD) proposes financial services as a powerful tool for poverty reduction (SIDA-MARD 1998). From the early 1990s onwards, the Vietnamese government has begun to establish and promote FFIs such as the VBARD, the VBP and the PCFs to

---

[26] This section is based on the following article: "Information and targeting policies and their principal-agent relationships – The Case of the Vietnam Bank for the Poor", written by Thomas Dufhues, Pham Thi My Dung, Ha Thi Hanh, and Gertrud Buchenrieder and published 2002 in the *Quarterly Journal of International Agricultu*re 41 (4): 335-362. I would like to thank Prof. Dr. Hans Dieter Seibel and Insa Theesfeld for their helpful comments on an earlier version of the article.

provide the rural poor with loans.[27] In addition, the State Treasury has implemented special sector credit programs, e.g. the 120-program for promoting employment, which is headed by the Ministry of Labor, Invalids and Social Affairs (MOLISA). This loan policy is based on the assumption that (1) the rural population is too poor to repay credits at market interest rates and that (2) capital is a scarce resource for increasing production and thus raising food security.

The Vietnam Living Standard Survey 1997-98 shows that FFIs have been very successful in increasing their level of outreach; the state-owned VBARD and the VBP, for example, have extended credit facilities to almost 4.5 million and 2.5 million rural households respectively (BAC 2001; HANH 2001). These figures represent more than 58% of all rural households in Vietnam. The majority of the loans to the rural poor are provided by the VBP through a group lending scheme, whereby the highest lending activity of the bank is found in the northern highlands and the lowest is observed in the southeast and central highlands (VBP 1999b).

The state-owned VBARD and VBP collaborate with the local governments at commune level, particularly the People's Committees, as well as mass organizations such as the Women's Union and the Farmers' Union. This operational arrangement has proven quite successful in expanding the availability of credit to subsistence farm households (VBARD and DANIDA 1999). Nevertheless, there exist rural financial market failures because credit is made available not to those rural households with the most profitable investments, but to those that are best informed.

---

[27] In 1988, the VBARD emerged from the mono-bank system. At that time, it was called 'Agricultural Development Bank of Vietnam'. Its name was changed in 1990 into Vietnam Bank for Agriculture (SEIBEL 1992). The VBP was only established in 1995 as its lending outlet for the poor of the Vietnam Bank for Agriculture. The PCFs emerged from the cooperative banking system that was originally part of Vietnam's mono-banking system. While most of the original cooperative banks went bankrupt after the introduction of a two-tier banking system, 80 survived. 78 out of them are today part of the more than 800 PCFs, which are legally based on the decree No. 390/Tg of 1993 (SEIBEL 1997).

3.1.1 Problem statement

The VBP focuses on the poorer segment of the rural households. It faces particularly high TCs because of the remoteness of the majority of its borrowers, the small credit denominations, and the extensive administrative procedure in the credit allocation process. Some of the operational steps within the screening and monitoring process are managed free of charge (e.g. by village leaders), but most are carried out by paid professionals (e.g. by credit officers). Currently, the average operational costs of the VBP, expressed as interest rate spread, are 0.45% per month (HANH 2001). The monthly interest rates charged by the VBP vary between 0.6% and 0.7%. This means that between 64% and 75% of the interest revenues are used to cover operational costs.

The allocation process of VBP loans for the rural poor is in many respects top-down. District, commune and village officials are heavily involved in this process. Apart from this, the commune and village authorities are involved in dissemination of credit information, screening, and monitoring of rural households and especially in exerting pressure on households with overdue loans. This ought to reduce information asymmetry (VBARD and DANIDA 1999), but this approach has created typical principle-agent problems at the commune and village level.

Empirical evidence suggest that (1) the heads of the communes do not necessarily sufficiently inform all villages in their communes about the availability of credit, and that (2) village officials do not always make certain that all households in their village get the news. It appears that these two administrative steps contribute to resource misallocation, in the sense that potential borrowers with profitable investments are excluded due to a lack of information. Information deficits therefore undermine the access of the poor to credit (KANBUR and SQUIRE 2001). Furthermore, interviews with key persons have shown that (3) local authorities are also responsible for the poverty assessment of households and might assess HHs of relatives, friends, or neighbors as rather poorer than in reality in order to give them easier access to VBP loans.

Based on these problems, one could claim that access to more timely and complete information could contribute not only to a more efficient allocation of funds, but also to an allocation that more effectively benefits the true target group, which is the rural poor. Information availability in the credit allocation process is therefore crucial for the empowerment of the rural poor and consequently for increasing their welfare.

3.1.2 Objectives and methodology

Besides the effect of information deficiencies, the effect of information asymmetry on the national poverty alleviation policy is evaluated. Key objectives of this contribution are (1) to identify crucial gatekeepers of important credit information and (2) to describe the formalized and non-formalized information channels and propose policy measures to improve their outreach to the target group.

Methodologically, this contribution combines secondary data from the FFIs and empirical evidence from the commune and household levels. The qualitative and quantitative data were collected between March and October 2001 in the Ba Be district of Bac Kan province in Northern Vietnam. The analysis of information flows of FFIs at district and provincial level produced insights into policy objectives and formalized procedures of credit fund allocation. The survey comprised 118 households in four villages and three communes of Ba Be district. By means of 'social mapping'[28], the relationships of members in credit groups was made transparent. Semi-structured interviews with key persons such as officials of mass organization, credit officers, credit group leaders (CGL) and members at village and commune level provided data on credit allocation.

3.2 New Institutional Economics and the analysis of information flows in Vietnam's rural credit allocation[29]

The term 'New Institutional Economics' (NIE) delineates a branch of economic theory which focuses on institutions and organizations while maintaining the basic principles of neo-classical economics such as the utility maximization assumption, the marginal benefit principle, the efficiency assumption, the equilibrium thinking (SCHMIDT and TERBERGER 1996), and the rational choice model, or the homo economicus with bounded rationality (RICHTER 1990). Nevertheless, the efficiency direction of NIE modifies the protective belt of neo-classical economics by including positive TCs and the constraints of property

[28] Villagers drew a map of their village, including all households. Then the households of the CGL and their relatives, credit group members, and all key persons and their relatives were marked.

[29] The following section draws on (BUCHENRIEDER 2002).

rights (PRs) (EGGERTSSON 1990).[30] The NIE defines an 'institution' as a commonly accepted set of formal rules and informal constraints that shape human interaction. Institutions also consist of the enforcement characteristics of the rules and constraints (NORTH 1989).

If a situation does have TCs or information problems, then it does matter how wealth and PRs are distributed. Modern economic theory emphasizes that TCs depend on institutions, that institutions are endogenous, and that the distribution of wealth affects economic efficiency both directly and through its effect on institutions. Distribution of wealth, institutions, and efficiency are inseparable. TCs caused by information asymmetry and risk are therefore of particular importance in developing countries (HOFF and STIGLITZ 2001).

3.2.1 Transaction costs

TCs decrease the efficiency of exchange relationships (GRINDLE 2001). The regulatory framework of institutions should reduce TCs and raise the efficiency of exchange. Although a standard definition has yet to be agreed upon, EGERTSSON (1990: 14) defines TCs as: "…the costs that arise when individuals exchange ownership rights to economic assets and enforce their exclusive rights." TCs include all expenses and opportunity costs, fixed and variable, which arise in the exchange of PRs, except the price of the PR itself. The costliness of information is the key to the costs of a transaction. Thus, reducing the cost of information means reducing TC (STIGLITZ 1986). In New Development Economics, TCs are considered to be of substantial interest for development finance (FIEBIG *et al.* 1999).

One way to classify TCs is: (i) prior to the transaction, information costs related mainly to searching for and screening potential trading partners and obtaining price information; (ii) during the transaction, negotiation costs including costs of arranging the transactions, physically transferring the product or service, and drawing up contracts; and (iii) after the transaction, enforcement

---

[30] Three directions can be delineated within NIE, all of which contribute to the understanding of institutional change: (1) the efficiency direction that concentrates on minimizing TCs, analyzes path-dependent institutional change etc., (2) the public choice direction, and (3) the distribution direction that analyzes the impact of access to power and resources on institutional change (SCHLÜTER 2001).

costs related to monitoring the terms of the transaction and enforcing liability (RANDOLPH and NDUNG'U 2000).[31]

As HOFF and STIGLITZ (2001) pointed out, the structure and the volume of TCs depend on the institution and on the institutional environment respectively. For instance, recent research in Thailand has shown that the type of lending policy strongly influences the level of TCs incurred by borrowers (ERHARDT 2000). In the case of lending, the TCs of the borrower and lender include all explicit and implicit expenses that occur in the process of disbursing and obtaining a loan, respectively. These costs, in case of the borrower, are associated with transportation, paperwork, lodging and meals, gifts and the opportunity cost of time, for example, and in the case of the lender, with wages, depreciation of equipment and loan arrears (HEIDHUES *et al.* 1997). The remoter the area and the more marginalized a group of people is, the higher the TCs usually are.

3.2.2 Principal-agent concept

The theory of agency relationships is a branch of the economics of TCs. Information is not always readily available or easily traded. Information may be communicated from one person to another, but it may be difficult to verify whether it is strictly true. This provides the basis for 'opportunism', meaning the incomplete or distorted disclosure of information in order to hide the true facts (WILLIAMSON 1985). In agency relationships, uncertainty and asymmetric information are the consequence (RICHTER and FURUBOTN 1996). Decision making in such circumstances is represented by the agency relationship in which two parties embark on a mutually beneficial hierarchical relationship, one being better informed than the other. The uninformed party is called the 'principal' while the other, who has all the information, is the 'agent'. The identification of which party to a transaction is the principal and which is the agent depends on the circumstances. Each individual in a hierarchical structure, except at the ultimate

[31] In this paper credit is defined as a search good/service. On the one hand, credit can be seen as a search good/service from the viewpoint of the borrower. On the other hand, from the viewpoint of the lender, credit is a mixture of a search and an experience good/service. Search goods/services can be inspected to make a quality assessment before purchase, whereas the quality of experience goods/services is learned after a purchase (BIJL 1995). One of the first to make this distinction between experience and search goods/services was (NELSON 1970).

level, is simultaneously a principal and an agent when rights are transferred down the organizational ladder (EGGERTSSON 1990).

In an agency relationship, the principal delegates PRs to an agent, who is bound by formal contracts and informal conventions to act in the principal's interest in return for benefits of some kind. Thus, agency problems are characterized by the fact that an agent's decision not only influences his own utility, but also that of the principal (JENSEN and MECKLING 1976). Due to the conflicting interests between principals and agents, and to the asymmetrical information, behavioral risks may emerge. Usually, the principal does not observe the agent's actions but rather the result of his actions. Agents may be evaluated by measuring their behavior and attributes in a costly process applying proxies such as university degree and number of hours worked. If the proxies are limited too much, asymmetric information is the result, and this may give rise to opportunistic behavior on the part of the agent or, in other words, agents are likely to make sub-optimal decisions from a principal's viewpoint unless they are effectively constrained. Market competition can, in various ways, reduce the agency costs to principals and raise the costs to agents of opportunistic behavior (EGGERTSSON 1990).

JENSEN and MECKLING (1976) differentiate between categories of agency costs: (1) monitoring costs (costs which arise for the principal to achieve more transparency with regard to the activities of the agent), (2) guarantee costs (costs which arise for the agent to show his reliability to the principal), and (3) residual costs (costs that result from a lower than agreed performance of the agent). As pointed out earlier, the actions of an individual are not easily observable. For instance, a bank entrusts resources to a borrower but cannot perfectly monitor his investments and initiative; a landlord entrusts land to a tenant but cannot easily monitor his effort and care. The task of the principal is to design an incentive scheme to try to align the agent's incentives with his own. The principal-agent literature focuses on the design of contracts to motivate the agent to act in the principal's interest. Contract provisions that can achieve this are collateral, bonds, and provisions that shift the risk of poor output onto the agent. The greater the agent's ability to post collateral, put up a bond, pay rent in advance, or absorb risk, the greater the agent's incentives to take appropriate actions (HOFF and STIGLITZ 2001). The problems of delegation and commitment are thus central in a principal-agent framework (GRINDLE 2001).

In a typical development finance approach, credit officers (agents) possess vastly more detailed and accurate information about the local environment and the clients than does central management (principal). In the presence of such

‘information asymmetries’ and high monitoring costs, managers are well advised to align the objectives of the organization (which usually include a mix of outreach and profitability indicators) with those of the agents (credit officers, head of communes) who actually make the vast majority of operational decisions. But these contracts need to be handled with care, as badly designed contracts can have many unwanted side effects. In fact, it is better not to set incentives at all than to set badly adjusted ones (HOLTMANN 2001).

3.3 Targeting policies of the VBP in Ba Be

First this section describes the poverty criteria and eligibility of rural households for VBP loans, which will describe which types of borrowers can access the loans of the VBP in the research area. Then we discuss the aspects of targeting polices of the VBP to the rural poor in the research area.

3.3.1 Target group definition and poverty criteria

The majority of poverty-focused development finance programs incorporate client selection criteria that attempt to limit participation to poorer households. However, despite attempts to simplify and objectify these procedures, most programs fail to maintain a focus on the poor and have very little outreach to the extremely poor. Targeting failure occurs when non-target households are included and when target households are excluded. The latter is of great concern to those concerned with poverty alleviation. Exclusion of target households may result from simple failure to identify them but very often is the result of deliberate efforts by program officials close to the target group to bar poor households, which are perceived as credit risks (HICKSON 2001). While this behavior reduces the TCs of the development finance program, it also reduces quality outreach. Another aspect that needs consideration in poverty lending is whether it is necessary to measure poverty or whether it is sufficient to rely on the self-selection mechanism of appropriately designed poverty-oriented financial services. Such financial services are to be designed in such a way that the better off would not care to access them (SEIBEL 1996). Relatively small loan volumes and group lending schemes go in this direction. While these characteristics apply to the VBP’s lending conditions to the poor, it explicitly monitors the poverty level of its borrowers and tries to exclude the better off and the hungry households, clearly this contributes to the operation costs of VBP.

Under the VBP, poverty is determined, in accordance with the MOLISA criterion, as the inability to provide for basic nutritional needs. The mandate of

lending was formerly characterized as the following, first to the starving, then to the hungry (VBARD and DANIDA 1999). The principle that the poorest of the poor have priority in receiving credit has been attenuated. The households classified in Vietnam as hungry, which should have priority with the VBP, are nowadays generally excluded. The director of the VBP has stated that other national programs are supposed to take care of them (BAO 2001).[32] Obviously, a change of paradigm has taken place. Nevertheless, MOLISA has recently broadened the poverty criteria. The poverty line for rural people in the uplands is now less then 80,000 VND per person per month (VIR 2001).[33] This change implies that households that were formerly considered as medium-income households are now assessed as poor. For the VBP this has created a difficult situation, as the bank does not have sufficient funds to satisfy the credit entitlements of the expanded group of potential borrowers (THU 2001).

The Poverty Reduction Board (PRB) is responsible for the wealth ranking of households. It exists in each commune. The members are usually the head of the commune as the most senior official (in most cases he is also the chairman of the board) and the heads of the respective mass organization at commune level.[34] The village heads are so called 'temporary consultant' members of the board. The wealth ranking of the households is carried out together with the village heads according to nationally defined poverty criteria (Table 3-1 represents the wealth ranking in the survey communes referred to in this paper). This ranking is done once per year. Many households try to be ranked as poor to improve their chance of accessing a VBP loan. The rather large number of people responsible for the ranking ought to reduce the danger of nepotism, a typical principal-agent problem.

---

[32] It is assumed that hungry households are not capable of using a loan productively or of repaying the principal and interest. Two very important aspects are not considered in this way of thinking: First, a consumption loan which is used for food can also be seen as an investment, as it is invested in the most important production factor of the poor, namely labor. Second, with this approach all hungry households would have to be assessed as not creditworthy. While this is probably true for many hungry households, it is not true for all.

[33] Before, the rural poverty line was 55,000 VND. One USD is equal to 15,709 VND (Sunday, October 14, 2001, <http://www.oanda.com/convert/classic>.

[34] The most important mass organizations in rural areas are the Farmers' Union and the Women's Union.

For each household in the commune, the members of the PRB roughly estimate income according to the given standards (see Table 3-1). The ranking is done by applying participatory instruments (ANH 1997). Factors other than income play a much greater role in determining the socio-economic standing of a household, such as area of paddy rice land, education, food security, off-farm activities (GEPPERT and DUFHUES 2003).

The VBP has delegated responsibility to the heads of the communes (and PRB) to verify that only households which are classified as poor according to the national poverty criteria benefit from the VBP credit line. For his duty in the screening process, the head of commune apparently receives an incentive, which is based on the credit volume and the repayment rate in the commune.[35] He is also heavily involved in the reinforcement of the repayment overdue loans. This is of course an unpleasant additional duty, which the commune head tends to try to avoid. The information asymmetry between the principal (VBP) and agent (head of commune) combined with the adverse incentive causes opportunistic behavior on the agent's side.

He therefore has an interest in excluding those households that he assumes to have a low repayment capacity. Clearly, this has a positive effect for the bank because the repayment rate rises, and for the household as well, as it reduces the negative effects of being indebted beyond its repayment capacity. At the same time, he will more likely select households that may not be poor according to the national criteria and have a higher credit demand. As the head of the commune has a very powerful position within the local administration, he also has the power to influence the poverty assessment of households. Hence, a better-off household might be assessed as poor due to his influence and thus be eligible to receive a loan from the VBP instead of a more expensive one from the VBARD.[36]

---

[35] According to BAO (2001), the head of the commune receives 80,000 VND per month for his collaboration, if: (1) the lending volume exceeds 100 million VND, (2) more than 50 households receive a loan, (3) the repayment rate is over 80%, and (4) the volume of bad debts is less than 4% of total credit volume. If one of these conditions is not fulfilled, he receives only 50,000 VND, thus the incentive is 30,000 VND. The monthly salary of the head of the commune is 360,000 VND. The general rule is that an incentive of less than 20% of total remuneration does not create significant stimulus to improve performance (HOLTMANN 2001).

[36] The giant part of the loans of VBARD/VBP is used for few purposes, e.g. raising buffaloes

The national policy objective, namely that only truly poor households should gain access to loans from the VBP, is thus attenuated.

Table 3-1: Income categories of households in VND/month and person

Commune	Dia Linh	Nghien Loan	Xuan La
Hungry HH	< 55,000	< 60,000	< 60,000
Poor HH	55,000 – 79,000	60,000 – 79,000	60,000 – 79,000
Medium HH	80,000 – 169,000	80,000 – 99,000	80,000 – 99,000
Better-off HH	170,000 – 219,000	100,000 – 119,000	100,000 – 119,000
Rich HH	≥ 220,000	≥ 120,000	≥ 120,000

Source: Administration book DIA LINH (2001); STATISTICS BOOK NGHIEN LOAN (2001); and STATISTICS BOOK XUAN LA (2001).

Notes: The classification of hungry and poor households is defined by MOLISA. The communes can vary the boundaries only slightly depending on the local situation. The band for variation for the definition of the boundaries for medium, better off, and rich households is more flexible (DUNG 2001).

3.3.2 Effective targeting of the VBP loans in the research communes

The outreach of the VBP differs greatly from commune to commune (see Table 3-2). In the Xuan La commune, 65% of the households received a credit. In the other two research communes, only about 20% of the households accessed a loan from the VBP. At first sight this is surprising because the Xuan La commune is the remotest of the three. But many of the credit groups in the Xuan La commune are inter-village groups. The creation of inter-village groups has the advantage that farmers from villages that are not able to build their own group can take part in groups of other villages. This widens outreach, but it may reduce social coherence among the members and thus induce moral hazard among group members.

or pigs or buying land. The profitability of these investments (e.g. pig raising) varies only little between villages in one commune.

Table 3-2: Wealth status and VBP loans of HH in research communes

	Dia Linh (N = 602*)		Nghien Loan (N = 848)		Xuan La (N = 426**)	
	N	%	N	%	N	%
HH with VBP credit	123	20	152	18	275	65
Hungry HH	54	9	111	13	75	18
Poor HH	73	12	300	35	118	28
Medium HH	184	31	397	47	112	26
Better-off HH	205	34	30	4	66	15
Rich HH	84	14	10	1	32	8

Source: ADMINISTRATION BOOK DIA LINH (2001); CREDIT BOOK DIA LINH (2001); STATISTICS BOOK NGHIEN LOAN (2001); and STATISTICS BOOK XUAN LA (2001).

Notes: * Two HH are not included in the wealth ranking. ** 23 HH are not included in the wealth ranking. Therefore, the sum of the HH in percent does not equal 100%.
N = number of households in one commune; HH = household.

Whether or not credit groups are created in a village depends heavily on the ability of enough persons who are able and willing to be a CGL.[37] In two of the four research villages, credit group creation failed because no suitable CGLs could be found. Clearly there is an unsatisfied demand for CGLs. The CGL must fulfill the following features:

- S/he must be mobile, as the person has to travel to the district branch of the VBP and to the commune during the application procedure of the group members. In many groups the CGL also has to collect the interest payments and often s/he must carry the money to the district branch.
- S/he must have a minimum level of education, as the CGL has to negotiate with local authorities and bank staff. S/he also has to support the other members in completing the forms and in planning the investment.
- S/he needs to have 'good' contacts with the local authority network to obtain all the necessary credit information at the right time and to have the application approved by them.

[37] Every credit group must have a CGL. The CGL is usually the one who builds the group. S/he gets a one-day training course carried out either by the head of the district VBP or by the credit officer. S/he has the obligation to support the group members in all credit matters. As recompense for this task, s/he receives the difference between the interest rate charged to the credit group members (0.7%/month) and the interest rate to be paid to the VBP (0.6%/month).

- S/he needs a certain level of wealth, because in the event of delayed repayment of interest by members, the CGL normally advances the money.

The absences of persons with the required abilities can lead to the creation of inter-village credit groups. Less remote villages, usually inhabited by the Tay[38] minority, normally have also a greater number of potentially suitable CGLs and thus, often have a higher number of credit groups than more remote villages. Friends or relatives from other villages may be allowed to participate in these credit groups. Although no empirical evidence was found, this arrangement leaves scope for bribery and thus may increase the TCs for the credit group members. As pointed out by SCHLÜTER (2001), human capacity and wealth distribution also play a significant role in institutional development, and not only efficiency considerations.

Table 3-3: Percentage of HH per village with VBP credits?

Dia Linh (N = 9 villages)		**Nghien Loan (N = 12 villages)**		**Xuan La (N = 10 villages)**	
Name of village	%	Name of village	%	Name of village	%
Coc Pai (13 HH)	46	Phia Deng (111 HH)	86	Thom Meo (85 HH)	80
Ban Vang 1 (73 HH)	38	Ban Dinh (86 HH)	22	Khoui Khi (40 HH)	37
Na Duc 2 (86 HH)	36	Khuoi Tuon (29 HH)	21	Nam Nha	n/a
Pac Nghe 1 (76 HH)	34	Khuoi Thao (40 HH)	13	Khuoi Boc	n/a
Na Duc 1 (101 HH)	16	Khuoi Un (70 HH)	11	Co Luong	n/a
Ban Vang 2 (75 HH)	13	Pac Gia (144 HH)	7	Luong Muong	n/a
Pac Nghe 2 (50 HH)	12	Ban Na (129 HH)	6		

Source: Own calculations.

Notes: In Dia Linh commune two villages (22%), in Nghien Loan commune five villages (42%), and in Xuan La commune four villages (40%) have no credit group. In the Nghien Loan commune, inter-village credit groups are also found. Therefore, the percentage share does not necessarily represent the actual number of HHs with a VBP credit in one village. n/a = not available, HH = household; N = number of villages in the commune.

Table 3-3 shows which villages in three research communes have access to VBP loans. Is also illustrates the percentage of households per village with loans. One might assume that the villages with a high percentage of VBP loans are villages

[38] The Tay minority represents the majority of the population in this area. Tay villages are usually less remote and located in valleys. They can usually speak Vietnamese and all important local authorities are part of this ethnic group.

with a high number of target group households, namely the poor. Primary data do not confirm this statement. For example, in the village Thom Meo, 33% of the households fall below the poverty line, but 80% of all households received a VBP loan (gap: 47%). The gap is even wider, namely 61%, since hungry households are considered to be too poor to invest loans efficiently. Clearly, for the reasons discussed above, non-target group households have gained access to VBP loans. This is also confirmed by Table 3-2 (see above), as this table shows that, in the Dia Linh and Xuan La communes, a greater share of households hold VBP credits than just the share of poor households in the communes. This is may be because the gatekeeper (credit officer) has family ties in this village.

3.4 Decision-making process of credit allocation for the poor in the case of VBP

Section 3.4 very briefly describes the credit policy of VBP before discussing the credit allocation process applied by the VBP to the communes. After this, a brief explanation is given of how farmers gain access to loans. The section concludes with a description of the information channels between the target group and VBP.

3.4.1 Credit policy

The VBP was established in 1995 as the poor people's lending outlet of the VBARD. The VBARD concentrates on the better-off market segment and provides individual loans and also offers savings services.[39] As regards the VBP, it is a state-owned bank, specialized in lending to poor households (see Table 3-1 above); savings mobilization plays a very minor role in the service array of the VBP.[40] The purpose of the VBP is not to maximize profit but to reduce poverty

---

[39] Recent credit policy developments, however, show that the credit products of the VBARD and VBP, and thus also their market segments, are becoming increasingly similar. For instance, the VBARD now tries to offer a credit product that does not require collateral for loans below ten million VND (VBARD 2001b). At the same time, the VBP has broadened its credit term to five years and raised the maximum amount to five million VND (VBP 2001b). It is not clear to potential customers whether this credit is a VBP product or a VBARD product offered by the VBP (VBARD 2001b).

[40] There is a national consensus, which is adopted by the local staff of the VBARD/VBP, that poor households are not capable of saving (CAT 2001; CHAN 2001). This is despite the fact that many non-governmental organizations in Vietnam have proven otherwise.

(HANH 1999; VBP 1999b). The VBP is allowed to use the operational facilities and staff of the VBARD and of mass organizations at commune and village level in extending its services to the target group. From the monthly interest rate charged to the clients, 0.1% is paid to the local mass organizations and 0.25% to the VBARD for its services (NGUYEN 1998). Currently, the average operational costs of the VBP, expressed as interest rate spread, are 0.45% per month (HANH 2001). The monthly interest rates charged by the VBP vary between 0.6% and 0.7%. As mentioned earlier, this means that between 64% and 75% of the interest revenues are used to cover operational costs. This implies that between 25% and 36% of the interest revenues remain to cover refinancing costs. The repayment performance of 98% is very good (HANH 2001). But this is only a poor measure of good performance, as re-scheduling of loans in VBP is extremely high; it is reported to be as high as 70% in some provinces (VBARD and DANIDA 1999).

The poverty focus of the VBP and the high operational costs do not mean that the bank consequently operates at a loss. Due to the highly subsidized interest rates, however, many international agencies consider VBP to be financially unsustainable.[41] Vietnamese policy makers have realized this issue and declare the subsidized interest rate policy to be a temporary strategy. In the long term, market rates are to be implemented (VBP 1999b). However, this objective has not yet been achieved (see Table 3-4).[42]

Table 3-4: Nominal interest rates per month of the VBP in Ba Be district

Year	1997	1998	1999	2000	2001
Interest rate	1.2	1	0.8	0.6	0.6/0.5

Source: VBP (1997, 1998a, 1999a, 2000, 2001a).

[41] The VBP is now recognized as loss-making (VBARD and DANIDA 1999). If the government does not have sufficient funds to finance the soft loans of the VBP, the Vietnam State Bank must refinance the VBP without interest on a long-term basis and without a pre-fixed repayment date (NHGIA 2001).

[42] The law on credit institutions approved by the National Assembly in 1997 stipulates that the state shall establish banks that operate on a non-profit basis (Article 10). This implies that the state will continue to provide cheap credit to rural areas and the poor (MINOT and GOLETTI 2001).

The VBP uses joint-liability group lending schemes to reach out to the poor (VBP 2001b). But in daily practice, the group members are not kept liable for each other. If one group member defaults, the only consequence for the other members is that this particular group no longer receives a credit. On the other hand, individual members who have repaid on time can join a new group.

In March 1999, the maximum loan size per group member had been set at three million VND (around 190 US$) with a maximum term of three years. In 2001, the loan size was raised to five million VND and the term to five years. The interest rate payments are collected every month, or every three or six months and the principal is usually paid at the end of the term.

3.4.2 Credit allocation process

For its credit allocation estimation, the VBP relies on information from several public organizations and subordinated branches at the district and provincial level. First, the PRB compiles a list of all poor households in their commune. This list is passed on to the MOLISA representative in the district. Second, the district-level VBP estimates the necessary credit amount for the district and delivers this figure to the provincial level.[43] There, the same procedure is repeated. Based on the figures of the provincial branches, VBP headquarters in Hanoi determines the nationwide credit demand. Based on the available funds provided by the government, the VBP in Hanoi makes a decision on how much of the fund to allocate to each district (THEESFELD 2000). The district branch of the VBP is informed about the decision. Thereafter, a body of experts decides how much of the credit fund granted is allocated to each commune.[44] The decision of the body is based on a recommendation of the head of the VBP at district level (CHAN 2001). The recommendation for the allocation at commune level depends on the number of poor (hungry) households and the prior repayment discipline in these communes (BAO 2001).

---

[43] The guidelines of the VBP for the credit estimation procedure propose that the PRB of each commune compiles a quarterly credit demand plan (VBP 1998b). These plans are handed to the VBP at district level, where the provincial demand is calculated. However, in the Ba Be district, the PRBs of the communes do not support the VBP in compiling such a demand plan (THEESFELD 2000).

[44] The body consists of three experts from district level: (1) Vice-head of the People's Committee, (2) head of the PRB, and (3) head of VBARD.

3.4.3 Loan application procedure

Figure 3-1 describes the nine-step procedure to acquire a loan from the VBP. While the head of the district branch of the VBP in Ba Be states that the credit officer has to screen and monitor each household during several visits (BAO 2001), the reality is that the credit officer does not normally visit the households. In reality, he visits the village and the CGL during the credit application process to gather secondary information about the applicants. The credit officer relies totally on the commune and village officials to assess creditworthiness. After the disbursement of the credit to the group members, the credit officer may verify with the CGL whether the group members use the credit as stated in the loan application.[45] Normally he trusts in the report of the CGL (giving him scope for opportunistic behavior) and does not monitor the credit directly. Basically, it is not bank staff but persons outside the bank that are involved in loan monitoring: The head of the commune and CGL (see Figure 3-1).

During discussions with the commune heads and the CGL, however, they admitted that this is not a regular activity. Officially, the loan ought to be repaid immediately if it is not used as stated in the credit contract. Nevertheless, farmers pointed out that as long as they pay the interest and the principal in due time, the credit officer and the other local authorities do not bother about the actual use of the credit. Credit officers in Ba Be district also confirmed this. The principal-agency relationship and the delegation of tasks have provided wide scope for moral hazard in terms of the fungible use of the loan.

---

[45] The eligible ways of using the loans are determined by the VBP. Only productive investments are financed. Loans are usually invested in livestock production. In the survey, 56% of all loans (including VBARD and others) were invested in livestock. DUONG and IZUMIDA (2002), in a survey carried out in 1997, found that 54% of the formal loans were used for livestock, followed by 28% for cultivation. This finding accurately reflects the fact that investment in livestock has been a popular trend in the Vietnamese rural communities in recent years and still continues.

Figure 3-1: The nine-step procedure to obtain a loan from the VBP

1. Build a group of at least five people (in rare exceptions four people may be sufficient).
2. Elect a CGL (usually the one who started the group will become the leader).
3. Go (CGL) to the district VBP in order to buy the application forms from the credit officer who is responsible for the commune.
4. Fill in (group members) the credit application forms.
5. Submit (CGL) the forms to the commune and get the approving signature and stamp of the head of the commune and the chairman of the PRB (part of the screening process)[1].
6. Bring (CGL) the forms back to the bank.[2]
7. Go (CGL) to the bank and take the loan booklets for each member (the loan booklets summarize the loan terms and are used by the credit officer to record the interest and principal payments).
8. Bring (CGL) the loan booklets back to the commune and receive another recognizing stamp and signature from the head of the commune and the chairman of the PRB (submits them to the monitoring process).
9. Bring (CGL) the booklets back to the bank and wait for disbursement of the loans (credit officer disburses the loans to the credit group members during a meeting in the commune or village).

Source: Own figure.

Notes: [1] The signature also confirms that the applicants belong to the target group. The head of the commune my decide to exclude an individual household from the credit application if he knows of a disagreement between married couples relating to the credit application, in cases of drug abuse by the applicant, or so-called social evil in the households.

[2] The approval procedure of the application is as follows: (i) the credit officer signs the credit application, which is synonymous with his approval, and (ii) the head of the VBP co-signs the con-tract. Normally, the head of the VBP follows the decision of the credit officer. The timeframe for this procedure varies between two weeks and nine months in the case of the research villages.

The fungibility of money has been noticed by VBARD's headquarter and their policy on eligible investments has been changed to better reflect the reality. Rural households are now allowed to spend their loan for any purpose, even for consumption. Due to the close connections between VBARD and VBP, it is very likely that the headquarters of VBP will soon adapt its policies, too.

Step 5 of the loan application process (see Figure 3-1) relates to the role of the head of the commune in this process. If the head of the commune approves the households in the application, the credit officer will almost always follow his recommendation. Since the head of the VBP complies with the credit officer's proposal, this implies that the head of the commune is actually the decisive power in the application process. The powerful position of the head of the commune in the VBP credit application process of households was also pointed out in earlier research on Ba Be district (THEESFELD 2000). According to VAESSEN (2001), since physical collateral is not required for VBP loans, the approval of the head of the commune can be considered social collateral. Local information sources in the form of key informants can be an important low-cost mechanism to reduce screening and enforcement

costs. Excessive dependence of a bank on local networks as sources of information and recommendation, however, can have negative effects in terms of social exclusion of those households not included in the social and political network in the territory (KARLAN 2001; VAESSEN 2001). In general, important information tends to be segmented and to circulate within specific groups or networks (ROBINSON 2001). Particularly the very poor households often find themselves in this position. Moreover, they lack access to fruitful relationships with powerful allies (HICKSON 2001).

3.4.4 Backward and forward information flows between VBP, local authorities and households

Preliminary findings indicate that information on financial services is insufficient in rural Vietnam. The population is often not aware of the eligibility conditions for loans, interest rates, and other loan terms. The VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT (1999b) states that information about credit is mainly conveyed via credit officers and is usually inconsistent. In this study it was found that the credit officers play only a minor role in the dissemination of credit information.

According to VBP staff and local authorities in the research area Ba Be, sufficient credit funds are available to cover the effective demand of the poor target group. Therefore, knowledge of how to exploit these funds seems to be more important than knowledge about their availability. As discussed above, the VBP lends only to credit groups. Thus, the greater the awareness of the target group regarding how to set up and manage a credit group, the greater the probability of obtaining timely loan approval. However, villagers are still reporting that loans are not always available at the VBP. Hence, timely knowledge regarding availability of funds is still crucial for access.

3.4.4.1 Formalized information channels

Flows to the household. In one line of information, the head of the VBP informs the head of the communes and the chairman of the PRB at commune level about the credit terms, but not about the total amount of available funds allocated to their commune. Consequently, the head of the commune decides which mass organization, or rather its members, will benefit from the allocated credit fund. The head of the commune conveys this information to the village leaders at a commune meeting, or sometimes directly to the villagers during a village meeting. Figure 3-2 displays the structure of the formalized information flux regarding credit availability from the VBP to the target group. The head of the village is responsible for inviting all villagers to this meeting. But not every household receives an invitation. There may be several reasons for this: (1) the village head has a personal dislike of a certain household, (2) the household is remote and the head is reluctant to go so far

every time, or (3) he simply forgot to inform a particular household. In one village, some households even complained that they were never invited. These households lack access to important information. Reasons (1) and (2) are clearly related to the principles of NIE as discussed in Section 2. Reason (1) has to do with opportunistic behavior on the side of a principal vis-à-vis a potential agent. Distance to a potential agent is closely related to the reduction of TCs argument.

In the other line of information, the chairman of the PRB of the commune informs the members of the board.[46] The members of the Board, who are usually heads of mass organizations, convey the news to the village-based heads of their respective mass organizations during regular meetings (see Figure 3-2).[47] While the meetings of the local authorities at the commune level are relatively regular, this does not apply to the meetings at the village level.[48] Clearly, the irregularity of the meetings could cause a loss of information, thus increasing TCs. However, most farmers turn to the heads of the mass organizations at the village level when they are planning to apply for a loan. The quality and the speed of the information flow from commune to household level thus crucially depend on the leadership and management capabilities of the local authorities at the commune and village level. This human capacity could be improved through training. The information flow from the mass media plays only a minor role in the dissemination process.

It is the credit officer's responsibility to visit the communes two or three times per month on a fixed date to collect the principal and the interest of the credit groups. Ideally, these dates should coincide with the market days in the commune (BAO 2001). The credit officer should inform the commune head and the PRB about his next visit. However, there is normally no direct information flow from the credit officer to poten-tial borrowers since, in reality, the dates of these visits are either not known by the population or the visits do not follow a time schedule. Publicity relating to financial ser-vices is not efficient. Communication is mainly via credit officers and is often inconsistent.

---

[46] Often, the head of the commune and the chairman of the PRB are one and the same person.

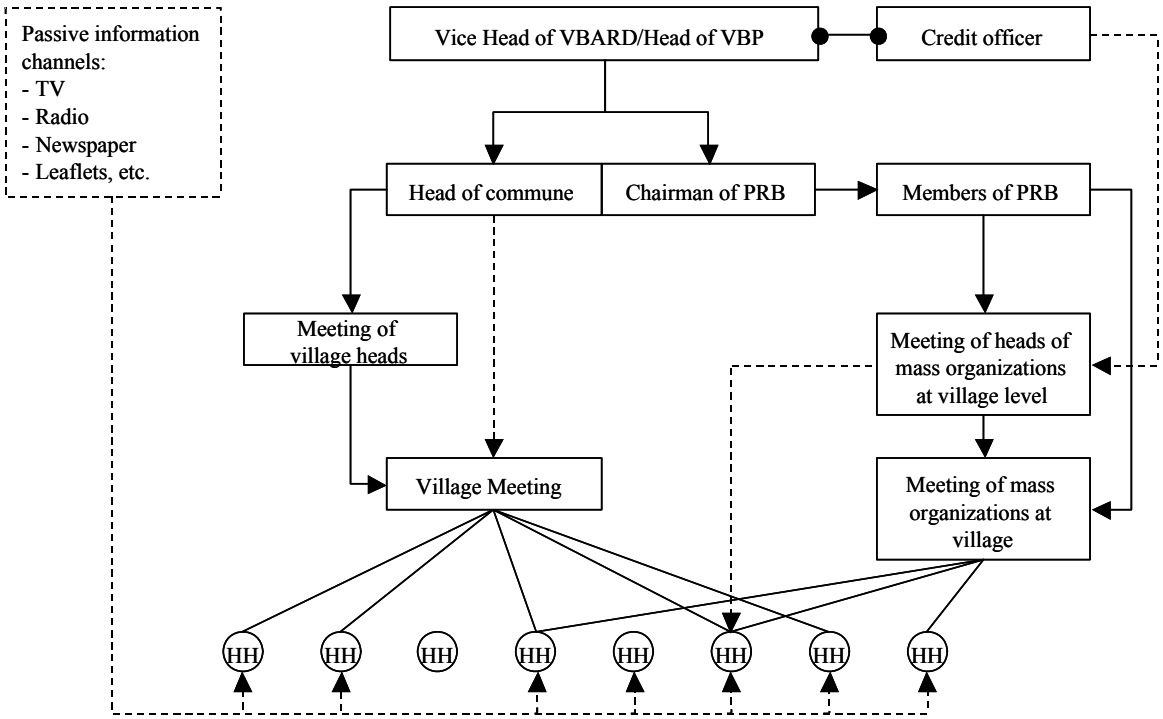
[47] The role of the mass organizations is to exert permanent pressure on their indebted members, i.e. the borrowers are regularly reminded to pay their debt.

[48] It should also be borne in mind that each mass organization organizes its own meeting and the Farmers' and Women's Union exist in every village.

The VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT (1999b) also found that the farmers did not know the time schedule of the credit officers' visits. However, female credit officers tended to do a better job as far as this issue is concerned. Obviously, the VBP relies on the trickle-down effect of information from local authorities and CGLs to the households. This trickle-down process is prone to bottlenecks, or in other words gatekeepers, as described above, and therefore crucial information may be held up, diverted, or lost.

After having submitted a credit application, the credit group has to wait for the decision. In the event of the head of the commune declining the application, he is not obliged to inform the applicants regarding the reasons. THEESFELD (2000), for instance, reports that the head of a commune uses a coded signature for the application form. Depending on the code, the credit officer knows whether or not he agrees to the application. This lack of transparency has two negative effects: First, there is no scope for improvement of the credit group's application (TCs remain high on the side of the credit group). Second, the group members may become frustrated and hesitate to apply a second time, because they already invested time and effort without any benefit and without knowing what went wrong (TCs for a transaction that did not occur on the side of the potential credit group, and opportunistic behavior on the side of the head of the commune).

Figure 3-2: Formalized information flows



Source: Own figure.

Notes: The arrows indicate the direction of information flow. Broken lines indicate irregular information flows. Often the head of commune and chairman of the PRB are one and the same person.

Flows to the VBP. The only direct formalized information flow from the household to the VBP is the submission of the credit application form. The fact that the bank receives the application form demonstrates that the application has already successfully passed through two screening levels. The first screening takes place when the credit group is formed and the second when the application is signed by the head of the commune. The application forms also contain a section on the planned investment to evaluate its creditworthiness. The farmers normally know which loan-financed investments are likely to be approved. Only a limited range of 'obvious' or 'fashionable' purposes related to agricultural production (e.g. rice cultivation, pig raising) will be approved by the bank. There is not much room for innovative or idiosyncratic proposals (UN 1998; VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT 1999b). As discussed earlier, while the credit purpose is screened, the bank staff does not monitor this later on.

Besides the information provided in the credit application form, the VBP uses commune authorities to assess the creditworthiness of potential clients. This approach of external screening is a reaction to the information asymmetry that exists between the credit officer and the local population. As the local authorities have more intimate contact with the local population, they are better able to judge their creditworthiness. This procedure ought to reduce the information gap between credit officers and borrowers and thus reduce TCs and improve the repayment rate (GRINDLE 2001; HOFF and STIGLITZ 2001). However, this approach can cause principle-agent problems between the credit officer (principal) and the head of the commune (agent). As was discussed earlier, the head of the commune has a strong influence on the outcome of the screening process. Good contacts with the head of the commune can bias his decision in the loan screening process towards a particular household, even if the latter does not in fact fulfill the eligibility criteria of the VBP.

While the VBP has already incorporated several measures to reduce information, negotiation and enforcement costs (RANDOLPH and NDUNG'U 2000) in the rural credit intermediation process, these measures still leave scope for opportunistic behavior by the principals involved and moral hazard on the part of the agents. Better rules for credit officers and more appropriate incentives for non-staff resource persons involved in the credit allocation process could reduce TCs and lead to more equity in the allocation of credit.

3.4.4.2 Non-formalized information channels

Flows to the household. Local authorities, such as the commune head, that possess insider information regarding when one of the credit funds is made available by VBP, function as so called 'gatekeepers'. Households that have information regarding when, where and how the loan funds are made available have a major advantage in exploiting this source by appropriate signaling. Clearly, this information tends to be given to households that belong to the social and political network of one of these gatekeepers (BAO 2001).

The village heads confirmed that one could always find households that cannot translate their demand into effective access to credit. These households may not be creditworthy and/or are excluded from the intra-village information-networks (THEESFELD 2000). Nevertheless, the 15 CGLs involved in this research claim that all villagers are able to participate in their credit groups. They point out that they informed the whole village about their intention to set up a credit group. This would imply that the groups are heterogeneous in their membership. Nevertheless, in thirteen of the 15 credit groups in the research area, the members were neighbors or relatives of the CGL. As stated by HOFF and STIGLITZ (2001) social ties are crucial for credit access.

Flows to the VBP. The head of the commune does not know all households in his commune personally. He makes enquiries of the CGLs, the village heads, heads of mass organizations, the security chiefs and other villagers regarding the individual households of a potential credit group. The credit officer interviews the same key persons. Again, this may cause agency problems. In this case, the head of the commune and the credit officer are the principals and the village key persons are the agents. Households that maintain good relations with these key persons have a better reputation than those who do not. One result of this may be that some households gain access to two loans from the VBP (e.g. father and son), which is not allowed. This, of course, only works if the village authorities tolerate it (BAO 2001).

3.5 Conclusions and policy recommendations

The analysis has shown that the financial information flows of the VBP are fuzzy (in the sense of a credit application having different outcomes depending on the intermediaries of information involved), despite extensive formalization of the channels. In principle, the use of the aforementioned local authorities in client screening and in the monitoring process is a good strategy for reducing information asymmetry and thus TCs. Nevertheless, the involvement of these crucial information gatekeepers at different administrative levels, namely the

credit officer, head of the commune, members of the PRB, the village head, and the CGL, may impede, divert, and attenuate the dissemination of information. These gatekeepers normally belong to the same or related social and political networks. The information collected during group discussions in the research communes confirms that the key informants of a FFI in a certain region should not all belong to the same network. VAESSEN (2001) points out that, this way, the formal lender can avoid falling into the trap of lending solely to a certain network of people, while the households outside this network are excluded. Key informants from other networks could be from non-governmental organizations or self-help groups. To date, however, these groups are not found in the research area. One attempt to open up new networks might be to employ credit officers from different ethnic minorities. So far, 95% of the credit officers in Ba Be belong to the Tay minority. The remaining 5% are Kinh (Vietnamese). Increasing ethnic diversity of employees could also diversify the networks of information. However, as stated by HUNG and GIAP (1999), the efforts of formal lenders are hampered by the difficulty in recruiting staff from ethnic minorities, especially in remote and mountainous districts.

According to the principal-agent concept, the VBP should design incentives schemes for its gatekeepers to improve the information flow to marginalized groups. Another way to make the available information more transparent to potential borrowers could be the establishment of local information centers. This could be the communal post office, where the VBP could arrange an information corner with leaflets. This could be combined with the introduction of a fixed day every week (or bi-weekly), which all commune members should be made aware of, when the credit officer is available for questions and discussions. This would allow farmers to seek information and advice directly from a professional. Officially, the credit officers already follow such a fixed visiting schedule. However, they do not stick to it, as discussed above. If the VBP succeeded in asserting this policy, it would improve the service without increasing the TCs.

The passive information flow from the VBP to the households could be improved by using the mass media, particularly radio. Today, 95% of the country's population and 98% of the national territory have access to the radio station Voice of Vietnam (VOV). In the past, most of the radio programs were broadcast in Vietnamese, which excluded many of the ethnic minorities from the information. As a result of recent efforts, however, the VOV has bolstered its broadcasting network to include eight ethnic minority languages, e.g. Thai, Mong (VIET NAM NEWS 2002b).

As the above analysis has shown, the use of a complicated poverty measurement system that (1) involves the same local authorities that decide on credit access for the poor and (2) sets out the framework for eligibility of households to VBP loans, creates agency problems and is open to nepotism. Instead of using the current system to measure poverty, one could use the land register as a much more objective set of criteria for target group identification. Households that possess documented land-use rights should automatically be excluded from the target group of the VBP, as they can get loans from the VBARD too. Of course this should go hand in hand with equalizing the interest rate of both banks, otherwise it could provide an incentive not to register the land in order to maintain the opportunity to apply for VBP loans.

By way of summary, improving the top-down and bottom-up information flow in the credit market for the rural poor might not only significantly reduce the operating costs of the FFIs concerned, but also increase market access for the poor target group with profitable investments.

4 Outreach of credit institutes and households' access constraints to formal credit in Northern Vietnam[49]

In the following section, the outreach of formal credit institutes and the access of rural households to them are discussed. A principal component analysis (PCA) is applied to measure the poverty outreach of the institutes and a binary logit regression to assess access constraints of rural households to formal credits.

4.1 Introduction

Most policy and research interest regarding rural credit markets revolves around the perception that poor households in developing countries lack adequate access to credit, which is believed to have significant negative consequences for various household-level outcomes. During the past 40 years, most developing countries and donors have set up credit programs aiming at improving rural households' access to credit. The vast majority of these programs, especially the so-called 'agricultural development banks', have failed both to achieve their objectives to serve the poor and to be financially sustainable institutions. An important feature of the rural credit market is that access to credit is far easier for some groups than for others. Meanwhile, most rural households in developing countries continue to rely on the informal market for their inter-temporal transfer of resources. Therefore, outreach of the financial institution and access to financial services have become a major issue in microfinance, and particularly in rural finance (DIAGNE *et al.* 2000; SARAP 1990).[50]

---

[49] This section is based on the following article: "Outreach of credit institutes and households' access constraints to formal credit in Northern Vietnam", written by Thomas Dufhues and Gertrud Buchenrieder and published 2005 in *Research in Development Economics and Policy Discussion Paper,* No1/2005 Stuttgart: Grauer Verlag.

[50] The performance of financial intermediaries in terms of breadth and depth of poverty outreach is partly a function of a range of internal factors such as the type of services provided, the use of screening methods to identify the poor, the financial scope of the program, and the marketing strategy of the program (ZELLER *et al.* 2003). Although there are more dimensions

Formal rural credit is considered by Vietnamese government agencies to be a powerful tool for poverty reduction (SIDA-MARD 1998). During the early 1990s, informal credit accounted for almost 80% of total outstanding loans in Vietnam (GSO 1995). The Vietnamese government tried to break the dominance of the informal sector and push development by supplying credit on preferential terms, particularly to rural households. The preferential credit was delivered mainly by state-owned financial intermediaries such as the VBARD, the VBP) and the PCFs.[51] In addition, the State Treasury implemented special sector credit programs, e.g. the 120 Program to promote employment (DUFHUES *et al.* 2004a). Initial signs of success of formal credit outreach were reported by the Vietnamese Living Standard Surveys, which stated that the share of the informal sector had been considerably reduced from 78% (1992/93) of all outstanding loans to 54% (1997/98) in favor to the formal sector (GSO 1995; GSO 2000). There is evidence from other developing countries that credit constraints persist despite the expansion of microfinance. For instance, AMIN *et al.* (2003) find that microfinance institutes (MFIs) in Bangladesh do not really reach those who are credit-constrained. Recent research suggest that, in Vietnam, the success of pro-poor policies will depend on easing structural constraints such as access to credit (GLEWWE *et al.* 2002; LIVINGSTONE 2000). However, deeper outreach usually increases not only social value but also social cost. As income and wealth decrease, it becomes more costly to a lender to judge the risk of a loan. This happens because, compared with the rich, the poor are more heterogeneous and less able to signal their ability and willingness to repay (CONNING 1999). Moreover, the provision of income-generating credit leads to a bias in favor of the less poor, because they have better opportunities to use the loan profitably (HULME and MOSLEY 1996). While modern microcredit programs are definitely more successful at reaching the poor than their predecessors, they are less

than depth and breadth of outreach (for a detailed overview see NAVAJAS *et al.* 2000; and SCHREINER 2002), this research will focus mainly on depth and breadth of outreach. Since society places more weight on the poor than on the rich, poverty is a good proxy for depth (NAVAJAS *et al.* 2000). The poorer the clients reached by the financial institute, the deeper the outreach (ZELLER *et al.* 2003).

[51] On March 11, 2003, the VBP and the PCFs were replaced by the Vietnam Bank for Social Policies (VBSP) (VIETNAM ECONOMY 2003; WORLD BANK 2003).

successful at reaching the vulnerable poor.[52] HULME and MOSLEY (1996) state that there is increasing evidence that the poorest 20% of the population are effectively excluded from microcredit programs.

While the Vietnamese government has so far failed to create sustainable rural financial institutions, it has succeeded in providing a huge share of the population with formal credit. However, despite the immense formal outreach, the distribution of formal credit in the northern provinces of Vietnam is very heterogeneous. In some villages, over 90% of households are served by formal credit, while in others just a few or none at all (DUFHUES *et al.* 2002). The question thus remains: Did the Vietnamese Government succeed in reaching the poor, or do groups of people still exist who are access-constrained?

The second section describes the conceptual framework, the analytical methods used and the sample composition. Section two starts with a discussion of collateral use in Vietnam and then continues with a description of the effective credit demand of the sample households. The last two chapters of this section discuss the outreach of rural lenders and access to formal loans by the households in this sample. The paper concludes with policy recommendations for improving outreach to access-constrained households.

4.2 Methodology and data

The following section describes the conceptual framework, followed by a description of the methodology used for the data analysis. Finally, the sample composition is presented.

4.2.1 Access constraints to formal rural credit – The conceptual framework

While the term outreach refers to the perspective of the financial intermediary and access refers to the point of view of the household, they both relate to the same thing: Who is getting the credit (VAESSEN 2001). Access constraints at the household level are mostly related to a lack of collateral (physical, human and/or

[52] Even with the use of group lending schemes, which are believed to have a good poverty outreach, the evidence suggests that the poorest people are excluded (MONTGOMERY 1996).

social capital).[53] The capital endowment of a household is of enormous importance for the household's access to formal credit and to the outreach of rural lenders. Capital can be classified into three different categories, physical, human and social capital. The term physical capital refers to any non-human, infrastructural, financial, or natural asset needed to support livelihoods. Human capital represents the skills, knowledge, ability to labor and good health of individuals or households. Social capital is defined here according to COLEMAN (1999), who states that social capital is not a single entity but a variety of different entities, with two elements in common: They all consist of some aspect of social structures, and they facilitate certain actions of individuals who are within the structure. The characteristics of human and social capital are identified as 'capital' in order to underline the need for continuous investment and to emphasize the importance of these factors in generating future income, particularly for the poor.

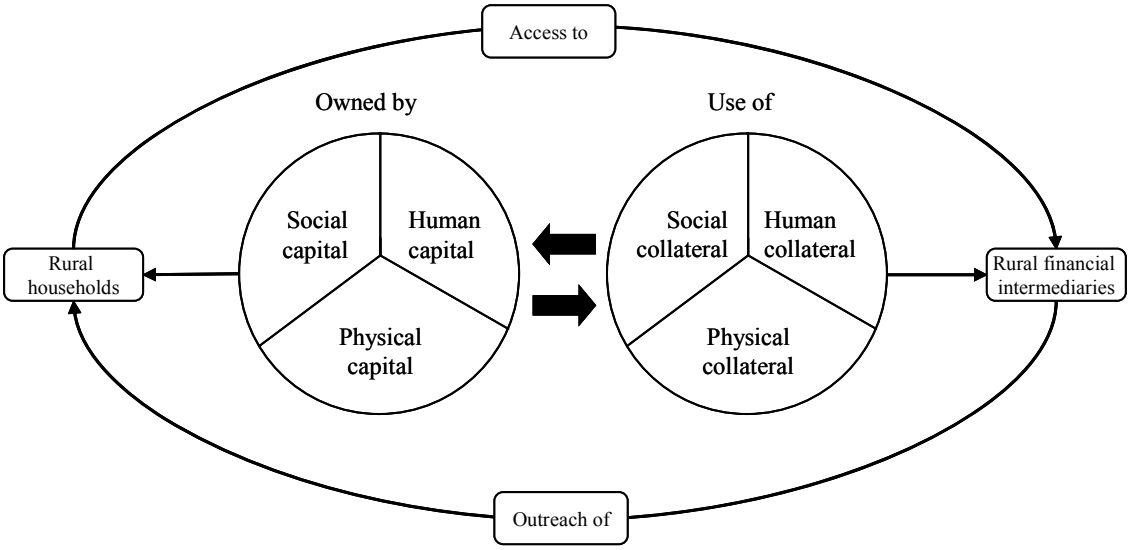
Figure 4-1 shows the different kinds of capital/collateral. Different kinds of capital/collateral can substitute each other, but only to a certain degree. Nevertheless, the capital endowment of a household represents the basis for the collateral used by the lender. Informal lenders, for instance, in the absence of physical collateral, have always used human and social collateral. Formal lenders usually rely on physical collateral that can be easily sold, are not moveable, are of sizeable value, and ideally carry a legal title, such as land and buildings.[54]

---

[53] Access constraints can also be intermediary-based, in other words influenced for example by business policies or staff attitudes, hard and soft skills. A conceptual framework of client-related barriers versus program-related barriers is presented in EVANS *et a*l. (1999) and VAESSEN (2001). However, this analysis focuses on the household level and rather neglects intermediary-based issues as they are reflected in the households' access constraints.

[54] Physical collateral has several functions, e.g. signaling credit worthiness. However its two main functions are: First, it insures the lenders' loan portfolio in case of default by borrowers. Second, it represents an incentive, enhancing the borrower's willingness to repay his loan (BESTER 1987; STIGLITZ and WEISS 1981).

Figure 4-1: Conceptual framework – The capital-collateral system



Source: Own figure.

Physical capital and collateral: Collateral in the form of physical capital plays a key role in lending practices. It shifts a portion of the potential capital loss from the lender to the borrower (BINSWANGER and SILLERS 1983). Lending institutions typically resort to legal options, such as seizing the property of the borrower or garnishing wages directly from the employer to enforce contracts. Regardless of the actual value of the asset owned by the borrower, the act of pledging assets and the consequent realization that they can be lost causes the client to repay the loan if possible (LEDGERWOOD 1999). Even if the collateral is almost never collected, this does not signal its lack of importance as an incentive device. If the threat is believable, there should be few instances when collateral is actually collected (MORDUCH 1999). Nevertheless, in most poor communities, such punishment fails for one of the two reasons: Either the legal infrastructure does not support such action, or the borrower has no sizeable assets or wages (KARLAN 2001).[55] This is a particular problem of MFIs, which systematically lend to low-income clients who usually have very few marketable assets. Traditional collateral such as property, land/land use certificates, or other capital assets is often not available. Therefore, the absence of physical capital, and thus collateral, has for a long time been seen as the major access constraint of lower-income households.

[55] For instance, in socialist economies like China, land is collectively owned, preventing its use as collateral (PARK and REN 2001).

Human capital and collateral: At the household level, human capital is a factor of the amount and quality of available labor, which usually is defined in terms of the health and education levels of individuals. Lack of human capital is seen as an access constraint from the household side, as there is often a need to fill in application forms or draw up small business plans, and this requires a certain amount of human capital (see for instance PANJAITAN-DRIOADISURYO and CLOUD 1999). Human capital can compensate for a lack of physical collateral. Then, the decision of whether or not to grant the credit is based mainly on the profitability of the investment. However, this practice is still very uncommon among rural lenders. Usually staff lacks the appropriate skills to assess an investment reliably.

Social capital and collateral: The poor seldom have physical collateral to offer. The most common way to deal with this problem is by using social collateral. Here, the borrowers' reputation, or the social (and political) networks to which they belong, replace traditional physical collateral (BASTELAER VAN 2003; PANJAITAN-DRIOADISURYO and CLOUD 1999). Usually this results in applying credit group schemes with joint liability.[56] Under an individual lending contract, if the borrower defaults, all he has to fear is the penalties the bank can impose, which, in the absence of collateral, simply means the denial of future loans. In group lending, he may also be exposed to the wrath of other group members (BESLEY and COATE 1995).

Infrastructure: The rural infrastructure influences both access to and outreach of credit equally, and is therefore not depicted in Figure 4-1. Infrastructure not only refers to the 'hard' infrastructure, like roads, but also to 'soft' infrastructure, such as legal frameworks. For instance, FABBRI and PADULA (2003) found in a recent paper that lax legal enforcement increases the probability of poor people being access-constrained to formal credit in Italy.

---

[56] Despite its popularity, group lending-oriented microfinance is not a panacea for solving all problems of access to financial services for the poor in developing countries. Not only specialized agricultural development banks are prone to the difficulties due to information asymmetries and moral hazard pointed out by institution economics; these problems can also occur in group lending. For a critical view of group lending see, e.g., HEIDHUES *et al.* (1997) and SCHMIDT and ZEITINGER (1994).

4.2.2 Measuring outreach and access: Econometric models

Principal Component Analysis:[57] The breadth of outreach of a microfinance institution is easy to measure (one simply counts the clients), but other dimensions of outreach, particularly poverty outreach, are more difficult to measure (WOLLER *et al.* 1999). A poverty assessment tool was developed in the late 1990s by the International Food Policy Research Institute (IFPRI), which uses the PCA as econometric instrument. The objective was to design a tool to assess the poverty level of the clients of a microfinance institution in relation to their non-clients (who represent the general population in its area of operation) to give a reliable assessment of the poverty outreach of the institution (ZELLER *et al.* 2001; ZELLER *et al.* 2005).

The PCA is a multivariate technique and its main objective is to reduce the dimension of the observations (HÄRDLE and SIMAR 2003). Different correlated variables are aggregated into fewer uncorrelated principal components, which can be seen as indices. With this technique, most of the information contained in the data is represented in the new indices. The analysis can be viewed as a 'data reduction technique', since the set of original m variables is reduced to n principal components (PC), with $n \ll m$. This smaller number of components can then be used for interpretation purposes or for further data analysis. The procedure carried out by the analysis is to calculate new uncorrelated principal components by linear combinations of the original, correlated variables. This is done by deriving (standardized) weights for each indicator. In algebraic terms this means that

$$\begin{aligned} PC_1 &= w_{11} v_1 + w_{12} v_2 + \ldots + w_{1m} v_m \\ PC_2 &= w_{21} v_1 + w_{22} v_2 + \ldots + w_{2m} v_m \\ PC_m &= w_{m1} v_1 + w_{m2} v_2 + \ldots + w_{mm} v_m \end{aligned} \tag{4.1}$$

with w is the calculated weight and v is the variable. Applied to poverty assessment, the PCA determines a subset of indicators that measure the relative poverty level of a household. In the end, a single indicator for each household is created that reflects the household's poverty status in relation to all other households of the sample (ZELLER *et al.* 2005). With the weights of the PC_1 and the respective indicators, the poverty index is calculated for each household. Relative comparisons can then be drawn by ordering the households according to their poverty

[57] The next section is based on a review by HÄUSER *et al.* (2005).

index. In this way, it is possible to identify which households are better or worse off than others. By creating terciles, quartiles or quintiles using the index, different wealth groups can be derived. The most important advantage of the PCA is that on the one hand it creates a single indicator that is easy to use for analysis, while at the same time this single indicator is not limited to the monetary aspect addressed by household expenditures as the conventional method of (income) poverty. The PCA technique allows to take the multiple dimensions of poverty into account and to integrate qualitative with quantitative variables. Therefore, indicators capturing different dimensions are included that measure changing conditions at different levels of welfare. These indicators can be categorized into three groups (HENRY *et al.* 2003):

1 *Means to achieve welfare*
This category includes indicators that reflect the earning capacities of a household. They are subdivided into human capital, social capital and ownership of assets.

2 *Basic needs*
These indicators show the fulfillment of basic needs, such as health status, food, shelter and clothing, partly obtained by questions asking the respondent about his or her self-assessment of the situation.

3 *Other aspects of welfare*
Security, self-assessment of (subjective) poverty, social status and the environment are captured in this group.[58]

Binary logit analysis: This research collects household-level credit market information to determine whether or not households are constrained as regards access to formal credit. Whether or not a household is access-constrained is depicted in the decision tree of effective credit demand (see Figure A-1 in the Annex). Households that had access to formal credit were considered not to be access-constrained regardless of whether or not they originally wanted to borrow more than they were lent. In particular, non-borrowing households were asked their reasons for not borrowing or for having been rejected. DIAGNE *et al.* (2000) and ZELLER and SHARMA (2000) state that households may have chosen not to borrow even when they had access to credit, while others may have wanted to borrow, but

[58] The adapted list of poverty indicators used in this research work can be found in Figure A-2 the Annex.

had no access. For these reasons, one cannot equate observed demand with access. Finally, the sample households were classified into households with and without access to formal credit.

Regression models describe the relationship between a dependent variable and independent explanatory variables (BACKHAUS *et al.* 1996). Ordinary least square regression models consider the dependent variable to be continuous in nature, while the explanatory variables can be either continuous or categorical. But it is not uncommon that a dependent variable is binary in nature, i.e., that it can only have two possible values, one for the occurrence of an event, zero other wise. In this case, the dependent (binary) variable is one for all households with access to formal credit and zero otherwise. A mixture of continuous and categorical variables may explain this dependent binary variable. Therefore, the econometric model used in this research work is a binary logit regression. In the binary logit regression model, the predicted probabilities for the dependent variable will never be less than (or equal to) zero, or greater than (or equal to) one, regardless of the values of the independent variables.

The explanatory variables for the binary logit model and the hypotheses behind the choice of the explanatory variables are presented in Table 4-1. Descriptive statistics of these variables can be found in Table A-1 in the Annex. As the variables have different units of measurement, the independent variables were standardized using z-transformation to make them comparable. In accordance with the theoretical framework, the variables have been sorted according to their character as indicators for the different forms of capital/collateral (see Section 4.2.1).

Table 4-1: Variables for the binary logistic regression model on credit access

Physical capital-related variables	
1. Red or Green Books* (yes = 1; no = 0)	Red Books or Green Books, certifying a person's use rights to farmland and forests, are often demanded as collateral by rural lenders in Vietnam (DUFHUES *et al.* 2004a). It is assumed that possession of a Red or Green Book will positively influence access to formal credit.
2. Agricultural land (m2)	Land is an important form of collateral. However, most property rights relating to land have an informal character in developing countries. In the absence of Red Books, Vietnamese farmers can apply to the local People's Committees for special land use certificates. Only 8% of the loans were used wholly or partly for buying land. Hence, the endogeneity of the variable is negligible.
3. Value of houses (VND)	Houses can be used as formal collateral with a max. value of five million VND. Thus, this variable is assumed to positively influence access to credit. Only 4% of the loans were invested complete or partly into constructing houses. Hence, the endogeneity of the variable is negligible.
4. Government salary (yes = 1; no = 0)	Government salaries can serve as collateral (DUFHUES *et al.* 2004a) and may therefore improve access to credit. Furthermore, government work in particular allows individuals to enhance their social network, helping them to stay informed about economic developments and new laws or policies (ALTHER *et al.* 2002; DUFHUES *et al.* 2002), which may also facilitate access to credit.
5. Cash savings (VND)	In theory, savings can be used as collateral, too. However, nearly 100% of the savings in this survey are informal and cannot therefore easily be seized by a formal lender. Nevertheless, savings are the basis for accumulating physical capital and are therefore a good indicator of possession of physical capital. In addition, they are a good indicator for the repayment capacity of households and are therefore assumed to have a positive influence on access to credit.
Human capital-related variables	
6. School years of HH head (years)	Better education is assumed to improve access to credit as loan application procedures demand a certain degree of formal education. Moreover, it is reasonable to expect that better educated households perform better in their investment activities. This was also shown in a recent paper by VAN DE WALLE (2003), who found that marginal benefit of irrigation increased strongly with the education of the household. Thus, better educated households are usually perceived as more creditworthy.
7. Vietnamese communication skills of the married couple (yes = 1; no = 0)	Vietnamese is the official language and used for the credit application procedure. The household head and his wife have to sign the credit contract. Therefore, it is assumed that households in which one of the two lacks the necessary language skills are more often access-constrained (in the event of only husband or wife existing in the household, his/her language capability is taken into account).
8. Receiving agricultural extension service (yes = 1; no = 0)	Households who receive agricultural extension services are likely to gain better access to improved knowledge and are thus able to increase their human capital. But at the same time, households who do not receive agricultural extension are likely to have fallen through the village information network and are assumed to have a low social capital base.

9. Active HH members (number)	Household members between 15 and 60 years for male members and 15 and 55 for female persons were counted as one workforce. These age lines represent the official retirement age in Vietnam. This indicator evaluates the labor capacity of the household and indicates human capital in the sense of labor force. Each investment activity demands additional labor. Households with a lower labor supply are assumed to have less access to formal credit.
10. Share of non-farm activities in total yearly income (%)	A high share of non-farm activity in total income may indicate a shift from traditional farm activities towards more innovative non-farm investments. It also includes households with employment at government agencies, which demands a certain level of education and entrepreneurial skill. Therefore, it is assumed that households with a higher share of non-farm income also have a higher level of human capital. Income from day labor is excluded, as this does not require any human capital except for the labor itself.
11. Lost working days due to illness (days/year/HH)	The number of lost working days per year within a household due to illness is a good indicator of the quality of human capital. The larger the number, the lower the human capital. It is assumed that households with a weaker human capital base are more often access-constrained.
Social capital-related variables	
12. Giving help (days/year/HH) 13. Receiving help (days/year/HH)	Receiving and giving help to friends and relatives is seen as an important indicator of social activity and of being a member of a social network, and thus of social capital, and this will positively influence the probability of having access to credit as households are better protected against income shocks.
14. Interest-free informal credit (VND)	Small interest-free informal loans are not a substitute for formal loans (Section 3.2). Thus, borrowing from informal sources is usually not the result of an access constraint to the formal financial market. Possession of an informal interest-free loan is a good indicator of a functioning informal social network. However, it is also seen as a mechanism for coping with sudden shocks and it suggests that the household may have a lower repaying capacity and a low physical capital endowment. Thus, the a priori sign of the coefficient is ambiguous.
15. Thai/Tay village (yes = 1; no = 0)	Considered them from a national point of view, the Thai and Tay ethnic groups are ethnic minorities. However, in the two research regions, Ba Be and Yen Chau district, the Tay and Thai are the ethnic majority. For instance, official positions in Ba Be are usually occupied by members of Tay ethnicity (DUFHUES *et al.* 2002). Belonging to one of these ethnicities is seen as important social capital. Besides, anecdotal evidence suggests that there exists a constraining hierarchy among the ethnic groups in Northern Vietnam. For example in Ba Be, Tay and Kinh are the leading ethnic groups, followed by the Nung, Dao, or Hmong (ALTHER *et al.* 2002; CASTELLA *et al.* 2002). Villages in the research region are of high ethnic homogeneity (see Table 5-3). Ethnic Thai or Tay usually dwell in valley positions or at medium-high altitudes with very similar agricultural production systems. Households not belonging to the regional ethnic majority but dwelling in a village mainly populated by them are also assumed to profit

	from this location. Therefore, household observations within a Tay/Thai village are not necessarily independent. However, significant differences can be expected between Tay/Thai villages and villages of other ethnic groups that are not captured by our data (e.g. different production systems). Therefore, households are grouped by Tay/Thai village to account for those differences. It is assumed that households dwelling in a Thai or Tay village are more privileged and therefore have better access to credit. Village fixed effects which are related to natural conditions (e.g. climate) are not viewed as relevant for access to credit in Northern Vietnam. An attempt is made to control for socio-economic village fixed effects, e.g. market access, by different variables, such as number of market visits.
16. Only female HH members going to the market (yes = 1; no = 0)	Who goes to the market is regarded as important factor for gaining access to certain social networks and for gathering essential credit information. Particularly when only women go to the market, the household as a whole may be excluded from important information. But this might also be an indicator of a weak human capital base, as the male household head could be dead, have left the family, or be physically or mentally incapable of going to the market. Hence, it is assumed that when only female household members go to the market, the chance of being access-constrained is higher.
17. Age of the household (years)	This variable can go in two directions. On the one hand, it may be that the older the household, the wider and stronger the social network of the household members and thus, the greater its political influence and its ability to gather credit-relevant information. On the other hand, however, younger households may be better educated or more dynamic. Thus, the a priori sign of the coefficient is ambiguous.
Infrastructure-related variables	
18. Remoteness (km)	This variable measures the distance in kilometers of rural households from the district center where formal bank branches are located. HUNG and GIAP (1999) state that the distance to the nearest bank branch strongly influences access.
19. Market visits per month (numbers)	The frequency of market visits by household members is assumed to be an indicator of high social activity. Frequent market visits may also increase the chance of receiving essential credit information, e.g. on the availability of loans (DUFHUES *et al.* 2002). The frequency of market visits of course also depends on the infrastructure connection and the remoteness of the household's dwelling.
20. Different markets visited (numbers)	The number of different markets visited is an indicator of the breadth of a household's information networks. It is assumed that the broader the network, the more relevant information is available to the household for receiving a credit. The number of markets visited also depends on the infrastructure connection and the remoteness of the household's dwelling.
*Poverty-related variables***	
21. Poverty index	Anecdotal evidence suggests that even credits that are targeted at the poor seem to be bypassing the poorest groups (NEEFJES 2001; WORLD BANK and DFID 1999). Thus, poorer households are assumed to have less access to formal loans.

22. Supply of day labor (yes = 1; no = 0)	Poor agricultural laborers and other day-laborer (for instance in road construction) are assumed to be more often access-constrained due to their low social standing (FALLAVIER 1994). Nevertheless, this may be also an indicator of lack of agricultural land and thus of physical capital.
23. Receiving aid from government (yes = 1; no = 0)	Only very poor or very vulnerable households receive food/equipment aid from the government. It is thus assumed that these households have less access to formal credit. However, anecdotal evidence suggests that it is not always the people with the greatest need who receive the help, but those who also have good contacts with village authorities, pointing to a certain degree of social capital, so the a priori sign of the coefficient is ambiguous.

Source: Own figure.

Notes: * Land is owned by the state in Vietnam. Nevertheless, the government allocates land use certificates to farm households, the so-called 'Red Books' for agricultural land (valid for 20 years) and, 'Green Books' (valid for 30-50 years) for forest land. Farmers are allowed to sell or rent land use certificates, or pass them on to children (LUIBRAND 2002).

** Poverty usually refers to a lack of human, social, and physical capital. Therefore, some variables that indicate a lack of a mixture of the different forms of capital partly capture the influence of poverty on access to formal credit.

HH = household.

4.2.3 Regional focus and sampling procedures

Data collection took place from March 2001 to March 2002. Detailed financial market data were collected at the household level, including information on household, farm, and business activities, assets, savings and borrowing transactions with both formal and informal sources, and households' perceptions of their formal sector borrowing opportunities. The survey also documented household consumption and labor market participation.

Two research sites were selected, namely Bac Kan province (Ba Be district) and Son La province (Yen Chau district). Both provinces are located in the mountainous regions of Northern Vietnam and are among the poorest provinces of the country (WORLD BANK 1999). Ba Be district is a very remote area and has only recently (in 1999/2000) gained access to regional and interregional markets. Farmers produce mainly for subsistence and a large proportion of them may be considered poor. Due to the creation of the Ba Be National Park (close to Ba Be town), huge resettlements took place, aggravating the socio-economic problems in the region. The Yen Chau district has a much better connection to regional markets (Son La town) and even to greater Hanoi, and therefore offers a good contrast to the situation in Ba Be district.

Table 4-2: Research areas and sample composition

Province and district	Commune	Village	Main ethnic minority		Number of households per village	Selected households	
						Number	%
Province Ba Kan, district Ba Be	Dia Linh	Pac Nghe 1	Tay	(97%)	76	36	47
	Nghien Loan	Khau Nen	Nung	(89%)	36	19	53
	Xuan La	Thom Meo	Tay	(93%)	84	43	51
		Khuoi Khi	Dao	(100%)	40	20	50
Province Son La, district Yen Chau	Sap Vat	Sai	Thai	(85%)	80	42	53
		Na Pa	Thai	(100%)	64	33	52
		Dong	Thai	(100%)	48	25	52
	Chieng Hac	Bo Kieng	Hmong	(100%)	20	13	65
	Chieng Pan	Than	Kho Mu	(100%)	38	20	53
		Tat Heo	Thai	(100%)	16	9	56
Interviewed households in total:						260	

Source: Own figure.

The communes and villages were stratified in accordance with pre-defined selection criteria to ensure a good degree of variance in the sample. These criteria are:

- Being located at different altitudes (valley, middle slope and top position), to obtain different stages of market access, ecological zones and ethnic minorities;
- Being engaged in different phases of the land allocation process (land allocation completed or not completed, percentage of households with land use certificates), and
- Having different shares of households with non-farm activities.

An overview of the sample in both regions is given in Table 5-3. Half of all households in each village were randomly selected after being stratified according to their living standard into five categories using official poverty data from the village headmen.[59]

[59] The Vietnamese government classifies every household once a year according to its living standard into one of five categories: Hungry, poor, medium, better-off, and rich (DUFHUES *et al.* 2002; and GEPPERT and DUFHUES 2003).

4.3 Outreach of and access to formal rural lenders in Vietnam

The following section first discusses the general use of collateral by formal lenders in Northern Vietnam. The situation as regards effective credit demand is then presented in Section 4.3.2, followed by the outreach of rural lenders (Section 4.3.3) and econometric analysis of access-constrained households (Section 4.3.4).

4.3.1 Collateral use

The main collateral demanded by lenders in Vietnam is physical collateral in the form of land use certificates (Red and Green Books). Social collateral in the form of references is also a widespread requirement, particularly in Northern Vietnam, and both forms are often intermingled.[60]

In Vietnam, lenders face enormous difficulty in enforcing pledges and mortgages (RIEDEL 2000; UNDP 1999). Banks are not usually allowed to seize land from defaulting farmers, even if the use rights have been pledged. It is more or less impossible to evict farmers and auction their land because of the lack of legal infrastructure and resistance from local authorities (WOLZ 1997). Only a few cases exist where land has been liquidated in the event of a farmer's collapse (DUONG and IZUMIDA 2002). It appears that the underdeveloped legal framework does not prove effective for the use of physical collateral as a risk management tool (GOTTWALD and KLUMP 1999). Nevertheless, the VBARD still insists on land use certificates as collateral and relies mainly on the psychological pressure related to the possibility of losing land.[61] As the liquidation of collateral is almost impossible in practice (although this may not be known to the farmers), rescheduling of the loan is often the only possibility for the credit officer to avoid designating a loan as overdue, not performing, or lost. Therefore, rescheduling of loans in VBARD/VBP is extremely high (IZUMIDA and DUONG 2001; VBARD and DANIDA 1999). According to BINSWANGER and SILLERS (1983), farmers, and particularly poor farmers, in developing countries are almost

---

[60] A detailed description of the use of different kinds of physical collateral in the credit procedures of rural lenders in Vietnam can be found in DUFHUES *et al.* (2004a).

[61] In contrast to VBARD practice, the government and VBARD headquarters state that households can take out loans of less than ten million VND without any collateral (see VBARD 2001b).

universally risk-averse and often reluctant to put their assets at stake as collateral for a loan. However, as DUFHUES *et al.* (2004a) found, even poor farmers in Northern Vietnam are not afraid to pledge their land use certificates as collateral. They may be convinced that their investment will not fail or, more likely, they believe that the bank will not seize the land even if they have difficulty repaying their loan.

Officially, the VBP uses solely group lending schemes with joint liability for delivering its loans (VBP 1999b).[62] Anecdotal evidence, however, revealed that in some cases of so-called 'hungry' households, which are officially excluded from access to VBP loans as they are considered too poor, the credit officers insist on collateral in the form of land use certificates, too. In this sample, over 25% of all VBP credits (N=94) were secured by physical collateral in various forms. The so-called joint liability credit groups are not working effectively, as some of the regulations enforced by the VBP seem to neutralize the peer pressure that is important for good credit repayment records. In everyday practice, the group members are not held liable for each other; the person who fails to repay the loan is simply expelled from the group and no negative consequences are imposed on the other group members. As joint liability does not work in the case of VBP, and physical collateral fails to achieve its intended purpose in the case of VBARD, both require guarantees from local authorities in the form of 'certificates of good conduct' and they rely on an extensive network of non-bank local officials, who support the banks in screening, monitoring, and enforcing the loans (DUFHUES *et al.* 2002). However, supervision of these structures can be difficult. For instance, TODD (1996) reported that when a loan officer who was at the same time president of the local political committee resigned, 100 borrowers defaulted as a result. Thus, the delegated task of putting pressure on borrowers does not always work, as the substitution of physical collateral by social collateral leads to a delegation problem in which the lender must concern itself with whether or not the third party charged with imposing social sanctions will actually carry out this task (BOND and RAI 2002).

---

[62] The VBSP, the successor of the VBP, will continue to provide physical collateral-free loans to certain target groups (VIETNAM ECONOMY 2003).

In summary, physical collateral works solely through the psychological pressure it exerts. The social collateral of joint liability groups does not work at all. The only form of collateral that seems to work is social collateral in the form of pressure exerted by local authorities and in the form of denial of future credit in the event of default. However, it remains questionable how long this pressure can be maintained. Anecdotal evidence from the WORLD BANK (2003, 2004b) suggests that in poor communes 70% of households default in their installment payments to VBSP, while around 30% default in their payments to VBARD.

4.3.2 Effective formal credit demand [63]

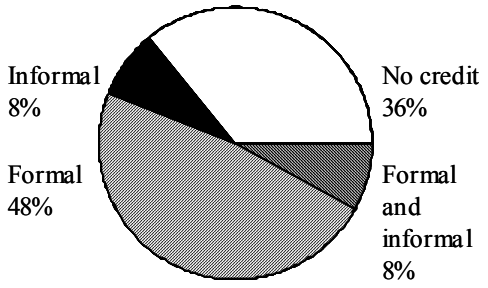
In total, 56% of all households in the sample (total N=251) have had an effective demand for formal credit (Figure 4-2). This clearly demonstrates the enormous breadth of outreach of the formal financial sector in Vietnam. Only a mere 16% of households are involved in the informal market and 23% of the total loans in this sample are borrowed in the informal sector. DUONG and IZUMIDA (2002) found that in their survey an even lower number, namely 17% of all loans, were extended by informal sources, and the WORLD BANK (2003) states that the majority of households have access to formal credit in one way or another. These figures stand in contrast to the observations made in many other developing countries, where the informal sector is still the biggest supplier of financial services. As one important factor for the reduction of the informal sector from about 80% in the early 1990s to around 20% today, MCCARTY (2001) mentioned 'crowding out' by the VBARD and VBP, both of which have extended their outreach enormously in recent years. Nevertheless, the VBP has done this at the cost of financial sustainability. On the one hand, crowding out moneylenders who charge usury interest rates is a very welcome effect. However, not all moneylenders charge usury interest rates. So, crowding out the informal sector can have very negative effects by destroying informal financial networks without replacing them with a sustainable formal alternative. In Vietnam these informal structures have been replaced by formal ones, but the questions remains: Are they sustainable in the long run? The VBP was recently replaced by the VBSP, which will continue the policy of the VBP. It is just a matter

[63] Formal credit is defined as credit from the formal and semi-formal financial institutes, VBARD, VBP, and the State Treasury. However, as the State Treasury disbursed only few credits, it is excluded from the later analysis.

of time when the VBSP will become unsustainable, as its interest policy cannot cover its costs. DIAGNE *et al.* (2000) state that policies and financial institutions should be designed to complement the informal market rather then to replace it.

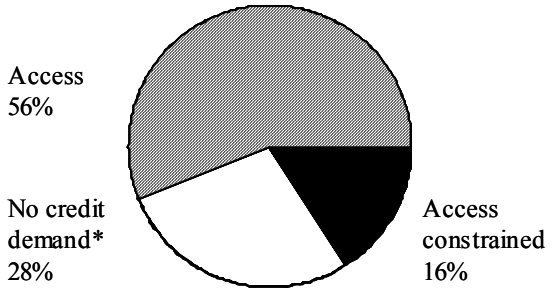
Over 40% of households are not engaged in the formal financial sector. ZELLER and SHARMA (1998) state that some rural households simply do not apply for a loan because of the expectation that they will be turned down. This statement was supported by the work of BUCHENRIEDER and THEESFELD (2000) in a similar research setting in Northern Vietnam. The empirical results of their research showed that a lack of bankability from the perspective of the clients exists. This may foster the assumption that there is still a need to extend the credit outreach of the formal financial sector still further. Looking at Figure 4-3, it becomes evident that this figure must be reassessed. A mere 16% of the households in the sample are access-constrained. When farmers were asked directly why they do not borrow in the formal sector, three answers were given most frequently: 1. afraid of debt; 2. have no collateral; 3. lack of knowledge. While 'lack of knowledge' clearly refers to a lack of human capital and 'no collateral' to a lack of physical capital, 'afraid of debts' refers to a mixture of human, physical, and social capital, namely a deficit in the risk-bearing capacity of a household.

Figure 4-2: Percentage of households using different credit sectors



Source: Own figure.
Note: N=251.

Figure 4-3: Access-constrained households (formal financial sector)



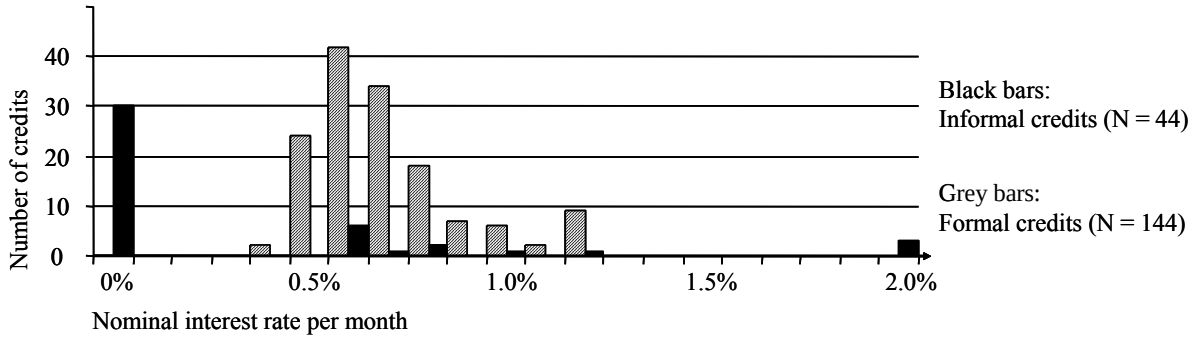
Source: Own figure.
Note: N=251.
* Households with no credit demand but access to the formal financial sector.

The great success of formal credit outreach in Vietnam is clearly due to credit-delivering technologies that reach out far into the rural area, e.g. offering group loans at the local level, but also due to the strong promotion of credit by the government. Finally, the very low interest rates, which are highly subsidized, are increasing effective demand and thus outreach.

Figure 4-4, Figure 4-5, and Figure 4-6 show that the market segments of the

informal and formal credit markets are clearly separated in terms of interest rate, loan term, and loan amount. The informal market is separated into two different segments, first a 'no interest rate' segment and second a 'high interest rate' segment.[64] Within the first segment, small amounts of money are lent out to family members or friends at zero interest. These credits are usually used for consumption and are one method of coping with emergencies or an unexpected shortage of cash. The second segment is served by traditional moneylenders. They charge interest rates clearly above the rates of the formal sector (about three to four times as much). While loans from the moneylender are usually very short-term, loans from family members or friends are either short-term or open-ended. Households using moneylenders have either fallen through the informal safety net or they have to borrow more than their social network can provide, e.g. in the event of expensive surgery needed by a family member. The biggest share of formal loans is usually used for investment or productive purposes.[65]

Figure 4-4: Interest rates per month of formal and informal credits

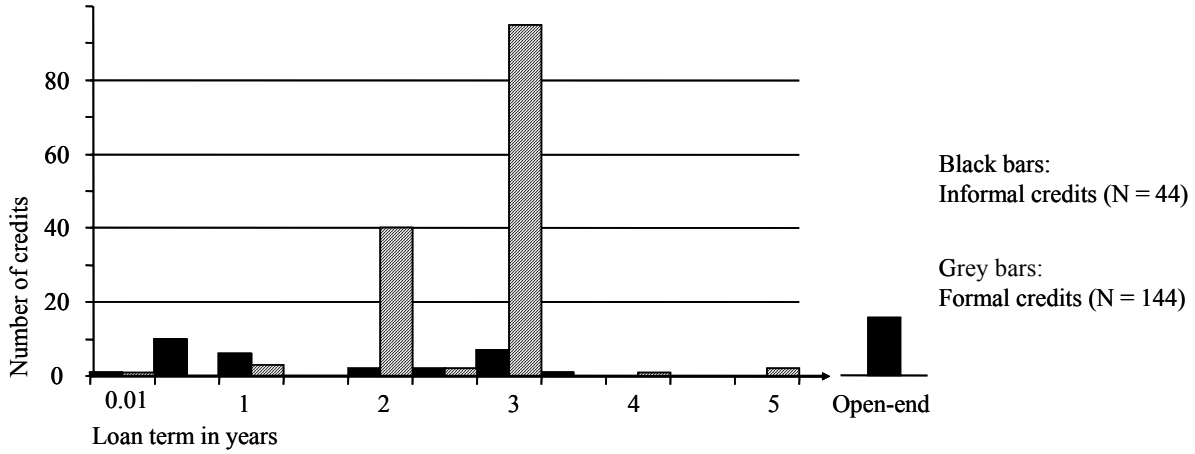


Source: Own figure.

[64] However, some households are paying an interest rate in the informal sector that exactly matches the formal rate. Usually these households have a close friend or a relative who borrowed in the formal sector and passed on part of the loan to a friend, who is then charged the formal interest rate.

[65] After financial reforms at the beginning of the nineties, the real interest rate became positive in 1992 (SENANAYAKE and HO 2001). Since then, however, the real interest rates have been gradually fallen (DUFHUES *et al.* 2004a).

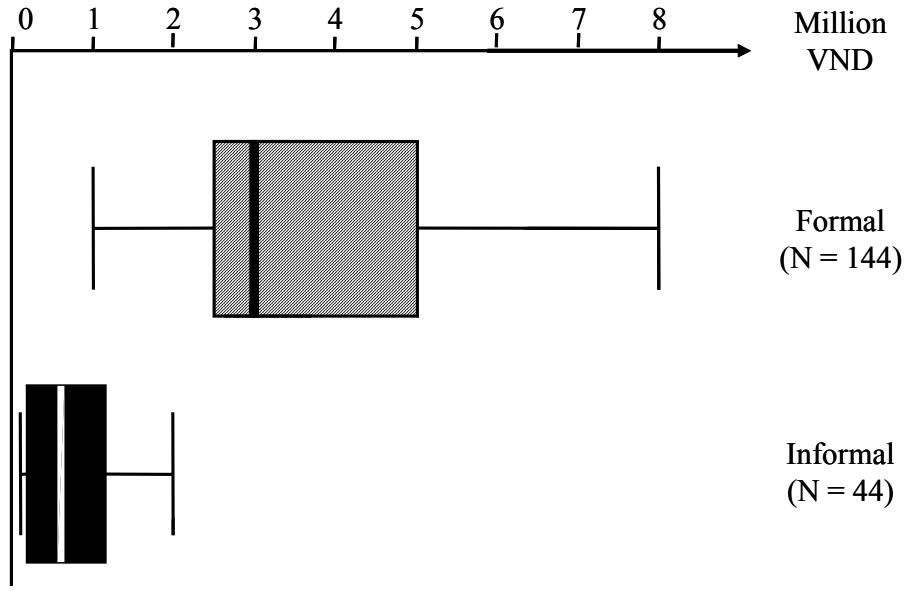
Figure 4-5: Formal and informal credit terms



Source: Own figure.

Formal and informal credits are imperfect substitutes for each other. In particular, formal credit reduces, but does not completely eliminate, informal borrowing (DIAGNE 1999). Neither of the informal segments, the 'no interest' or the 'high interest' segment, can be reached by traditional credit products, and it would be probably a drain of public recourses if the Vietnamese government tried to do so. But the two segments could probably be reached by financial products other than credit. For instance, the lower segment could be served by client-adapted savings products, and the moneylender segment by a functioning social security system.

Figure 4-6: Loan size of formal and informal credits in VND millions



Source: Own figure.

Notes: 1 million VND = 70 US$ at time of survey (average conversion rate).

4.3.3 Credit outreach

The poverty outreach of the formal lenders is analyzed using a poverty index calculated with the PCA. Households that have no effective credit demand in the formal financial sector are the reference group. These households were first ranked according to their poverty index and then sorted into five groups of equal size. The lowest quintile incorporates the poorest households and the upper quintile embraces the better-off families. When assessing the poverty outreach of microfinance institutes at the household level, only new clients should be included in the analysis in order to rule out any impact that could have occurred due to the financial services obtained from the lender and that could have led to a change in the poverty status of the client (MATIN *et al.* 1999).[66]

When looking at new clients of the formal financial sector, it is clear that better-off households are over-represented and that the poor and poorest households are under-represented (Table 4-3). Nevertheless, clients are considered, only the poorest group is under-represented. This might indicate a shift by formal lenders towards the better-off households.[67] Of course this is a rather naïve comparison, as any impact of the program is neglected. But assuming that there is no impact, the comparison would hold, and if a positive impact is assumed, the gap would in fact widen. Only in the case of a negative impact would the gap decrease. Discussions with farmers did not reveal any wide-scale negative credit impacts. Thus, the last option is unlikely to be realistic. Hence, it is likely that there is a shift towards the better-off clientele. Whether this shift is actively influenced by formal lenders, or rather passively, as all creditworthy poor households are already clients, remains unanswered.

---

[66] HENRY *et al.* (2003) suggest using only clients who received a loan within the past three months. However, most of the loans in this sample are invested in livestock production – mainly pigs, cattle or buffaloes (DUFHUES *et al.* 2004b). Initial profits are not expected within the first six to seven months. Thus, it is safe to consider clients who received a loan within the last seven months as unbiased by poverty impacts of the loan. These households are grouped in Table 4-3 as 'new clients'.

[67] Almost three-quarters of the new loans were made by the VBP. Thus, a targeting bias through VBARD, which focuses more on the better-off clientele, can be excluded.

Table 4-3: Depth of outreach of formal lender clients

	← increasingly poor/increasingly rich →				
	Group 1	**Group 2**	**Group 3**	**Group 4**	**Group 5**
No clients, reference group (N=111)	20%	20%	20%	20%	21%**
Effective access (new clients) (N=40)	0%	13%	28%	40%	20%
Effective access (all)* (N=140)	5%	24%	22%	26%	23%
VBP clients (N=94)	4%	30%	23%	27%	16%
VBARD clients (N=35)	6%	9%	26%	23%	37%

Source: Own calculations.

Notes: * Including VBP, VBARD, and State Treasury clients.
** Because of rounding, the figures may not add up to 100%.

When looking at Table 4-4, it is clear that the poorest group (namely group 1) is clearly less often served by formal credit than the other groups. Only 24% of the households belonging to the poorest group have a formal loan. Surprisingly, the other poverty groups are more or less equally served. The VBP uses a targeting system which focuses on the poor but excludes the poorest, and the VBARD focuses on non-poor households (DUFHUES *et al.* 2002). However, if the poorest have collateral in the form of land use certificates they can usually access credits from the VBP and VBARD (see Section 4.3.1). Nevertheless, the poorest households in this survey seem to have difficulty accessing formal bank loans in comparison to wealthier households, which corresponds to international experience (see Section 4.1). On the one hand, as stated by MOLISA and UNDP (2004), bank staff and local authorities fear that the poorest will fail to pay back their loans. On the other hand, many of the poorest households may simply not demand the credit products on offer. The most realistic scenario is probably a mixture of low creditworthiness and low demand, a scenario also supported by research in other developing countries. For instance, NAVAJAS *et al.* (2000) state that in Bolivia the poorest households are less likely to be assessed as creditworthy and/or to demand loans of the type offered by the industry.

Table 4-4: Outreach of formal credit by poverty group

	← increasingly poor/increasingly rich →				
	Group 1 (N=29)	Group 2 (N=56)	Group 3 (N=53)	Group 4 (N=58)	Group 5 (N=55)
Households with access per group	24%	61%	58%	62%	58%

Source: Own calculations.

The two banks, the VBP and VBARD, serve clearly under-proportionately the poorest group of the sample population (Table 4-3). This finding is also confirmed by IZUMIDA (2003), who states that the so-called 'hungry' households have

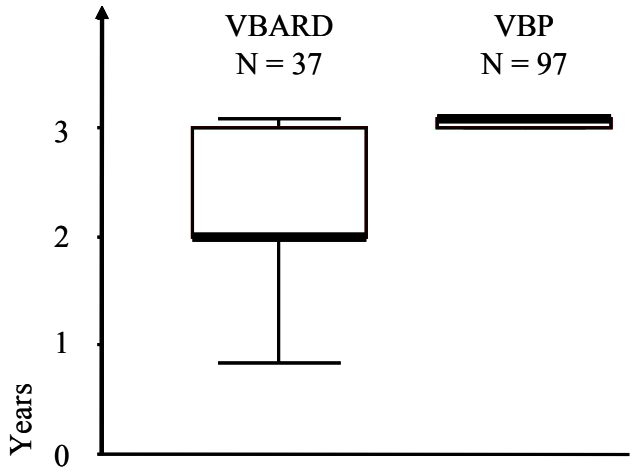
rarely been reached by the VBP. However, in line with their different target groups, both have a different depth of poverty outreach. If one considers the two lower quintiles as fairly poor and the three upper quintiles as fairly rich, then almost 40% of all poor households in the sample were reached with credit by the VPB. This is also confirmed by the WORLD BANK (2004a), which states that the VBP has been fairly successful in reaching the poor. Fairly may be interpreted as a noticeable outreach to the poor, although it is still an under-proportionate outreach. However, the aim of being a 'Bank for the Poor' is obviously not being achieved, as two-thirds of the VBP's clients in this sample are not considered poor.[68] Another way of measuring depth of outreach is the loan amount and loan term. Smaller amounts or shorter loan terms usually mean greater depth (CHARITONENKO *et al.* 2004; SCHREINER 2002). Considering only the loan term, one might think that the VBARD has deeper outreach, with an average loan term of 2.5 years compared to 2.9 years in the case of the VBP. Nevertheless, there are two facts that contradict this. First, the interest rate is higher in the case of VBARD loans. As a result, farmers probably try to keep the loan term as short as possible, and second, the loan terms are more negotiable in the case of VBARD loans (Figure 4-7 and Figure 4-8). The VBP loans are 'one-size-fits-all' loans. Furthermore, VBP loans are clearly smaller than VBARD loans, sug gesting that VBP has a higher depth of outreach than VBARD. The average loan amount of a VBP loan is 2.8 million VND (177 US$) per credit group member compared to 6.6 million VND (420 US$) from VBARD. Nevertheless, CHRISTEN *et al.* (1995) point out that scale determines whether significant outreach to the poor can be achieved. The VBP not only has greater depth of outreach, but also greater breadth. Two-thirds of all loans in this sample are disbursed by the VBP and only one-quarter by the VBARD.[69] Thus, considering only Northern Vietnam, the VBP reaches deeper into the poorer part of the population than the VBARD.

---

[68] Official data on this issue are much more optimistic. For instance MOLISA and UNDP (2004) state that three-quarters of the subsidized loans are delivered to poor households.

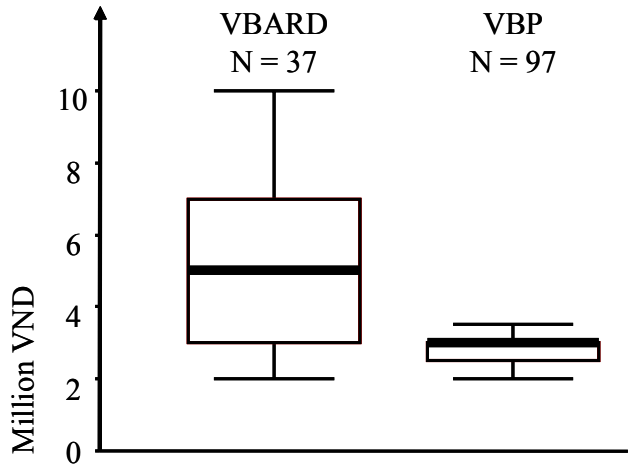
[69] However, when considering national data the VBARD has a much bigger breadth of outreach then the VBP.

Figure 4-7: Loan term of formal credits in years



Source: Own figure

Figure 4-8: Loan amount of formal credits



Source: Own figure

4.3.4 Credit-constrained households

Of the 260 households interviewed, nine households were dropped prior to the analysis and eleven were excluded during the analysis due to missing values. Thus, the parameters are estimated on the basis of 240 households. A binary logit model is used, where the dependent variable is one for all households with access to formal credit and zero otherwise. The dependent variable is derived following the decision tree in the annex Figure A-1. The list of regressors is presented in the earlier section (see Table 4-1 in section 4.2.2). From 23 potentially influential parameters, eight variables have a significant influence in the model presented. These variables are displayed in Table 4-5.

Table 4-5: Parameters influencing households' access to formal credit – Binary logit estimation

		Standard error	Significance	Exp(B) odds ratio
Physical capital-related variables				
1. Red or Green Books	(yes = 1 no = 0)	0.229	0.049	1.570
2. Agricultural land	(m^2)	0.506	0.247	1.798
3. Value of houses	(VND)	1.119	0.051	8.919
4. Government salary	(yes = 1 no = 0)	0.390	0.438	0.739
5. Cash savings	(VND)	1.720	0.686	2.005
Human capital-related variables				
6. School years of HH head	(years)	0.415	0.419	1.399
7. Vietnamese communication skills of the married couple	(yes = 1 no = 0)	0.824	0.954	1.048
8. Receiving agricultural extension	(yes = 1 no = 0)	0.284	0.230	1.407
9. Active household members	(numbers)	0.310	0.321	0.735
10. Share of non-farm activities in total yearly income	(yes = 1 no = 0)	0.354	0.623	0.840
11. Lost working days	(days/year/HH)	0.482	0.823	0.898
Social capital-related variables				
12. Giving help	(days/year/HH)	0.348	0.703	1.142
13. Receiving help	(days/year/HH)	0.261	0.023	0.553
14. Interest-free informal credit	(VND)	0.597	0.100	0.374
15. Thai/Tay village	(yes = 1 no = 0)	0.770	0.004	9.007
16. Market visits only by females	(yes = 1 no = 0)	0.304	0.018	0.488
17. Age of the household	(years)	0.287	0.622	0.868
Infrastructure-related variables				
18. Remoteness	(km)	0.393	0.006	2.916
19. Market visits per month	(numbers)	0.868	0.041	5.897
20. Different market visited	(numbers)	0.416	0.233	1.642
Poverty-related variables				
21. Poverty index	(index)	0.462	0.553	1.315
22. Day labor	(yes = 1 no = 0)	0.331	0.353	0.735
23. Receiving aid form government	(yes = 1 no = 0)	0.239	0.858	0.958
Chi-square	107.309			
Nagelkerke R Square	0.619			
Observations in model	240			

Source: Own calculations.

Notes: Variables over a significance level of 0.1 are considered to be not significant.

The model predicted 92% of all observations correctly (Table 4-6). In the group of access-constrained households, the percentage of correctly predicted cases

was good, at 71%; it was very good, at 96%, in the group of households with access to the formal financial market. The overall fit of the model is satisfactory, with a Nagelkerke R^2 of 0.619. The correlation tables showed no problems due to multicollinearity between independent variables.

Table 4-6: Classification of correctly predicted access to formal credit-constrained households

	Predicted		Percent correct
Observed	0	1	
0	27	11	71.1
1	8	194	96.0
Overall percent correctly predicted			92.1

Source: Own calculations.

Notes: The categories of the dependent variable are: 0 = No access to formal credit; 1 = Access to formal credit.

Physical capital: In contrast to other countries, lack of physical capital in the form of farmland is not a significant access constraint.[70] However, the possession of land use certificates is significant, but the influence is the lowest of all significant variables. In the 1990s, one of the most important access constraints to formal rural credit in Vietnam was the lack of physical collateral in form of land use certificates (HUNG and GIAP 1999). Today, land use certificates seem to have lost most of this influence. The ongoing dissemination of 'Red/Green Books' in recent years has brought an increasing number of households into possession of assets that are useable as collateral, and this has broadened the possible outreach dramatically (DUFHUES *et al.* 2004a; MCCARTY 2001).[71] Moreover, the main supplier of formal loans in the research area is the VBP, which tries to rely totally on social collateral (section 4.3.1 and 4.3.3). This explains the fact that possession of land use certificates appears to have little influence on access to formal credit. Nevertheless, households without certificates may still have difficulties in accessing formal loans, particularly from the VBARD.[72]

[70] For instance, SARAP (1990) found that the smaller size of land holdings in India has an adverse effect on the access of small farmers to formal credit institutions.

[71] In this sample, 89% of the households have a Red Book and/or a Green Book.

[72] Lack of collateral was also mentioned by access-constrained households as a reason for self-exclusion.

A high-value home has much greater influence on the likelihood of obtaining access to formal credit than land use certificates. Housing is probably used as a visible indicator of the general wealth of the household and can easily be assessed by local officials or credit officers. Furthermore, houses can be used as formal collateral.[73] This may explain the considerable influence of the value of housing on the likelihood of obtaining access to formal credit. The visible wealth of a household seems to be very important for its access to credit.[74]

Human capital: None of the human capital-related variables is significant. Particularly surprising is the fact that the variable 'school years of HH-head' is not significant, as research from other developing countries, e.g. EVANS *et al.* (1999), SARAP (1990), and VAESSEN (2001), support the opposite notion. Moreover, illiteracy levels in Vietnam remain high among the poor ethnic minorities, and in more remote parts of the country, especially in the northern mountains (BHUSHAN *et al.* 2001). This may indicate that the formal credit application process is not in itself a market entry barrier any more to poorly educated customers. Group credits from the VBP have probably eradicated this access constraint. Within the group credit scheme, only the credit group leader who submits the credit proposal needs a certain degree of literacy (DUFHUES *et al.* 2002). Furthermore, investments are not usually very innovative and revolve mostly around conventional enterprises in animal production. Thus, a high amount of human capital does not seem necessary to carry out those investments.

Social capital: Dwelling in a Thai/Tay village has the highest influence on the likelihood of having access to formal credit. As mentioned above, from a national point of view Tay and Thai are ethnic minorities. However, in the two research areas these minorities represent the majority and occupy many key positions in the local administration, including the district bank branches. It is not surprising, therefore, that inhabitants of non-Thai/Tay villages have a significantly higher chance of being access-constrained then the ethnic majority in Ba Be and Yen Chau respectively. However, privileged access to credit may be related not only to

---

[73] However, in this sample only one case was found where the house was used as collateral for a VBARD loan.

[74] The housing status of a household must not be equated with its poverty status. GEPPERT and DUFHUES (2003) and SIMANOWITZ (2000) stated that the appearance of housing is an insufficient indicator for poverty, for instance housing could be completely debt-financed.

ethnicity, but also to the fact that the predominant farming system in these villages is paddy rice production. Paddy rice production was for long time seen by local officials and bank staff as a farming system with a high developmental priority. Thus, inhabitants of these villages were likely to obtain easier access to formal credit. Moreover, these villages usually have a better market connection and are thus more easily accessed by bank staff, which also promotes access to loans.

The numbers of days of informal help and the amount of interest-free informal loans that a household receives from its social network may both be indicators of a functioning social network, but they may also lower the chance of gaining access to formal credit. A functioning informal social network has apparently no positive influence on the likelihood of obtaining access to formal credit. But high use of the social network is obviously a strong indicator of an income shock or a shock that negatively influences the repaying capacity of the household.[75] The incidence of shocks either raises the chance of being assessed by local authorities as not creditworthy or adds to the self-exclusion tendency of households.

In households where only female persons go to the market (i.e. the wife of the household head or a female household head), the chance of being access-constrained is higher then in other households. On the one hand, this may be caused by a lack of human capital, as the male household head is mentally or physically unable to go to the market. While the number of missed working days due to illness is not significant, the permanent absence of an important member of the workforce such as the male household head may be more important. Moreover, the absence of the male household head can be easily observed by local authorities or bank staff and may indicate a problem inside the household, which may lower its creditworthiness. On the other hand, women probably have less access to official information networks than men.[76] Households of low social standing are often excluded from information networks and thus lack important information. VAESSEN (2001) draws similar conclusions from a research study in Nicaragua. One reason mentioned by households that are access-constrained to formal credit is lack of information.

---

[75] The use of informal borrowing may also be seen as an indicator of poverty. However, other research, e.g. by RUTHVEN (2001), has shown that reciprocal lending is not necessarily related to poverty.

[76] MCCARTY (2001) points out that the vast majority of rural loans are given to men.

Infrastructure: Surprisingly, the variable 'distance to the district capital with the nearest bank branch' is positive. Former research in Vietnam, e.g. by HUNG and GIAP (1999), has shown that remoteness is an access constraint to formal credit. Nevertheless, many programs around the world are set up specifically to serve the under-served. They locate where financial services have long been weak (MORDUCH 1999). In the case of Vietnam, those areas are/were certainly the more remote areas. Through the VBP and special credit programs, the Vietnamese government has pushed credit outreach for poverty reduction in favor of remote communes. MINOT (2000) states that poverty is more pronounced in places that are more remote from markets and cities. Obviously program placement is not random, and remoter villages or communes with a higher share of poverty are preferred. However, ALTHER *et al.* (2002) state that the poorest villages may not necessarily be located inside the poorest communes. Poor villages in wealthier areas may have less access to government services.

The variable with the third highest influence is 'frequency of market visits'. The high influence in this case may be explained by the lack of information about credit application procedures and availability in the village, as described in DUFHUES *et al.* (2002). Farmers use market days not only for buying and selling, but also for exchanging information and keeping relations and networks alive. DUFHUES *et al.* (2002) also showed that good relations with commune officials or the credit officer are essential for receiving credit. These contacts are most likely to be established and maintained on market days. This finding is supported by VAESSEN (2001), who found that access to certain information and networks in Nicaragua is essential for receiving credit. The more often a household goes to the market, the more investment ideas the household may develop. Consequently, the bigger its demand for credit and the lower its self-exclusion tendency is likely to be.

Poverty:[77] A very surprising result is that the poverty variable does not have a

---

[77] Better access to credit potentially reduces the incidence of rural poverty via a positive impact of the credit itself and, in the case of not borrowing, via access to consumption loans at times of income shocks. Therefore, poverty is endogenous to credit access and the inclusion of a poverty index would result in biased coefficients. However, in this case study, endogenity of poverty is expected to be negligible for two reasons: First, in the past, formal Vietnamese lenders did not disburse consumption loans. Second, QUACH *et al.* (2003, 2004)

significant influence on the chance of a household being access-constrained. For instance, former research by DUONG and IZUMIDA (2002) concluded that the poor have great difficulty in accessing formal credits. Furthermore, the descriptive statistics in section 4.2.2 indicate that particularly the poorest households tend be excluded. On the one hand, this may be explained by the fact that the Vietnamese government has made major efforts to increase the supply of formal credits to the rural poor, and clearly these efforts have been successful. On the other hand, the poorest households may potentially be able to obtain access to formal credit, but they do not demand it as their investment possibilities are very limited, their debt-taking capacity is low and their risk-aversion is high.[78]

4.4 Conclusions and policy recommendations

This research paper has contributed to enhance our understanding of the broad outreach of formal rural lenders in Northern Vietnam. Compared to a decade ago, the informal market now plays only a minor role. The poverty outreach of the formal rural lenders is satisfactory (e.g. about 50% of the households belonging to the two lower poverty quintiles have effective credit demand). However, the outreach analysis has shown that the poorest households are seldom clients of formal lenders. Only slightly more than 20% of the poorest households are served by formal lenders, while among the wealthiest quintile this proportion

found in their studies only a very small impact of formal credit on household welfare in Vietnam. As mentioned in Section 3.3, households who received a formal loan within the last seven months are likely to be unbiased by poverty impacts of the loan. Therefore, a new model was calculated with a sub-sample of households. In this sub-sample, households that had a formal loan with duration of more than seven months were excluded. The results from this model also indicate that poverty status had no influence on the likelihood of a household being access-constrained to formal credit.

[78] First the poverty index variable was squared and then multiplied by its original value, which can also be negative, to give a higher weight to the extreme cases. Second a dummy variable for the lowest quintile of the poverty index was incorporated in the regression instead of the poverty index itself to give a higher weight to the poorest households. But, in both cases the poverty variable turned out to be not significant. However, when dropping all variables except the poverty index as explanatory variable, this variable becomes significant. This indicates that poverty does play a role but its single dimensions or characteristics which are already reflected by other variables in the model turn out to be more important. As mentioned above the correlation table did not reveal any problematic correlations between the independent variables.

is around 60%. When considering access to formal credit, this figure must be re-evaluated. As the logit analysis revealed, general poverty (as captured with the poverty index) does not significantly influence access to formal credit. The results indicate that only certain aspects of poverty, e.g. low quality of housing, have an important influence on access to formal credit in Vietnam. Thus, the poorest households use formal credit less often, but are not significantly more often access-constrained. This means that the poorest households simply have much less demand for the types of formal credit products on offer. Improving credit products or offering new credit lines would only slightly improve the credit coverage of poorer households. A more promising approach would be to introduce a specialized pro-poor extension service to widen the scope of their investment ideas and opportunities, combined with a general improvement in the infrastructure. One factor that very positively influenced access to formal credit was the connection to the market. A good market connection serves credit outreach in a twofold manner: First, households have better access to credit-relevant information; and second, through better market access they may find new investment opportunities. The most appropriate tool to incorporate poorer households into the formal financial system would the mobilization of savings. As stated by several scholars, all people can save, even the poorest of the poor, and therefore deposit services have deeper outreach than credit (CHARITONENKO *et al.* 2004; SCHREINER 2002; ZELLER and SHARMA 2000). Moreover, DUFHUES *et al.* (2004a) revealed an enormous and unmet demand for formal savings among the rural population in Northern Vietnam.

Nevertheless, the number of access-constrained households is surprisingly low. One reason for the low number is the weakening or eradication of former access constraints. A major access constraint in the last decade was lack of collateral. Land use certificates are nowadays widespread and they have only limited influence on access to formal credit. If the process of issuing land use certificates is finally completed and/or if the VBARD and the VBSP enforce their national policy of granting collateral-free loans, the number of households without access to the formal financial market due to lack of land use certificates will dwindle, and the importance of land use certificates as physical collateral will become even less important. Other access constraints, namely remoteness (distance to the nearest bank branch) and literacy requirements of the household head, have been eradicated through locally disbursed group credits. However, considering the anecdotal reports of very low repayment rates, the price of eradicating these access constraints has likely been a decrease in sustainability of the formal lenders. AS VON PISCHKE (1991:83) points out: "Binding financial constraints to the formal sector are not necessarily anti-developmental. If they stand in the way of

bad investment, they are socially beneficial. For the financial system to make good loans and allocate funds for high-return investments, it must reject poor proposals, unfit applicants, and low-return investments. To generate good loans requires a highly selective screening of applicants."

Nevertheless, some barriers to access continue to exist. To reduce these access barriers, locally-oriented rather than general actions should be taken, catering to the needs and the circumstances of those households which lack access, particularly ethnic minorities and female-led households. Such measures will be particularly useful within the organizational structure of the lenders themselves. DUFHUES *et al.* (2002), for example, suggested employing ethnic minority credit officers, which would create more awareness of those groups inside the institution. Furthermore, special female credit officers for female-headed households could work in the same direction. However, the recent efforts of the Vietnamese government, for instance the establishment of the VBSP, represent an attempt to broaden access in general. But this increase in outreach will go hand in hand with an increase in access to credit for non-creditworthy households, thus resulting in decreased repayment rates. Moreover, it is questionable whether households that do not have access today, or do not demand the existing products, will demand credits from the VBSP. If rural lenders in Vietnam were one day forced to work in a competitive environment according to market principles, there would be a great chance that large parts of the population would be access-constrained as a result of previous loan defaults.

Whether the breadth and depth of formal credit outreach that was financed by enormous government subsidies contributes to poverty reduction, however, remains a subject for future research. Finally, it should be borne in mind that the conclusions drawn in this paper are based on a rather small and regionally limited sample. Therefore, further confirmation of the results by a larger and more representative study would be desirable.

5 Participatory product design by using Conjoint Analysis in the rural financial market of Northern Vietnam[79]

The following sections discussed the development of client adapted financial products by measuring customer preferences in a participatory way. In this sense credit and saving products are discussed separately.

5.1 Introduction

Vietnam has been engaged in a process of enhancing the role of market forces in the economy since 1986-87. This transition process, known in Vietnamese as 'Doi Moi' ('renewal'), is aimed at restructuring Vietnam's legal, regulatory, administrative, investment and foreign trade apparatus and policies to transform its centrally planned economic system into a market economy with 'socialist characteristics' (BRYANT 1998). In some sectors the reforms have achieved impressive results, bringing economic growth rates up to an annual average of 7.5% for the years 1995-99. Nevertheless, Vietnam is still an extremely poor country (WORLD BANK 1999). Three-quarters of Vietnam's population are engaged in subsistence farming and the majority of them lives in rural communities (BA 1997).

In the transition process, the reform of the national financial system plays a key role (SCHRIEDER and HEIDHUES 2000). The tasks ahead include: Strengthening popular faith in the financial system, moving the banking sector to financial self-sustainability, and expanding its outreach to include the newly emerging private sector not only in urban but also in rural areas. A financial system that enjoys the confidence of the population will be able to boost the domestic financial

---

[79] This section is based on the following article: "Participatory product design by using conjoint analysis in the rural financial market of Northern Vietnam", written by Thomas Dufhues, Franz Heidhues, and Gertrud Buchenrieder and published 2004 in the *Asian Economic Journal* 18 (1): 81-114. I would like to thank Prof. Dr. Manfred Zeller for his helpful comments to an earlier Version of this artikel.

savings rate, now hovering at around 20%, up to rates of 30-40%, as attained in other East Asian countries (WORLD BANK 1995; WORLD BANK 1998). Vietnam is still largely a cash economy, with cash accounting for about 50% of the M3 money supply (WOLFF 1999). There is consensus that in transition countries such as Vietnam, for the financial system to develop a comprehensive service portfolio to all market segments, the regulatory and supervisory framework for banking needs strengthening. In this context, the paper refers to the development of demand-driven financial services in a participatory way.

Broad access to appropriate and sustainable financial services has been pointed out repeatedly as being important for poverty reduction. It contributes to higher incomes and better food security (ADB 2000; BUCHENRIEDER and THEESFELD 2000; HEIDHUES 1995; SCHRIEDER 1996; ZELLER *et al.* 1997). In Vietnam many poor households are confronted with transitory food insecurity, even though their incomes seem to provide an adequate livelihood base over several years. Thus, there is a potential demand for savings, credit, and insurance services to more effectively stabilize consumption and to increase the ability to escape chronic poverty (KANBUR and SQUIRE 2001; SHARMA 2001; ZELLER 1999). Hunger eradication and poverty alleviation, particular in the northern Uplands, is of enormous concern to the Vietnamese government (VBP 1999b). MARD proposes financial services as a powerful tool for poverty reduction (SIDA-MARD 1998). From the early 1990s onwards, the Vietnamese government has begun to establish and promote FFIs such as the VBARD, the VBP and the PCFs to provide the rural poor with cheap loans. This policy is based on the assumption that (1) the rural population is too poor to repay credits at market interest rates and that (2) capital is the factor constraining production and thus limiting food security.

The Vietnamese FFIs have been very successful in increasing their level of outreach. The state-owned VBARD and VBP have reached almost 4.5 million and 2.5 million rural households with credit, respectively (BAC 2001; HANH 2001). These are more than 58% of all rural households in Vietnam. Despite this success in terms of outreach, many rural households demanding credit still lack access. Even those credits that are targeted towards the poor seem to be bypassing the poorest groups, which often are identical to ethnic minorities (NEEFJES 2001; WORLD BANK and DFID 1999). The supply of formal savings schemes is insufficient in Vietnam. Formal savings schemes have not been in the focus of development efforts. Rural households are widely assumed to be too poor to save, and therefore the VBP, for example, does not offer any saving schemes. However, theoretical and empirical evidence suggests that even poor people

want to, need to, and indeed do save for various purposes (KANBUR and SQUIRE 2001; RUTHERFORD 2000; SHARMA 2000; WRIGHT and MUTESASIRA 2001; ZELLER 2001).

The development of adapted financial products has been the orphan of research on financial markets in developing countries and is only now coming into its own (RUTHERFORD 2000). Thus, there is a pressing need to examine ways of designing and introducing new financial service products into MFIs to improve their outreach, depth, and access to them (WRIGHT 1999).

This research work aims at developing innovative client-oriented financial services in a participatory way to improve access to financial services. The objectives can be formulated as: 1. analysis of the supply of formal financial services, and 2. design of client-oriented financial services by means of participatory research.

5.2 Material and methods

The complexity of the rural financial market system requires a whole set of different research methods and tools. Data from three different levels, the household level (demand side), the level of financial institutes (supply side), and the community level need to be collected and analyzed.[80] However, this research sets a special focus on the demand side, i.e. the household level. Primary data collection took place in the period from Mach 2001 to March 2002.

Secondary data were collected at all administrative levels. Semi-structured and unstructured interviews with key persons such as officials of mass organizations or political cadres at the commune and district level provided general information on the research region and on the financial landscape in general.[81] Furthermore, primary data were collected at the commune level. Secondary data from the FFIs

---

[80] Community level is defined as all institutions, policies, and infrastructure above village level.

[81] Due to Vietnam's socialist history, the so-called 'mass organizations' are found everywhere in Vietnam. They are hierarchically structured according to the administrative levels, e.g. Farmers' Union, Women's Union, Youth Union, and Veterans' Union. Some of these organizations offer small loans or organize training courses or saving groups at village level. The Fatherland Front is the holding organization of all other mass organizations and also has political influence on the local people's committees (GEPPERT *et al.* 2002).

and non-formal financial institutes, like non-governmental organizations and special credit programs carried out by the state, were collected. Semi-structured interviews were conducted with bank staff from all hierarchical levels (credit officer to bank manager and district branch to head-quarters). These data were analyzed from the point of view of performance indicators and information economics.

The main part of this analysis is based on the household/village database, comprising households of different ethnicity. Cross-sectional household-level data from the Yen Chau and Ba Be districts in Northern Vietnam were collected, whereby the sample contains agricultural households with and without access to services from the formal financial sector (see Section 5.2.2).

The perception of the target group, namely the rural population, is the most important part of this research work, particularly while designing the conjoint survey. Their view of reality permeates the whole research study to supplement and to validate all other data. Therefore, different participatory rural appraisal (PRA) tools were applied and had their influence on all parts of the research and its analysis. Depending on the purpose, different stakeholders were contacted with the PRA-tools: Women – men, poor – rich, old – young, individuals – groups. PRA-tools applied included: Cash-flow diagrams, mobility maps, wealth rankings, unstructured interviews (partly supported by photographs), different rankings, visualization workshops and role-plays with an external moderator, social mappings, and Venn diagrams.

5.2.1 Conjoint survey[82]

Conjoint Analysis (CA) is commonly used in commercial marketing studies and analysis of consumers' preferences and has its origin in psychological research (WITTINK and CATTIN 1989).[83] Assuming that a product can be defined as a vector in a multidimensional attribute space, and that the evaluation of the

---

[82] A comprehensive description of the methodology of CA can be found in GREEN and SRINIVASAN (1978, 1990).

[83] Preference is a one-dimensional psychological variable. It reflects the perceived advantage between two or more alternatives. The given preference to an alternative does not mean that this alternative is assessed as positive or good. A preference shows merely a relative assessment of alternatives (HAMMANN and ERICHSON 1994).

product is based on its attribute levels, it becomes theoretically possible to relate preference to attributes (JANSSEN *et al.* 1991).[84]

Table 5-1: Credit attributes and their levels

Attributes	Levels
1. Interest rate (percent/month)	1) High (1.2%/month) 2) Low (0.5%/month)
2. Insurance of investment in livestock	1) Insurance of livestock investment (livestock that died due to accident or disease (buffaloes and pigs) will be replaced by their value at time of death; premium 5,000/month per animal) 2) No livestock insurance
3. Disbursal time of the loan	Disbursal time of loan in days from the first day of action to receiving the loan (e.g. in the case of VBARD getting the application form; in the case of VBP creating the group) 1) Quick (7 days) 2) Slow (60 days)
4. Lending scheme	1) Group lending scheme During a group lending scheme, all negotiations with the bank and commune authorities will be conducted by the CGL. The application form will be filled in by the group leader, the interest will be collected by him, etc. 2) Individual lending scheme
5. Collateral	1) Land use certificates (Green and Red Books) 2) Durable consumer goods 3) No collateral required
6. Place of credit negotiations and information	All necessary negotiations, credit disbursal, collecting of interest, collecting of principal will take place at one of these levels. 1) District 2) Commune 3) Village

Source*:* Own figure.

Each product has an almost infinite number of attributes. Many of these attributes do not have a measurable influence on the purchasing decision of a potential consumer or are considered as important only by a very small market segment. Therefore, it is neither possible nor useful to grasp all existing attributes and their levels in market research. It is necessary to reduce the attributes and their levels to a manageable size and to those, which are most relevant to consumers

[84] A possible attribute of a credit product is the interest rate, with the possible level of 20% interest rate per year.

in forming their preferences. Such a reduction requires interaction with the potential consumers to determine the most relevant attributes and their levels. From the perspective of the target population, the attributes and their levels have to be determined in a participatory process because this is pre-eminent for obtaining true-to-life results in the statistical analysis. Engineers and/or economists assigned with developing new products or services may have other priorities than the potential customer.

The rural population, and particularly the farmers, were encouraged during open discussions to describe their financial background and economic conditions with the help of several participatory research tools. The qualitative data gathered allowed to specify possible attributes of financial services that are microcredit and microsavings services. Then relevant microfinance attributes and corresponding levels were pre-selected. These pre-selected attributes were again presented to the rural target group during group discussions and rankings. Here the importance of each attribute was verified or the attribute was dropped (Table 5-1 and Table 5-2).

Table 5-2: Deposit attributes and their levels

Attributes	Levels
1. Savings term	1) Interest-bearing (0.5% per month), three-month time deposit If money is not withdrawn after this time, automatic extension for another 3 months. 2) Interest-bearing (0.3% per month), one-month time deposit If money is not withdrawn after this time, automatic extension for another month. 3) No interest-bearing checking account Withdrawal and deposit at any time.
2. Incentive	1) With a lottery scheme Clients receive a free ticket for the monthly lottery for each 10,000 VND deposit. After withdrawals, clients have to skip three months of lottery unless they deposit at least 10,000 VND more than they have withdrawn. For every 50,000 VND on the account they receive one ticket. 2) No lottery scheme
3. Place of transaction	The savings transaction will be done at one of the following locations. 1) District 2) Commune 3) Village
4. Minimum deposit at opening	1) 20,000 VND 2) No minimum deposit necessary

Source: Own figure.

Orthogonal design: Even if the number of attributes and levels is reduced to the most relevant and important ones, the number of possible concepts which have to be assessed is usually too large to be managed effectively.[85] For instance, in this research, in the case of the credit product, four attributes with two levels and two attributes with three levels have been identified as most relevant. This would result in 144 possible concepts. According to BACKHAUS *et al.* (1996), the CA design should not exceed 20 concepts. Therefore, a reduced design was applied. The basic idea behind a reduced design is to create a manageable number of concepts that represents the full design as closely as possible. The number of concepts is selected in such a way as to permit the statistical decomposition and quantification of each attribute level's contribution to the consumers' choice (RANDOLPH and NDUNG'U 2000). The Orthogonal Main Effect Design for asymmetrical factorial experiments has been applied to reduce the number of concepts (ADDELMAN 1962).[86] An Orthogonal Main Effect Design was created with SPSS 9.0. Hence, the full design for the credit CA was reduced from 144 concepts to 16, and in the case of the savings CA, from 36 to nine without losing important information.

Stimuli: Typically, a CA is carried out using hypothetical descriptions of the service, or so-called stimuli. In this context, a stimulus is defined as the presentation of the attributes' levels to the respondent. Data for CA experiments may be collected by three types of stimulus presentation: (1) verbal, (2) paragraph (descriptive cards), and (3) pictorial or in-kind presentation (GREEN and SRINIVASAN 1978). These stimuli describe distinct concepts and will be assed by the respondents (BACKHAUS *et al.* 1996). This research study follows the recommendation of SCHRIEDER and HEIDHUES (1991) for presentation of financial services, which constitutes a mixture between verbal, paragraph, and pictorial design for the creation of stimuli in developing countries.

Ideas for the visualization of the levels were gained through the whole research process and later on discussed during village workshops, which were moderated by a PRA specialist. The visualization ideas were finally discussed with a painter of the Tay ethnic minority. He converted the ideas, images, and figures into pictograms (BARISCH and DUFHUES 2001; GEPPERT and DUFHUES 2003).

---

[85] Different compositions of attributes' levels create hypothetical product concepts.

[86] An asymmetrical design is defined as a set of attributes with different numbers of levels (BACKHAUS *et al.* 1996).

The pictograms were arranged on DIN-A4 cards according to the orthogonal design and titled with an explanatory headline in Vietnamese. A detailed description of the participatory creation of stimuli can be found in (DUFHUES *et al.* 2003).

The traditional CA involves asking consumers to rank or rate in order of preference different product alternatives. However, this research uses the so-called 'Choice Based Conjoint Analysis' (CBC) approach. CBC does not involve any ranking or rating, but simply asks customers which option they would choose or purchase. This approach is more realistic. Another advantage of the CBC method is the 'none' option. As in the real world, respondents can decline to purchase in a CBC interview by choosing the 'none' option (ORME 1996).

One representative of each household was invited to participate in the CA survey. The respondent was asked to choose the three best alternatives represented by the stimuli-cards, or none. Furthermore, a short interview was conducted to collect data for market segmentation (e.g. sex, age, etc.) and complementary questions on the ideal savings/credit product (e.g. amount of savings).

5.2.2 Regional focus and sampling procedures

Two research sites were selected, namely Bac Kan (Ba Be district) and Son La province (Yen Chau and Mai Son district). Both provinces are located in the mountainous regions of Northern Vietnam and belong to the poorest provinces of the country (WORLD BANK 1999).[87] Ba Be district is a very remote area and has only recently (in 1999/2000) gained access to regional and interregional markets. Farmers produce mainly at subsistence level and a large proportion are to be considered poor. Therefore, the area is suitable for developing client-adapted financial products that can be used as a mechanism to prevent, mitigate, and cope with poverty. Due to the creation of the Ba Be National Park, huge resettlements took place and these have aggravated the problems in the region. Hence, the main focus of this research was set on the Ba Be district.

The communes and villages were selected in accordance with pre-defined selection criteria. These criteria are:

---

[87] The average GDP per capita for Son La province is 206 US$ and for Bac Kan province 149 US$. These figures lie clearly under the national average of 370 US$ per capital (1998) (STATISTICAL PUBLISHING HOUSE 1999).

- Along the slope, to get different stages of market access, ecological zones and ethnic minorities;
- Different phases of the land allocation process, and
- One village with a high proportion of non-farm activities.

Research in rural regions involving foreigners is sometimes perceived by the local authorities as being troublesome for the village society. To keep the intrusion to a minimum, the research was arranged together with the local authorities and local research partners. For example, three communes were selected together with the Thai Nguyen University of Agriculture and Forestry and the local authorities in Ba Be town according to the criteria presented above. Then the leaders of the communes identified three villages in each commune in line with the selection criteria. From these nine villages, four were chosen for the sample. An overview of the research sample in both regions is given in Table 5-3. The households in Ba Be and Yen Chau district were selected using a stratified sample according to the living standard of the population. Different wealth groups are of particular interest for this research in order to take into account the diverse preferences of people.

Table 5-3: Research areas and sample composition

Province and district	Commune	Village	Main ethnic minority		Number of households per village	Selected households	
						Number	%
Province Ba Kan, district Ba Be	Dia Linh	Pac Nghe 1	Tay	(97%)	76	36	47
	Nghien Loan	Khau Nen	Nung	(89%)	36	19	53
	Xuan La	Thom Meo	Tay	(93%)	84	43	51
		Khuoi Khi	Dao	(100%)	40	20	50
Province Son La, district Yen Chau	Sap Vat	Sai	Thai	(85%)	80	42	53
		Na Pa	Thai	(100%)	64	33	52
		Dong	Thai	(100%)	48	25	52
	Chieng Hac	Bo Kieng	Hmong	(100%)	20	13	65
	Chieng Pan	Than	Kho Mu	(100%)	38	20	53
		Tat Heo	Thai	(100%)	16	9	56
Interviewed households in total:						260	

Source: Own figure.

5.2.3 Econometric analysis

Consumers make their consumption decisions based on a joint comparison of different attributes. The CA assumes that a consumer assigns a utility value to each level of each attribute and makes his or her final decision based on the total utility values across attributes for a given product (RANDOLPH and NDUNG'U 2000). Applied consumer research focuses on determining the contributed portion

(part-worth utility) of each attribute level to the dependent variable (MOORE 1980). The part-worth utility is defined as the contributed portion of various attribute levels to the overall acceptance perceived (GREEN and SRINIVASAN 1978). The respondent of a CA interview shows his preferences for different concepts. By using an estimation procedure, the value of each attribute level can be calculated from the overall preference (ALBRECHT 1997). An advantage of the technique is that it can be used to assess hypothetical as well as existing products, and so it is often used to evaluate new commercial products before they are put on the market, or even before they are developed (RANDOLPH and NDUNG'U 2000). Thus, one of the main objectives of the CA is to develop a new product/service according to the true multi-attribute preferences for the product/service of a certain target group (market segment). In addition, it quantifies the impact on consumer acceptance if the demanded attribute concepts are not met (KÖCHER 1990).

The analysis of main effects regarding financial service attributes can lead to valuable insights for designing financial products (SCHRIEDER 1996). The main effects are investigated by using part-worth and total utilities, and the relative importance of single attributes. A utility is a measure of relative desirability or worth. When computing utilities using logit, every attribute level is assigned a utility (also referred to as part-worth). The higher the utility, the more desirable is the attribute level. Attribute levels with high utilities have a large positive impact on influencing respondents to choose products. Just because a level receives a negative utility value does not mean that this level is unattractive. But relatively speaking, other levels are better. Utilities are zero-centered within the attribute and therefore sum to zero in each attribute. The relative attractiveness of a concept can be assessed by adding up the utilities for its component attribute levels (total utility). Utilities cannot be compared between different attributes. Therefore, the relative importance of each attribute is calculated to enable comparisons between attributes.

The CBC 2.6 software was used for data analysis. The CBC 2.6 software applies a multinomial logit analysis. Logit analysis is an iterative procedure to find the maximum solution for fitting a multinomial logit model to the data. Within logit, a multinomial framework is advocated over a binary one. In a binary model of choice, the dependent variable has just two states, to choose one product or not. A multinomial model estimates the probabilities of choosing a product from a number of competing alternatives (HUBER 2000).

The logit analysis is evaluated by the chi-square statistics. Both the credit and savings models have seven degrees of freedom. With seven degrees of freedom, a chi-square of about 25 would be significant at the 0.001% level. The chi-squares

obtained from the logit analysis, which are recorded in the Tables 5-7, A-2, and A-3, are safely larger than this. Therefore, it is safe to say that respondent choices are significantly affected by the attribute composition of the concepts.

5.3 Results and discussion

The following section is based on the analysis of primary data, secondary data, and an extensive literature review. In the first part, the supply side of the rural financial market will be examined and in the second the demand side will be the in focus of the analysis.

5.3.1 Institutional assessment[88]

Vietnam's financial system is still in a formative stage with some legislative issues still in process. Nevertheless, after a decade of financial sector reforms, Vietnam expects the emergence of an effective and efficient banking system (NGUYEN-KHAC and VON GURETZKY-CORNITZ 1996; TEUFEL 1997). By 1997, the former mono-bank system had been changed into a two-tier banking system consisting of the SBVN as central bank and supervisory institution (tier 1), and an operating system (tier 2) consisting of four SOCBs (one of them is the VBARD), one non-profit, state-owned bank (the VBP)[89], about 150 commercial banks in the form of private banks, joint-stock banks, joint venture banks and foreign banks (foreign bank branch or representative office), 947 PCFs (commune level savings and credit cooperatives, which are supervised by the State Bank), and one Vietnam Postal Savings Service Company (VPSC) (QUE 1997; WORLD BANK 1999).[90]

---

[88] The institutional assessment is based on the data collected in Ba Be district.

[89] As mentioned before, the VBP was replaced by the VBSP. The reasons for the establishment of the bank are the separating of policy and commercial credits. This aims at enhancing financial transparency in the country's banking system (SGT DAILY 2003).

[90] The VPSC was established in 1999 and operates under the authority of Vietnam Post and Telecom. Its main functions are to provide a savings product for the underserved (rural, women, and poor) populations of Vietnam and to mobilize savings for government development investments. VPSC offers a time savings and a collection savings (demand deposits) and a limited money transfer system for clients. The operating cost of VSPC is de facto subsidized by the Vietnam Post and Telecom through the use of its staff, as the VSPC itself has only 100 staff on board. The postal savings system offers the use of a structure that is

The formal financial institutes of the rural financial system are the VBARD, VBP, and PCFs.[91] The semi-formal sector consists of special credit programs administered by the State Treasury and by mass organizations. The informal sector (non-governmental organizations, moneylenders, and family or friends) covers the demand not served by the formal and semi-formal sector. Nevertheless, the share of the informal sector has been heavily reduced during the last ten years in favor of the formal sector from 78% (1992/93) of all outstanding loans to 54% (1997/98) (GSO 1995, GSO 2000).[92] It is quite safe to say that this development will continue as the interest rates of the formal sector are constantly lowered (see below Table 5-5). The main players in the rural financial system are the VBARD and VBP. Therefore, in the following sections the structure and performance of these two will be discussed.

5.3.1.1 Structure of VBARD/VBP

Before the financial reform (1988-1990), the VBARD was a department of the SBVN. Its former objective was to provide credit to state farms and cooperatives. The share of credits to SOEs has decreased drastically in the last years and the new objective of the VBARD is to offer financial services, and in particular credit, to all rural households and SMEs (BAC 2001). However, the VBARD concentrates on the better-off market segment. The branch system is split into four levels: 1. Headquarters (Hanoi) and two representative offices (Da Nang and Ho Chi Minh City), 2. provincial, 3. district, and 4. sub-district banks.[93]

The VBP was established in 1995 as the poor people's lending outlet of the VBARD. The VBP is a so-called policy bank, specialized in lending to poor households.

---

obligated to have equal geographic distribution, not access driven by profitability. Up to now, the VPSC is offering its services only in Hanoi, Ho Chi Minh City, and Quang Ninh Province with 710 postal savings services (WORLD BANK 2002a).

[91] PCFs are not the object of this research report, as they are of minor importance due to their little outreach (only 5% of the rural population and the fact, that they are not active in either of the two research provinces (Bac Kan and Son La) (WOLZ 1999).

[92] DUONG and IZUMIDA (2002) found that, in their survey, only 17% of the loans were borrowed from informal sources. MCCARTY (2001) mentioned as one important factor for the reduction of the informal sector the 'crowding out' by the VBARD and VBP, by which both extended their outreach in the last years.

[93] The sub-district level includes the so-called 'mobile car branches'. At the moment, 240 mobile branches are active (BAC 2001).

The VBP uses what is called ex-ante targeting. Only a certain part of the population is eligible for a loan, namely the rural poor.[94] The Vietnamese government classifies once a year every household according to its living standard into one of five classes: Hungry, poor, medium, better-off, and rich (for details see DUFHUES *et al.* (2002) and GEPPERT and DUFHUES (2003). The target group of the VBP is the rural poor. Households from other wealth classes are officially excluded. The purpose of the VBP is not to maximize profit but to reduce poverty (HANH 1999; VBP 1999b).[95]

The VBP basically consists of a head office and it has no own structures below this level. For example, the vice-head of the VBARD branch is at the same time the head of the VBP branch. The VBP uses the operational facilities and staff of the VBARD and of mass organizations at commune and village level in extending its services to the target group. From the monthly interest rate charged to the clients, 0.1% is paid to the local mass organizations and 0.25% to the VBARD for its services.[96] Currently, the average operational costs of the VBP, expressed as interest rate spread, is 0.45% per month (HANH 2001). In 2000, the monthly interest rate charged by the VBP was 0.6%. This means that 75% of the interest revenues are used to cover operational costs.[97]

The poverty focus of the VBP and its high operational costs do not mean that the bank consequently operates at a loss. Due to the highly subsidized interest rates, however, many international agencies consider VBP not to be financially sustainable.[98] Vietnamese policy-makers have recognized this statement and declare the subsidized interest rate policy as a temporary strategy. In the long term, market rates should be implemented (VBP 1999b). However, this objective has

---

[94] The successor of the VBP, the VBSP, has broadened its targeting criteria. Now, not only 'the poor' are eligible for a loan, but also other disadvantaged groups, e.g. pupils, students, unemployed persons seeking jobs (even abroad), individuals and organizations in remote areas (VIETNAM ECONOMY 2003).

[95] The VBSP continues the policy of non-profit making. It is explicitly responsible for granting the preferential loans to underprivileged groups (VIETNAM ECONOMY 2003).

[96] The head of the district branch stated that the payment from the VBP for the VBARD services does not cover the costs (CHAN 2001).

[97] The VBSP will establish its own branch network independently from the VBARD with 80 district branches across the country (SGT DAILY 2003).

[98] The VBP now is recognized as loss-making (VBARD and DANIDA 1999).

not yet been achieved (see below Table 5-5). It looks rather like a fictitious statement to satisfy the international donor community with their requirements for financial sustainability and thus attracting more funds.[99]

Outreach: The VBARD is the biggest supplier of rural credit. In 2001, 4.5 million households were given credit. This figure represents 38% of all rural households. However, the share of VBARD's outstanding credit to mountainous provinces is significantly lower than to rural areas (CECARDE 1999).[100] As the VBARD targets the better-off clientele in the rural population, the bank has been able to meet only a small proportion of the funds demanded by very poor households in rural areas, particular in Northern Vietnam (DUONG and IZUMIDA 2002; VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT 1999a). In South Vietnam, the share of poor people with loans from the VBARD is higher, as the VBP is less active there (IZUMIDA and DUONG 2001). In Northern Vietnam the VBP is covering this market segment. In total, the VBP reaches 21% of all rural households (HANH 2001). Both VBP and VBARD have enormous outreach.

This enormous outreach is reflected by the research sample in Ba Be district. In total, 57% of all households have had an effective demand for formal credit. About 30% of the households were not interested in taking a formal credit. Only 15% of the households in the sample were access-constrained. Keeping in mind that this figure also includes non-creditworthy households the number of constrained but creditworthy households would be even smaller.

Staff: The efficiency of the VBARD has been increased over the last decade. In 1990, 30,000 people worked for the VBARD. From then, the number of staff was steadily reduced to 24,000 people in 2000 (VBARD 2000a). At the same time, the branch system was extended from fewer that 1,300 branches at the end of 1993 to 1,568 branches in 2000 (BAC 2001; SCHENK 1998; VBARD 2000a). Along with the increase in efficiency, however, an overload of work due to

---

[99] The law on credit institutions approved by the National Assembly in 1997 stipulates that the state should establish banks that operate on a non-profit basis (Article 10). This implies that the state will continue to provide cheap credit to rural areas and the poor (MINOT and GOLETTI 2001). Besides, the newly established VBSP continues to provide soft-loans to special target groups (VIET NAM NEWS 2003).

[100] For instance, in 1998 the mountainous provinces received on average 150 billion VND compared to Hanoi, which received 1,200 billion VND.

numerous/transactions was observed in most of the district branches (VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT 1999a). This was confirmed by the research undertaken in Ba Be district. For instance, it was found that some credit officers had to administer more than 1,000 households (CAT 2001). It has been realized that one credit officer, if he exercises all his duties including receiving clients, checking project proposals, disbursing money, checking loan usage, collecting principal and interest, can take care of 500 families as a maximum (CECARDE 1999). Certainly, if the credit officer serves more than this, he cannot fulfill all his duties. Nevertheless, it is vital that the credit officers visit all clients in their home to check their creditworthiness and to prevent heavy debts. This is not possible in case of VBARD/VBP. The VBARD/VBP has therefore delegated many responsibilities to local authorities (heads of the communes). In fact, the credit officer relies totally on the commune and village officials to assess the creditworthiness of the potential borrower.

Both banks apply a group lending scheme to shift responsibilities of screening and monitoring to the clients themselves. However, the principle of peer pressure does not work in the applied group lending scheme (see ***Credits*** below). After the disbursement of the credit to the group members, the credit officer may verify with the CGL whether the group members use the credit as stated in the loan application. Normally he trusts the report of the CGL (giving him room for opportunistic behavior) and does not monitor the credit directly. Basically, no bank staff, but persons outside the bank are involved in the monitoring: The head of the commune and CGL. During discussions with the commune heads and the CGL, however, they admitted that this is not a regular activity. Officially, the loan ought to be repaid immediately if it is not used as stated in the credit contract. Nevertheless, farmers pointed out that as long as they pay the interest and the principal in time, the credit officer and the other local authorities do not bother about the actual use of the credit (DUFHUES *et al.* 2002).

Local information sources in the form of key informants can be an important low-cost mechanism to reduce screening and enforcement costs. Too much dependence by a bank on local networks as sources of information and recommendation, however, can have negative effects in terms of social exclusion of those households not included in the social and political network of the territory (VAESSEN 2001). In general, important information tends to be segmented and to circulate within specific groups or networks to the exclusion of others (ROBINSON 2001). Particularly the very poor households often find themselves in this position, as they are socially excluded and lack access to fruitful relationships with powerful allies (HICKSON 2001).

Mobilization of funds: The financial sources of the VBARD consist mainly of hot money.[101] For instance, in the year 2000 over 95% of the sources were mobilized through savings. The insufficiency of deposit mobilization by formal institutions at the grass-roots level stands in contrast to the successful development of deposit mobilization at national level. The majority funds are mobilized in urban areas. In Vietnam, money is flowing from urban to rural areas (HUNG and GIAP 1999; IZUMIDA and DUONG 2001). The VBARD offers the only formal savings scheme available to households in rural areas in Northern Vietnam. However, even VBARD deposits are overwhelmingly urban, with only a small portion coming from rural households (MCCARTY 2001). Therefore, most branches in rural and mountainous areas have to borrow from the head office. Regulations from the head office do not motivate district branches to mobilize funds (for details see HUNG and GIAP 1999; and VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT 1999a). Moreover, these regulations make branches become used to depending on head office funds rather than competing for funds and improving efficiency in fund mobilization. However, the VBARD branch in Ba Be district seems to rely totally on hot money (BAO 2001). But only one-quarter of this money is based on savings from the population. The rest of the money originates from savings from other institutes, mainly the State Treasury (60%).

The sources of the VBP consist purely of cold money. One of the major reasons for establishing the VBP was to attract international donor funds (VBP 1999b). However, the VBP failed to attain this objective, and international donors provide only small amounts. The government is the main supplier of funds to the VBP. If the government does not have sufficient funds to finance the soft loans of the VBP, the SBVN must refinance the VBP without charging interest on a long-term basis and without a pre-fixed repayment date (NHGIA 2001). The procedure for distributing the funds from the national to the lower levels is rather cumbersome. For its credit allocation process, the VBP relies on information from several public organizations and subordinated branches at the district and provincial levels, and then distributes the funds on that basis (for a detailed description see DUFHUES *et al.* (2002) and Theesfeld (THEESFELD 2000).

[101] Hot money is defined as savings. Cold money is defined as grants and subsidies.

Credits: Lending scheme: Most of the VBARD loans follow an individual lending scheme and only on a very limited scale group lending schemes. In contrast, the VBP uses only group lending schemes (so-called 'joint liability groups') (VBP 2001b).[102] However, in day-to-day practice, the group members are not held liable for each other. If one group member defaults, the only consequence for the other members is that this particular group does not receive credit any more. But individual members who repaid on time can join a new group. This means that it is enough to expel only the defaulter from the group in order to obtain a new credit, as this is officially a new group. Therefore, joint liability does not exist and the concept of peer pressure does not work. Each group has a group leader. He has an obligation to support his group members in all matters related to the loan (a detailed description about the obligations of a CGL can be found in DUFHUES *et al.* 2002). The VBARD/VBP regulations points out that the CGL is also liable (VBP 2001b). He has to repay the loan in the event of default by a single borrower. However, this regulation is also not practiced in day-to-day business.

Loan Terms: Most loans from the VBARD were short-term production loans until around 1996. Recently, however, the situation, has changed quite significantly, with a larger proportion of long-term loans (IZUMIDA and DUONG 2001). Table 5-4 shows the development of the loan structure in the Ba Be district. The demand for short-term loans is decreasing, while demand for long-term loans is increasing year by year. This might be by explained by the fact that the VBARD has eased the criteria for long-term credits and that very popular investments are e.g. husbandry of large ruminants or tree cultivation. For an investment such as these, one year is too short to gain any profit. The government of Vietnam recognized this development and recently gave permission to the VBARD to use 30% of its short-term deposits as medium and long-term loans for farmers to provide more funds for long-term investments.

The VBP uses predefined loan products for all households. In March 1999, the maximum loan size for a loan from the VBP had been set at three million VND and a maximum term of three years. In 2001, the loan size was raised to five

[102] The group lending scheme of VBARD/VBP was supposed to be a copy of the Grameen Bank group lending scheme.

million VND and the term to five years.[103] In comparison to the VBP, the VBARD determines the loan amount by the value of the collateral. Short-term loans are usually not requested (see Table 5-4).

Table 5-4: Loan structure of VBARD/VBP in Ba Be district

	1998		1999		2000		2001	
	Amount	%	Amount	%	Amount	%	Amount	%
VBARD short-term	826	19	722	16	779	10	698	6
VBARD long-term	3,562	81	3,801	84	7,240	90	10,316	94
VBP short-term	121	8	50	2	0	0	0	0
Long-term	1,313	92	2,291	98	3,471	100	3,326	100

Source: VBARD (1998, 1999, 2000b, 2001a) and VBP (1998a, 1999a, 2000, 2001a).

Notes: Figures are in VND millions. Classification of loan term: Short-term: ≤ one year; long-term: > one year (BAC 2001).

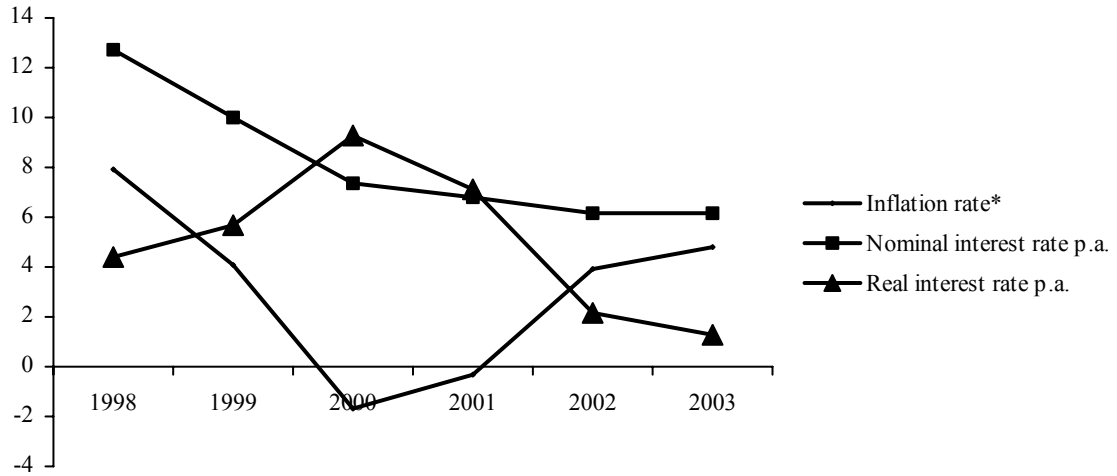
Interest rates: The Vietnamese Government sets an interest rate ceiling through the SBVN to provide the population with soft loans. After financial reforms at the beginning of the nineties, the real interest rate became positive in 1992 (SENANAYAKE and HO 2001). Since then, however, the nominal interest rates, particularly those of VBARD and VBP, have been gradually reduced (see Table 5-5). Interestingly, apart from the nominal price, the credit conditions have remained more or less the same over the years. Over this period, the effective demand increased continuously. The demand was satisfied through the Vietnamese government by supplying additional funds to VBARD and VBP for lending on. Apart from two years, 2000 and 2001, when Vietnam experienced deflation, the real credit interest rate also declined (see Figure 5-1). The increasing credit demand is certainly positively correlated with the declining price, but also with the improvement of the transport infrastructure, which allowed the credit officers to reach more remote villages that were formerly not serviced.

Nevertheless, commercial banks such as VBRAD are allowed to adjust their credit interest rates within a range of 0.25% for short-term and 0.3% for medium- and long-term loans (NGUYEN 2001). However, the VBARD has to give a

[103] The VBSP will provide short- and medium-term loans only. Long-term loans will be considered later (VIETNAM ECONOMIC TIMES 2002). A single borrower will be entitled to get a maximum loan of ten to fifteen million (SGT DAILY 2003).

discount of 15% on the interest rate for farmers who are living in a poor commune and 30% for those living in a very poor commune. The interest rate payments are collected on a monthly basis, or every three or six months (depending on negotiations with the credit officer) and the principal is usually paid at the end of the term.

Figure 5-1: Real credit interest rate of VBP in Ba Be district, 1998-2003



Source: *ADB (2001), CIA (2002), and EIU (2002).

Notes: The monthly interest rate was lowered in 2001 from 0.6% to 0.5%. Therefore, the average interest rate of 0.55% was used for the calculation of the real interest rate. It was assumed that the monthly interest rate of 2001 (0.5%) will stay the same in 2002 and 2003. The estimated inflation rate for the years 2002 and 2003 is based on EIU (2002).

Table 5-5: Nominal interest rates per month of VBARD/VBP in Ba Be district

		June 1997	1998	1999	2000	2001
VBARD	Short-term	1.25%	1.2%	1.2%	1.1%	1.0%
	Long-term	1.05%	1.0%	1.0%	0.9%	0.8%
VBP		1.20%	1.0%	0.8%	0.6%	0.6/0.5%

Source: VBARD (1997, 1998, 1999, 2000b, 2001a) and VBP (1997, 1998a, 1999a, 2000, 2001a).

Notes: Classification of VBARD, short-term: ≤ one year; long-term: > one year (BAC 2001).

Loan use: Households desire to use funds for various purposes while formal financial institutions only finance a number of specific purposes. In former times the VBARD provided only financing for agricultural production, but little or none to other production activities or services (VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT 1999a). The fungibility of money has been noticed by the VBARD's headquarters and the formerly strict rule has been attenuated recently so that nowadays trading and small-scale processing will also be financed (VBARD 2001b). Rural households are now allowed to spend their loan for any purpose, even for consumption (IZUMIDA and DUONG 2001). Due to the close connections between VBARD and VBP, it is very likely that the headquarters of the VBP will

soon adapt its policies, too. However, this new development has not yet reached the Ba Be district. The VBP still finances only a limited range of 'obvious' or 'fashionable' purposes related to agricultural production (e.g. rice cultivation, pig raising). There is not much room for innovative or idiosyncratic proposals (UN 1998).

Collateral: The VBARD requires collateral for its loan. Usually land use certificates, 'Green Books' or 'Red Books' are taken as collateral.[104] The collateral often does not reflect the real value as no differentiation is made in the assessment of the land. Different qualities of land are given the same value (e.g. paddy rice or forest). During the loan term, the land use certificates are kept in the bank, until the principle has been repaid (BAC 2001, CAT 2001). The land use certificate can bear only one loan, even if the loan amount is less than the value of the certificate.

Other accepted forms of collateral are government wages and houses.[105] The collateral, except land use certificates, must be notarized at the certification office in Ba Be town if the value exceeds ten million. Below ten million an approval from the commune is sufficient (CAT 2001). If the loan exceeds 50 million, the collateral must be notarized in the province capital (BAO 2001). Only part of the value of the collateral will be granted as a loan. For instance, in the Dia Linh commune 70% of the value of the collateral will be granted, while in the other communes it is only 60% (DOAN 2001).

Although, the government states that farm households can take out loans of less than ten million without any collateral, the VBARD still requires certificates of land use certificates and guarantees from local authorities as loan security. Therefore, these households without certificates have difficulties in accessing formal loans from the VBARD (MCCARTY 2001). However, the ongoing dissemination of 'Red Books' in recent years brought an increasing number of households into possession of assets that are useable as collateral, which broadened the possible outreach dramatically.

Nevertheless, the land market is still underdeveloped. Only few households in fact sell or buy land and usually it is traded within the village. Therefore it is difficult

---

[104] and is owned by the state in Vietnam. Nevertheless, in 1993 the renewal of the law was completed and since then, the government allocates land use certificates to farm households, the so-called 'Red Books' for agricultural land (valid for 20 years) and, since 1999, 'Green Books' (valid for 30-50 years) for forest land. Farmers are allowed to sell, rent, or pass land on to children (LUIBRAND 2002).

[105] The VBARD recently announced that it will also accept assets other than land use certificates, houses, and wages to improve their outreach to SMEs.

for the banks to liquidate land. Often, the only possibility would be the expulsion of the farmers from the land before liquidation (BAC 2001). At the moment the VBARD uses only psychological pressure to the farmers relating to the possibility of losing their land. None of the villagers or key persons interviewed knows of any case of land liquidation in this area. Therefore, there might be the danger of a moral hazard. If farmers find out that the VBARD is not going to liquidate their land in the event of default, the bank might end up in a landslide of bad debts.

The VBP does not require any physical collateral for its loans. However, the approval of the head of the commune can be considered as social collateral according to DUFHUES *et al.* (2002). Besides, anecdotal evidence from the village survey showed that in some cases of 'hungry' households, which are officially excluded as they are assessed as too poor, the credit officers insist on collateral in the form of a 'Red Book' for a VBP loan too. However, this is in contrast to the national policy of the VBP, namely to provide collateral-free loans.[106]

Repayment rate: The official repayment rate is quite impressive. In the year 2000, only 1.1% of the loans were not performing (VBARD 2001b). Nevertheless, in this case the repayment rate is an inadequate indicator of good performance, as the VBARD has so-called 'frozen debts', which are not counted as 'not performing' or 'overdue' as the principal is guaranteed by the SBVN. These debts will not bear any further interest.[107] The loan recovery is generally overestimated. Besides, the arrears of the VBARD do not contain rescheduled loans. The details of rescheduling loans are not clear in annual reports or in interviews with VBARD staff. A loan can be rescheduled several times but not beyond one production cycle for short-term loans or 36 months for medium/long-term loans (IZUMIDA and DUONG 2001). As the liquidation of collateral is not possible, rescheduling of the loan is often the only possibility for the credit officer to avoid designating a loan as overdue or not performing.[108]

---

[106] The VBSP will continue to provide collateral free loans to certain target groups (VIETNAM ECONOMY 2003).

[107] In the event of a natural calamity or something unavoidable, the SBVN admit some loans from VBARD as frozen debts.

[108] The new VBSP will take over most of the non-performing loans made by the VBARD to poor households. This of course will serve the VBARD very well but the VBSP has to carry a heavy burden right from the start (VIR 2003).

The VBP too has a very high repayment performance of 98% (HANH 2001). But again this is only a poor measurement of good performance, as rescheduling of loans in VBP too is extremely high; it is reported to be as high as 70% in some provinces (VBARD and DANIDA 1999). As the staff of VBARD and VBP is identical, it is not surprising that the instrument of rescheduling is also heavily used within the VBP.

Procedure: The procedure for obtaining an individual loan from the VBARD is described in Figure 5-2. The credit officer supplies the farmer with the application form. But it is not uncommon that the credit officer does not have the form with him. This means that the farmer has to go to the district or wait until the next visit of the credit officer to get the form.

In general, TCs such as credit fees, cost for forms, opportunity cost of time, etc., were not seen as an access barrier by the farmers themselves. Nevertheless, the striking disadvantage of this credit product is the high transportation costs due to the frequent journeys required (at least three) to the district capital. For the more remote households, this is a very strong market entry barrier. Particularly, the first two visits were mentioned by farmers as representing access barriers, as the farmers do not know at that time whether the loan will be granted or not. This problem could be solved by implementing so-called profit centers and through a real decentralization of the decision-making structures.

The directors authorize all small loans as recommended by the credit officers. In essence, credit officers, though not authorized to impose any limit, are authorizing small loans. This impression was confirmed by research work done within the VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT (1999a). However, this practice is still far from being a decentralized profit center as implemented for example by the Bank Rakyat Indonesia (BRI) (SEIBEL and SCHMIDT 2000).[109] This form of decentralization is called 'deconcentration', and is predominant in Vietnam (GEPPERT *et al.* 2002; HIEN 1999). Within the deconcentration process, the authority remains with the central agency.

The procedure of the VBP is very similar to the procedure for VBARD loans, but most of the steps are carried out by the CGL. Therefore, the TCs for the single borrower are much lower. Nevertheless, as it is a group lending scheme, the whole procedure is

[109] Profit center is defined as a semi-autonomous, independently accounting corporate unit responsible for its own operations, profits, and losses (TOFFLER 1990).

much more time-consuming (for details see DUFHUES *et al.* 2002). Recent credit policy developments, however, show that the credit products of the VBARD and VBP are becoming more and more similar, and so their market segments are converging. For instance, the VBARD now tries to offer a credit product that does not require collateral for loans of less than ten million VND (VBARD 2001b). At the same time, the VBP has broadened its credit term to five years and raised the maximum amount to five million VND (VBP 2001b).[110] It is not clear to potential customers whether this credit is a VBP product or whether it is a VBARD product, offered by the VBP. Some farmers even switched from the VBARD to the VBP because of its lower interest rate, despite having collateral and not belonging to the eligible target group of the VBP. This marketing strategy can affect the sustainability of both institutions.

Figure 5-2: The six-step procedure to obtain an individual loan from the VBARD in Ba Be district

1. The farmer contacts the credit officer in the district or in the commune to discuss with the credit officer the purpose of the loan, the amount, the profitability of the investment, and further steps (if farmers can not calculate the profitability of the investment, the credit officer helps to do so); then the farmer receives the application form.
2. The farmer fills in the form at home, because the wife and any children over 18 in the household have to sign as well.
3. The farmer has to take the form to the commune to get a signature and a stamp from the head of the commune.
4. The farmer brings the form and the land use certificate to the bank. (The credit officer visits the household to check if everything is correct and arrange an appointment at the bank (usually Tuesdays and Wednesdays). He mainly checks the collateral. Many farmers stated that the credit officer never visited their households, as they have to give him the land use certificate to keep it in the bank, he has no need to visit the household.)
   Internal steps of application: *a) The credit officer signs the application.*
   b) The head of credit office signs the application.
   c) The director signs the application.
5. The farmer has to come to the bank to ask whether his application was approved or not; if yes, he agrees a date with the credit officer for the disbursal of the money.
6. The farmer comes on the arranged date and receives the money disbursed.

Source: Own figure.

Notes: [1] The signature also confirms that the applicant lives in the area. The head of the commune may refuse the signature if he knows of a disagreement between the married couple as it relates to the credit application, in cases of drug abuse of the applicant, or so-called social evil in the households.

[110] The new VBSP adjusted its credit scheme even further to the credit scheme of the VBARD (see Footnote 103).

5.3.1.2 Supply of savings products

The VBARD's head office offers different savings schemes: A demand deposit scheme, which is mainly used by companies and term deposit accounts with three, nine, twelve, and more than twelve-month terms. Bonds are available for two, three or five years. However, long-term deposits are not popular and are rarely demanded (BAC 2001).

Savings accounts at VBARD's branches are traditional, simple and not attractive enough to customers. Branches offer only a very limited choice of savings products, for instance the branch in Ba Be district offers only demand deposits (0.15% per month) and three month (0.25% per month), six month (0.4% per month), and twelve/thirteen month (0.45% per month) deposits, while customers' need a more diverse supply. There is no linkage between credit and savings in branches' and credit officers' operations. For example, loans are disbursed directly in the communes (as in the case of VBP) and credit officers also visit the villages, but to save money, customers have to go personally to the branch offices. For remote households this is an invincible market entry barrier, as transport costs to the branch office are often much higher than the amount saved (VIETNAM-CANADA RURAL FINANCE OUTREACH PROJECT 1999a). Another barrier, particularly for poorer households, is the minimum deposit of 50,000 VND. Many poor households are not able to save this amount at one time. Despite the fact that the interest rate on deposits has been sinking year on year, the numbers of savers and the amount saved have increased in the last four years (Table 5-6). Nevertheless, as discussed above, almost 100% of the savings are of urban origin. Savings mobilization plays no role in the range of services of the VBP.

As a reason for the lack of formal savings schemes in rural areas, the high cost of deposit collection is often mentioned. Rural households are scattered geographically and their potential deposits are very small. In developing countries the bad infrastructure aggravates the situation. Nevertheless, it is now widely agreed that microsavings can be collected in a profitable and sustainable way (for discussion see ROBINSON 2001). However, in Vietnam the cost argument did, if at all, influence only slightly the decision of not implementing a rural saving scheme. It is the national consensus, adopted by the staff of the VBARD/VBP,

that poor households are not capable of saving (CAT 2001; CHAN 2001; HANH 2001; HUNG and GIAP 1999).[111] Many non-governmental organizations and research projects in Vietnam found evidence to the contrary. The negative attitude towards savings is one of the main obstacles for improving savings products in order to achieve wider outreach to the rural population.

Table 5-6: Savings products at VBARD in Ba Be district

	1998		1999		2000		2001	
	Amount	Saver	Amount	Saver	Amount	Saver	Amount	Saver
Demand deposit	/	/	336	171	206	146	278	152
3-month deposit	148	23	94	19	189	21	57	16
6-month deposits	1,374	116	2,732	215	2,962	247	4,599	379
13-month deposit	1,978	133	/	/	/	/	/	/

Source: VBARD (1998, 1999, 2000b, 2001a).

Notes: Amount in VND millions. This table includes only savings of the population and SMEs, excluding public agencies.

5.3.2 Potential demand

This section empirically applies CA to identify the specific demand for financial services and to formulate market and client-oriented financial policies. First the potential demand for credit services then saving services will be discussed. In the following the households are segmented by wealth (three classes) and by gender.

5.3.2.1 Potential demand for credit

Without any market segmentation, the credit attributes are assessed with similar relative importance. However, within the wealth segmentation the relative importance of attributes differs greatly. The indigent and medium households valued the attribute 'disbursement time' as most important (see Table A-2 in the Annex). Both groups have a high preference for quick disbursal of loans. This finding is supported by KANBUR and SQUIRE (2001), who state that poor households often

[111] In all interviews with VBARD/VBP staff, the costs of saving collection were never mentioned as an obstacle for the implementation of a rural saving scheme.

use quickly accessible credits as a tool for income and consumption-smoothing and to cope with external shocks. This explains why poorer households have a stronger preference for quick loans than rich households.

All groups value the livestock insurance positively. However, it plays a minor role in the decision process relating to taking a credit, except for indigent households. The existence of livestock insurance is the second important parameter in their decision process relating to taking a credit. Yet, the differences between the attributes in this class are rather small. Nevertheless, poor households are well known for their risk-averse behavior.[112]

Surprisingly, medium households prefer the district to the commune (the district is more remote from the rural household's perspective), and indigent households value commune and district almost equally as the place for the credit transactions. This might be explained by the fact that the regional market also takes place in the district, which gives the district an additional attraction, especially for the poor who seldom leave the village. However, for indigent and particularly for medium households it seems quite important (second highest relative importance) to conduct all credit transactions in the village. In comparison, rich households prefer the commune as the transaction place. This result is not significant, but it is supported by qualitative research. Members of rich households are often working at the commune or have family members or close friends who do so, and therefore have close contacts with commune officials and especially to the head of the commune. The head of the commune has a prominent position in the local rural credit market of Northern Vietnam (DUFHUES *et al.* 2002). Therefore, it may be that those households expect to take advantage of this relationship.

Rich households assess the attribute 'collateral' as most important, and within this attribute, the level 'no collateral required'. This is surprising, as rich households are considered to be in possession of sufficient collateral. Although this is not significant, one explanation for this outcome might be that rich households are more afraid of losing their collateral in the event of default than other households.

---

[112] Over 80% of all households would take out livestock insurance even without a credit. Particularly the poorer households demanded this service. Therefore, the implementing of such a livestock insurance scheme would probably directly benefit the poor.

This seems to be particularly true for 'durable consumer goods'. These goods might be assessed by local authorities and bank staff as luxury goods and are probably easier to seize than land use certificates.[113] Therefore, the rich value 'durable consumer goods' very negatively. In comparison, poorer households do not seem to care much about collateral. The relative importance of the attribute is only 17%. It is striking here that they place land use certificates on the same level as 'no collateral'.[114] Indigent farmers are not afraid to give their land use certificates as collateral. They may be convinced that their investment will not fail or, more likely, they believe that the bank will not seize the land. In the event of loan default, they expect to be helped by the bank or the government. Usually this means that the credit officer will extend the loan, or in the event of a natural disaster, the government will step in and freeze any debt obligations. The finding is confirmed by DUONG and IZUMIDA (2002), who state that in rural Vietnam only few cases are known where land has been sold because of a farmer's default.

Men and women did not show great differences in their preference for credit products. Therefore, we refrained from showing the detailed table here with all utility figures and t-values. Only a slight difference was found within the attribute 'lending scheme'. Both sexes favored the individual lending scheme. However, male respondents preferred the individual lending scheme to a greater extent than women (15% to 11% relative importance). This might be explained by the fact that women are usually less educated and more reluctant to deal directly with local officials or bank staff. Therefore on average they are more loath to the individual lending scheme than men.

The share of households who chose the 'none' option (indicating no credit demand) was highest in the case of the rich and second in the case of the indigent. Rich households do possess a certain self-financing capacity and indigent households often lack investment ideas due to a low educational level. Yet, when the indigent

---

[113] Land markets are still in a rudimentary stage in Vietnam.

[114] 88% of the surveyed households in Ba Be district have Green Books or Red books. The average in the three research communes is slightly lower, at 70%, but still high. However, not every household possesses a land use certificate. The share of households with certificates varies greatly between the villages. In some villages, not a single household has a certificate and in others all of them do. Villages with better access to the infrastructure

group is separated into poor and hungry households, it shows that only 5% of the hungry households chose the 'none option'. The poorer the households, the greater the share of households who want to use a credit. It is likely that some of these households are so pressed for funds that they would take any credit, no matter what the credit terms or features are. The numbers of male respondents who picked the 'none option' was almost double compared to the number of females. Therefore, it seems that women do have a much greater demand for credit than men. McCarty (2001) points out that the vast majority of rural loans are given to men. Therefore women seem to have an unsatisfied demand for credit products. Nevertheless, in general the demand for credit is still enormous due to the low interest rates set by the government.

The assumption that certain attributes of a credit product could compensate for a higher interest rate is not confirmed in this research. Almost 100% of the respondents choose the cheaper credit. This strong focus on interest rates might be explained by the fact that rural Vietnam has gone through a decade of continuous reduction of interest rates and a history of public pronouncements on how important low interests are for rural development and the improvement of rural living. Besides, farmers often have the impression that the VBP particularly is not a bank but an institution to help the poor. Nevertheless, farmers are willing to pay extra fees for special services, as the insurance attribute has proven.

5.3.2.2 Potential demand for savings

With regard to developing savings products for the rural poor, emphasis ought to be placed on liquidity and low TCs (Zeller 1999). Nevertheless, a monetary incentive to save is also important. The results from the logit modeling show that households in all wealth groups give special emphasis to a high interest rate for savings (Table A-3 in the Annex). Corresponding to economic theory (time preference rate), this tendency is more distinct in poor and hungry households. Men clearly put a high interest rate above everything else. Women too are in favor of a high interest rate, but they rate a sight deposit account without any interest more highly than a one-month time deposit with a 0.3% interest rate. A possible interpretation for this outcome is that women are more often confronted directly with family emergencies and therefore prefer an

---

have a greater probability of possessing land use certificates.

always-accessible sight deposit account providing access to the deposit immediately in case of sudden need.

As saving is a much more regular activity than obtaining a credit, it is not surprising that the level 'saving in the village' is valued highly by the indigent households. Poor households seldom leave the village and the small amounts they intend to save are easily eaten up by travel costs. OWENS and WISNIWSKI (1999) pointed out that close physical contact is essential to reach the poor with savings products. Rich and medium households favor the commune as the place to save, but this result is not significant. Nevertheless, some farmers mentioned that they prefer saving in the commune or in the district because they would not trust people collecting savings in the village, even if this were a bank employee. Farmers mentioned a case where the credit officer collected the interest rate payments in the village and gambled it away on the way back to the bank. It was not clear whether farmers had to bear the loss or the bank. Although cases like this are very rare, they create an environment of distrust. Trust in the bank is essential for attracting savings. LEDGERWOOD (1999) states that MFIs providing credit services must select borrowers whom they trust to repay the loan. When collecting savings, however, it is the customer who must trust the MFI.

Lottery linked deposit accounts have proved to be successful to attract savings in many countries (GUILLEN and TSCHOEGL 2002). The lottery scheme was also analyzed for different wealth groups. In comparison to indigent households, medium and rich households accept the lottery as an incentive to save. However, these results are not significant. Indigent households are very indifferent about the lottery incentive. The lottery itself is assessed as positive but the attribute plays almost no role in the decision process whether to save or not. All farmers understood the lottery, but some had difficulties to comprehend that this is a kind of incentive. This idea was very unfamiliar to them. However, the risk-averse behavior of poor households might deliver another explanation, namely that winning a prize in a lottery is not secure, but interest rates are. Some poor farmers mentioned that they would never win the prize. It is surprising that women favor the existence of a lottery more than men. Usually women are more risk-averse than men. However, when considering only indigent women, the utility of the lottery became negative. But this result is not significant.

From rich to indigent households, an increase in choosing the 'none' option (indicating no interest in savings schemes) was observed. Rich households have more money to save in the bank. Besides, members of rich households are used to dealing with local officials and therefore can better assess their trustworthiness.

Women strongly prefer to save in the village as compared to men (Table 5-7). RANDOLPH and NDUNG'U (2000) state that TCs may vary by gender, e.g., a woman farmer with reproductive responsibilities may face higher opportunity costs of time when leaving the village to seek any kind of services than a male farmer. Women are responsible for many tasks in the household and on the farm. It is much more difficult for them than for men to reallocate time towards other activities. Therefore, WORLD BANK and DFID (1999) concluded in a study about poverty among ethnic minorities in Northern Vietnam, that any kind of policy intervention must consider women's high opportunity costs of time and their tight time schedules.

Table 5-7: Logit estimation of average utility values for saving attributes, by sex

	Male (189 respondents)		Female (68 respondents)	
	Utilities	t-values	Utilities	t-values
Interest rate and term				
No interest rate / demand deposit	-2.247	-3.130***	-0.217	-0.360
0.3% Per month for a one-month deposit	0.110	0.225	-1.167	-1.745*
0.5% Per month for a three-month deposit	2.137	5.791***	1.384	4.502***
Relative importance in %	50%		24%	
Incentive scheme				
No lottery	-0.446	-1.110	-0.944	-2.119**
Lottery	0.446	1.110	0.944	2.119**
Relative importance in %	10%		18%	
Location of depositing and withdrawing				
Village	1.447	6.026***	1.947	3.966***
Commune	-0.517	-1.270	0.430	0.817
District	-0.929	-3.265***	-2.377	-2.963***
Relative importance in %	27%		41%	
Minimum requirement for account opening				
No minimum requirement	0.518	2.114**	0.933	2.248**
20,000 VND	-0.518	-2.114**	-0.933	-2.248**
Relative importance in %	12%		18%	
None option	2.138	5.086***	1.937	3.088***
Percentage of households choosing none option	13%		11%	
Chi-square	350.894		117.704	

Source: Own calculations.

Notes: * Significant at 10% level. ** Significant at 5% level. *** Significant at 1% level.

5.4 Conclusions and policy recommendations

The CA provided some valuable insights into how to improve the financial services of FFIs to the population by adapting the existing services. The results of this research show that the VBP particularly can improve its credit services by offering individual loans, as this kind of lending scheme was strongly preferred by the sample population. This approach would also reduce the administration time of the credit procedure, i.e. TCs.[115] It could also go hand in hand with the increasing introduction of physical collateral instead of group liability, as farmers showed that they are able and willing to use their land use certificates (Red Books) as collateral. However, without an effective land market for trading Red Books, it will probably be risky for the credit institutes to rely more on land use certificates as collateral. Nevertheless, VBP and VBARD together already have enormous outreach. At this stage, implementing a consolidation policy and establishing financially sustainable structures would deserve priority over boosting credit outreach further by implementing new structures. An important element for inducing innovation in the microfinance industry is to nurture conditions for greater competition between different suppliers. As long as no effective competition exists in the rural financial market in Northern Vietnam, there is little incentive for the institutes to improve their products. The only competition exists between the VBP and the VBARD.

This research has shown that poor households are able and willing to save. Over 80% of the households demand a formal savings scheme. The supply of savings services offers firstly the possibility to create financially sustainable structures within the existing institutes, and secondly to boost the outreach of the formal financial sector. When offering savings services to the rural population, especially to the poor, close physical proximity to customers is seen as a key factor. This proximity could be achieved by creating decentralized profit centers. Credit officers would collect and pay out savings as well as performing all credit activities. Thus, the deposit collection could be done within the village. The local savings collection by the credit officer would also influence very positively the credit business. The credit officer has access to a much broader range of information to

[115] The recently established VBSP, successor of the VBP, will also offer collateral free soft loans to individuals.

assess the client's creditworthiness. These profit centers also guarantee a good internal monitoring of most operational costs involved in financial intermediation. A good example is offered by the BRI. Besides, savings instruments need to be promoted much more than credit. Therefore, a marketing and advertisement strategy is essential to absorb substantial amount of rural savings.

Nevertheless, the main challenge will be to implement a safe, attractive and cost-covering deposit collection system at the village level. Simple savings products can coexist with more complex market-segment-oriented saving products. Therefore, a range of products should be implemented and promoted. The implementation of the Vietnam Postal Saving Company (VPSC) is a right step in this direction. Although the VPSC potentially offers a very deep outreach down to the commune and village level, the 710 postal savings services are far away from having a significant outreach to the rural population and particularly to the rural poor. As WORLD BANK (2002a:46) states: "In a country where 80% of the population lives in rural areas, even the 2000 branches of VBARD cannot reach wide, nor deep enough to the population at large." Nevertheless, the politics of VBARD and VBP respectively VBSP have not changed so far regarding the implementation of a savings scheme to reach the rural population. Before this can happen a paradigm change is called for. The rural financial intermediaries in Vietnam need to recognize the ability and the demand of the rural population to save.

6 Final conclusion

The rural financial market in Vietnam is, and in the near future will continue to be, strongly dominated by state-owned financial intermediaries. The liberalization of interest rates is an important step towards full transformation of the financial system and offers the potential for financial intermediaries to supply cost-covering services. However, as long as the Government continues to supply subsidized credits to major parts of the population, it is unlikely that any viable services (private or state-owned) can be provided in the rural financial market. The VBSP and the VBARD continue to crowd out competition, inhibiting the deepening of the financial system and impeding innovations.

A promising development is the attempt to integrate the savings of the rural population into the financial system. This attempt has resulted in the creation of the VPSC and might indicate a paradigm change, namely recognition of the rural population's ability to save financially, and consequently recognition of their demand for deposit instruments. Finally, this paradigm change may bring to an end the tradition of considering credits as the only financial tool for development. The VBARD, however, despite its immense network, has never reached deep enough into the country to attract rural savings. Furthermore, the VBSP does not show any intention to offer savings instruments to its customers. Therefore, discontinuing the Vietnamese soft loan policy will likely take more time.

Though the creation of the VBSP, the Vietnamese government has at least formally separated political lending from commercial lending. Earlier evidence from agricultural development banks in other countries, e.g. by ADAMS and VON PISCHKE (1992) and HEIDHUES and SCHRIEDER (1999), to name but a few, suggests that VBARD, now freed from political lending, is likely to dismiss its peasant clientele and concentrate on more lucrative rural business with bigger and wealthier farmers. The VBSP will offer subsidized loans on a broad scale and will obviously be a drain on public resources. The question is, how long can the Vietnamese Government

finance the VBSP, and who will serve the rural poor after the collapse of the VBSP, should the government discontinue subsidizing the VBSP?[116]

Despite all the progress achieved in the transformation of the financial system, its sustainability is also still threatened by an accumulation of non-performing loans amassed by SOEs over the years. In addition, the problem of non-performing loans is spreading to the private sector and particularly to rural households. Apart from macro-economic threats to the financial system, this moral hazard behavior is hindering the establishment of any viable rural financial intermediation.

Compared to a decade ago, the informal market now plays only a minor role. The breadth of outreach of the major formal rural lenders (VBARD and VBP, now VBSP) is immense and their poverty outreach is satisfactory since about 50% of all predominantly poor rural households have access to formal credit. However, the outreach analysis has shown that the poorest households are seldom clients of formal lenders. Only slightly more than 20% of the poorest households are served by formal lenders. When considering access to formal credit, this figure must be re-evaluated. As the logit analysis (see Section 4) revealed, general poverty (as captured with the poverty index) does not significantly influence access to formal credit. The results indicate that only certain aspects of poverty, e.g. low quality of housing, have an important influence on access to formal credit in Vietnam. Thus, the poorest households use formal credit less often, but are not significantly more often access-constrained. This means that the poorest households simply have much less demand for the types of formal credit products on offer. Improving credit products or offering new credit lines would only slightly improve the credit coverage of poorer households. A more promising approach would be to introduce a specialized pro-poor extension service to widen the scope of their investment ideas and opportunities, combined with a general improvement in the infrastructure. One factor that very positively influenced access to and demand for formal credit was the connection to the market. A good market connection serves credit outreach in a twofold manner: First, households have better access to credit-relevant information; and second, through better market access they may find new investment opportunities.

---

[116] The VBSP is assumed to be financially not sustainable (IZUMIDA 2003).

Nevertheless, the share of access-constrained households is surprisingly low (only 16%). One reason for the low figure is the weakening or eradication of former access constraints (e.g. lack of physical collateral, literacy requirements, remoteness) through locally disbursed group credits. Considering the anecdotal reports of very low repayment rates, the price of eradicating these access constraints has likely been a decrease in financial sustainability of the formal lenders. However, some barriers to access continue to exist, particularly for ethnic minorities or female-headed households. To reduce these access barriers, locally-oriented rather than general actions should be taken, catering to the needs and the circumstances of those households which lack access.

Nevertheless, the recent efforts of the Vietnamese government, for instance the establishment of the VBSP, represent an attempt to broaden access in general. But this increase in outreach will go hand in hand with an increase in access to credit for non-creditworthy households, thus resulting in decreased repayment rates. The situation will possibly be aggravated by the fact that the VBSP will supply subsidized loans for higher education. Without the creation of appropriate jobs, however, newly graduated young debtors will face difficulties in paying back the loan, as has recently been the case in China (THE ECONOMIST 2004). Furthermore, many people consider political lending to be a gift from the government, one that they are not required to repay. There is a very real possibility that expanding accessible policy credit could create a mountain of bad debt (IZUMIDA 2003). If rural lenders in Vietnam were one day forced to work in a competitive environment according to market principles, there would be a great chance that large parts of the population would be access-constrained as a result of previous loan defaults. Moreover, it is questionable whether households that do not demand the existing products today will demand credits from the VBSP in the future.

A more sustainable way to promote outreach would be to improve the rural population's knowledge in general, and in particular that of fringe groups such as ethnic minorities or female-headed households, of credit application procedures, as access (especially by fringe groups) is often hampered simply by a lack of information. The information supply to rural households as regards essential credit information is impeded by the supply-oriented flow of information and by relying on local authorities for the dissemination of credit relevant information.

Ethnic diversification of bank employees could broaden the information networks available and could create more awareness of those groups inside the institution. Furthermore, special female credit officers for female-headed households could work in the same direction. Local information centers, in combination with the

introduction of regular information days (preferably market days), when bank staff is locally available for questions and discussion, would further improve the availability of information. Designing employees' contracts to include incentives to pass on information to different social networks would round off a transparent credit policy.

As mentioned above, however, state-owned rural lenders have already an enormous outreach. At this stage, implementing a consolidation policy and establishing financially sustainable structures would deserve to take priority over boosting credit outreach further by introducing new structures, which are unlikely to improve credit outreach significantly – particularly as the poorest households would profit the least from broadening credit outreach on a large scale. The most appropriate tool to incorporate poorer households into the formal financial system would the mobilization of savings. As stated by several scholars, all people can save, even the poorest of the poor, and therefore deposit services have deeper outreach than credit (CHARITONENKO *et al.* 2004; SCHREINER 2002; ZELLER and SHARMA 2000). In contrast to the enormous credit outreach in Northern Vietnam, formal savings are used by rural households only on an insignificant scale. However, this low effective demand for savings instruments is caused by inappropriate savings products and not by the inability or unwillingness of the rural population to save. This research has proved again that even the poorest households in Northern Vietnam are able and willing to save. Over 80% of all households in this sample demand a formal savings scheme. The supply of client-adapted savings services not only boosts the outreach of the formal financial system, but also offers the possibility to create financially sustainable structures within the existing institutes. However, savings products need to be tailored closely to the needs of the rural population. Otherwise they will not be adopted by the local people. When offering savings services to the rural population, especially to the poor, close physical proximity to customers is seen as a key factor for success. This proximity could be achieved by creating decentralized profit centers. Credit officers would collect and pay out savings locally as well as performing all credit activities. Thus, deposit collection could be done within the village. Local savings collection by the credit officer would also influence the credit business very positively. The credit officer has access to a much broader range of information to assess the client's creditworthiness. These profit centers also guarantee good internal monitoring of most operational costs involved in financial intermediation.

Whether the enormous government subsidies channeled into rural credit contribute to poverty reduction, however, remains a subject for future research. But it is clear

that these subsides bypass households that have no demand for credit, and these households are often identical to the poorest. Finally, the low credit interest rates imply low saving rates, which again affect the poor most, as stated by ADAMS (1984: 72): "The low rates on deposits hurt poor households the most because they cannot assemble enough savings to buy lumpy, non-financial assets such as land and cattle. The poor are forced to accept a tax on their savings if they bother to open accounts or to consume their surplus. The backlash of cheap credit is that the poor take a beating on their financial savings." This statement of Adams reflects the situation in Vietnam. The transformation polices of the Vietnamese government concerning the rural financial system are biased towards the supply of preferential credits and this policy discriminates the poorest households against their access to save formal savings products.

Reference list

Adams, D. W. 1984. Are the arguments for cheap agricultural credit sound? In *Undermining rural development with cheap credit.* Adams, D. W. *et al.* (ed.): 92-104. Boulder, USA: Westview Press.

Adams, D. W., D. Graham, and J. von Pischke. 1984. *Undermining rural development with cheap credit*. Boulder, USA: Westview Press.

Adams, D. W., and J. von Pischke. 1992. Microenterprise credit programs: Déja vu. *World Development* 20 (10): 1463-1470.

ADB. 2000. Finance for the poor: Microfinance development strategy. Manila, Philippines: Asian Development Bank (ADB).

ADB. 2001. *Asian Development Outlook 2001*. Manila, Philippines: Asian Development Bank.

Addelman, S. 1962. Orthogonal main-effect plans for asymmetrical factorial experiments. *Technometrics* 4 (1): 21-46.

Administration Book Dia Linh. 2001. Administration book Dia Linh Commune. District Ba Be, Vietnam. July 2001.

Ahmed, R., and F. Goletti. 1997. Food policy and market reform in Vietnam and Bangladesh; Annual report essay 1997. Washington DC, USA: International Food and Policy Research Institute (IFPRI).

Albrecht, J. 1997. Validitätsarten und ihre Überprüfung bei der Conjoint-Analyse. In *Märkte der Agrar- und Ernährungswirtschaft, Schriften der Gesellschaft für Wirtschaft- und Sozialwissenschaften des Landbaus Band 33.* 299-311. Münster-Hiltrup, Germany: Landwirtschaftsverlag GmbH.

Alther, C., J. C. Castella, P. Novosad, E. Rousseau, and T. T. Hieu. 2002. Impact of accessibility on the range of livelihood options available to farm households in mountainous areas of Northern Vietnam. In *Doi Moi in the mountains – Land use changes and farmers' livelihood strategies in Bac Kan Province, Vietnam.* Castella, J. C. *et al.* (ed.): 121-146. Hanoi, Vietnam: The Agricultural Publishing House.

Amin, S., A. Rai, and G. Topa. 2003. Does microcredit reach the poor and vulnerable? Evidence from Northern Bangladesh. *Journal of Development Economics* 70 (1): 59-82.

Anh, V. T. 1997. Criteria for rural poverty monitoring. *Vietnam's Socio-Economic Development* 9 (1): 3-16.

Ardrey, W., I. Watson, and N. T. Ha. 1999. Regulation of prudential ratios for banks and credit organizations in Vietnam. Hanoi, Vietnam: The World Bank and State Bank of Vietnam (SBVN).

Ba, L. X. 1997. Informal credit and its impact on the poor. *Vietnam's Socio-Economic Development* 9 (1): 21-26.

Bac, T. H. 2001. Expert interview with the Chief of Statistics and Translation Department and International Relations Department of the Vietnam Bank of Agriculture and Rural Development. Hanoi, Vietnam: 06.02.2001/2001.

Backhaus, K., B. Erichson, W. Plinke, and R. Weiber. 1996. *Multivariate Analysemethoden – Eine anwendungsorientierte Einführung*. Berlin, Germany: Springer-Verlag.

Bao, N. V. 2001. Expert interview with the head of the VBP and Vice-director of VBARD at Ba Be district. Ba Be, Vietnam: 24.04., 21.05., and 18.09. 2001/2001.

Barham, B. L., S. Boucher, and M. R. Carter. 1996. Credit constraints, credit unions, and small-scale producers in Guatemala. *World Development* 24 (5): 793-806.

Barisch, T., and T. Dufhues. 2001. Facilitating farmers workshops through PRA techniques to support the visualization of financial services in rural mountainous areas in Northern Vietnam. Internal report for the subproject F2 'Rural finance and sustainable development in Northern Vietnam'. Hanoi, Vietnam: The Uplands Program.

Barth, J. R., G. Jr. Caprio, and R. Levine. 2002. Bank regulation and supervision: What works best? NBER Working Paper 9323. Cambridge, USA: National Bureau of Economic Research (NBER).

Bastelaer van, T. 2003. Does social capital facilitate the poor's access to credit – A review of the microeconomic literature. Social Capital Initiative Working Paper No 8. Washington DC, USA: The World Bank.

Besley, T., and S. Coate. 1995. Group lending, repayment incentives and social collateral. *Journal of Development Economics* 46 (1): 1-18.

Bester, H. 1987. The role of collateral in credit markets with imperfect information. *European Economic Review* 31 (4): 887-899.

Bhushan, I., E. Bloom, N. H. Huu, and N. M. Thang. 2001. Human capital of the poor in Vietnam. Manila, Philippines: Asian Development Bank.

Bijl, d. P. W. 1995. Entry deterrence and signaling in markets for search goods. Tilburg, Netherlands: Tilburg University, Centre for Economic Research.

Binswanger, H. P., and D. A. Sillers. 1983. Risk aversion and credit constraints in farmers' decision-making: A reinterpretation. *Journal of Development Studies* 20 (1): 5-21.

Bond, P., and A. Rai. 2002. Collateral substitutes in microfinance. Mimeo. Accessed October 2004 at <http://www.cid.harvard.edu/cidpublications/limits-july2.pdf>.

Bowles, P., and G. White. 1994. Central bank independence: A political economy approach. *Journal of Development Studies* 31 (2): 235-264.

Bryant, J. 1998. Communism, poverty, and demographic change in North Vietnam. *Population and Development Review* 24 (2): 235-269.

Buchenrieder, G. 2002. *Sequencing of institution building in Central and Eastern Europe's financial system transformation*. Frankfurt am Main, Germany: Peter Lang Verlag.

Buchenrieder, G., T. Dufhues, F. Heidhues, and P. T. M. Dung. 2003. Rural finance and sustainable rural development in Northern Vietnam – Final report of the subproject F2. Stuttgart, Germany: University of Hohenheim, The Uplands Program.

Buchenrieder, G., and F. Heidhues. 2005. Rural financial markets for food security. In *Food and nutrition security in the process of globalization.* Schulz, M. *et al.* (ed.): 289-304. Münster, Germany: Lit-Verlag.

Buchenrieder, G., and I. Theesfeld. 2000. Improving bankability of small farmers in Northern Vietnam. *Savings and Development* 24 (4): 385-403.

Castella, J. C., T. Q. Hoa, O. Husson, V. H. Nam, and D. D. Quang. 2002. The declining role of ethnicity in farm household differentiation: A case study from Ngoc Phai Commune, Cho Don district, Bac Kan Province, Vietnam. In *Doi Moi in the mountains – Land use changes and farmers' livelihood strategies in Bac Kan Province, Vietnam.* Castella, J. C. *et al.* (ed.): 47-71. Hanoi, Vietnam: The Agricultural Publishing House.

Cat, M. V. 2001. Expert interview with a credit officer from the VBARD/VBP at Ba Be district. Ba Be, Vietnam: 09.10. and 08.11. 2001/2001.

CECARDE. 1999. A rural credit in Vietnam: A case study in Tuyen Quang and Than Hoa. Hanoi, Vietnam: Center for Consultation on Agriculture and Rural Development (CECARDE).

Chan, M. N. 2001. Expert interview with the head of the VBARD at Ba Be district. Ba Be, Vietnam: 09.10. 2001/2001.

Charitonenko, S., A. Campion, and N. A. Fernando. 2004. *Commercialization of microfinance: Perspectives from South and Southeast Asia*. Manila, Philippines: Asian Development Bank (ADB).

Chin, A. T. H., and Ng. H. Guan. 1996. Towards a framework for the transforming economies of East Asia. In *Economic management and transition towards a market economy – An Asian perspective.* Chin, A. T. H. *et al.* (ed.): 1-11. Singapore: World Scientific Publishing Co. Pte. Ltd.

Christen, R. P., E. Rhyne, R. Vogel, and C. McKean. 1995. Maximizing the outreach of microenterprise finance: An analysis of successful microfinance programs. Washington DC, USA: United States Agency for International Development (USAID).

Christen, R. P., and R. Rosenberg. 2000. Regulating microfinance – The options. *Small Enterprise Development* 11 (4): 4-23.

CIA. 2002. *The world factbook 2002 – Vietnam*. Washington DC, USA: Central Intelligence Agency (CIA).

Coleman, J. S. 1999. Social capital in the creation of human capital. In *Social capital: A multifaceted perspective.* Dasgupta, P. *et al.* (ed.): 13-39. Washington DC, USA: The World Bank.

Collier, P., and C. Mayer. 1989. The assessment: Financial liberalization, financial systems, and economic growth. *Oxford Review of Economic Policy* 5 (4): 1-12.

Conning, J. 1999. Outreach, sustainability, and leverage in monitored and peer-monitored lending. *Journal of Development Economics* 60 (1): 51-77.

Credit book Dia Linh. 2001. Credit book Dia Linh Commune. District Ba Be, Vietnam. Juli 2001.

Demirgüc-Kunt, A., and E. J. Kane. 2001. Deposit insurance around the globe: Where does it work? Washington DC, USA: The World Bank and Boston College.

Diagne, A. 1999. Determinants of households' access to and participation in formal and informal credit markets in Malawi. FCND Discussion Paper No 67/1999. Washington DC, USA: International Food and Policy Research Institute (IFPRI) – Food Consumption and Nutrition Division (FCND).

Diagne, A., M. Zeller, and M. Sharma. 2000. Empirical measurements of household's access to credit and credit constraints in developing countries: Methodological issues and evidence. FCND Discussion Paper No 90/2000. Washington DC, USA: International Food and Policy Research Institute (IFPRI) – Food Consumption and Nutrition Division (FCND).

Diehl, M. 1998. The role of institutions in the economic transition process: The Reform of state-owned enterprises in Vietnam. *Journal for Institutional Innovation, Development, and Transition* 2: 49-59.

Doan, D. Q. 2001. Expert interview with a credit officer from the VBARD/VBP at Ba Be district. Ba Be, Vietnam: 21.06., 17.10., and 09.11. 2001/2001.

Du, T. T. N. 2001. Governance and participation in Vietnam. Project discussion Paper No 12/2001. Duisburg, Germany: University of Duisburg, Institute of East Asian Studies/ East Asian Politics.

Duckett, J. 2001. Bureaucrats in business, Chinese-style: The lessons of market reform and state entrepreneurialism in the People's Republic of China. *World Development* 29 (1): 23-37.

Dufhues, T., P. T. M. Dung, H. T. Hanh, and G. Buchenrieder. 2002. Information and targeting policies and their principal-agent relationships – The case of the Vietnam Bank for the Poor. *Quarterly Journal of International Agriculture* 41 (4): 335-362.

Dufhues, T., M. Geppert, and G. Buchenrieder. 2003. Enriching quantitative analysis through participatory research – Developing demand-driven microsavings services with Conjoint Analysis in Vietnam. Poster accepted at the 25. International Conference of Agricultural Economists (IAAE) in Durban, South Africa, August 16-22, 2003 on 'Reshaping Agriculture's Contributions to Society'.

Dufhues, T., F. Heidhues, and G. Buchenrieder. 2004a. Participatory product design by using Conjoint Analysis in the rural financial market of Northern Vietnam. *Asian Economic Journal* 18 (1): 81-114.

Dufhues, T., U. Lemke, and I. Fischer. 2004b. Constraints and potential of livestock insurance schemes – A case study from Vietnam. Research in Development Economics and Policy. Discussion Paper No 5/2000. Stuttgart, Germany: Grauer Verlag.

Dung, P. T. 2002. Overview on insurance and agricultural insurance of Vietnam. Hanoi, Vietnam: The Uplands Program and Hanoi Agriculture University No. 1 (HAU).

Dung, P. T. M. 2001. Expert interview with rural finance specialist at Faculty of Economics and Rural Development at Hanoi Agricultural University No 1. Hanoi, Vietnam: 6.10.2001/2001.

Duong, P. B., and Y. Izumida. 2002. Rural development finance in Vietnam: A microeconomic analysis of household surveys. *World Development* 30 (2): 319-335.

Eggertsson, T. 1990. *Economic behavior and institutions*. Cambridge, USA: Cambridge University Press.

EIU. 2002. *Vietnam at a glance*. London, UK: The Economist Intelligence Unit Limited (EIU).

Erhardt, W. 2000. *Small enterprise finance in urban and rural Northern Thailand*. Frankfurt am Main, Germany: Peter Lang Verlag.

Evans, T., A. M. Adams, R. Mohammed, and A. H. Norris. 1999. Demystifying non-participation in microcredit: A population-based analysis. *World Development* 27 (2): 419-430.

Fabbri, D., and M. Padula. 2003. Does poor legal enforcement make households credit-constrained? FAME Research Paper No 81. Geneva, Switzerland: International Center for Financial Asset Management and Engineering (FAME). Accessed October 2003 at http//:<www.nccr-finrisk.unizh.ch/media/pdf/fabbri_creditconstrained.pdf>.

Fallavier, P. 1994. Developing microfinance institutions in Vietnam – Policy implications to set up an enabling environment. M.A. Thesis. Vancouver, Canada: School of Community and Regional Planning, University of British Columbia. Accessed June 2004 at <http://www.arts.uwaterloo.ca/~vecon/download/fallavier/mfi_vnm.pdf>.

Fforde, A. 2004. Vietnam in 2003 – The road to ungovernability? *Asian Survey* 44 (1): 121-129.

Fiebig, M., A. Hannig, and S. Wisniwski. 1999. Saving in the context of microfinance – State of knowledge. In *Challenges of microsavings mobilization: Concepts and views from the field*. Hannig, A. *et al.* (ed.): 3-26. Eschborn, Germany: Gesellschaft für Technische Zusammenarbeit (GTZ).

Geppert, M., G. Buchenrieder, and N. T. Dang. 2002. Participatory agricultural research and decentralization in Vietnam. *The Journal of Agricultural Extension and Education* 8 (4): 171-180.

Geppert, M., and T. Dufhues. 2003. Visualizing rural financial market research in Northern Vietnam through pictures. Research in Development Economics and Policy Discussion Paper No 2/2003. Stuttgart, Germany: Grauer Verlag.

Gibbons, D., B. Jr. Quiñones, J. Remenyi, and H. D. Seibel. 2000. Microfinance for and by the poor: Lessons from experience. In *Microfinance and poverty alleviation – Case studies from Asia and the Pacific*. Remenyi, J. *et al.* (ed.): 253-269. London, UK: Pinter.

Glewwe, P., M. Gragnolati, and H. Zaman. 2002. Who gained from Vietnam's boom in the 1990's? *Economic Development and Cultural Change* 50 (4): 773-792.

Gottwald, K., and R. Klump. 1999. Financial reform in Vietnam: Lessons from the Asian crisis. Passau, Germany: Universität Passau.

Green, P. E., and V. Srinivasan. 1978. Conjoint Analysis in consumer research: Issues and outlook. *Journal of Consumer Research* 5 (2): 103-123.

Green, P. E., and V. Srinivasan. 1990. Conjoint analysis in marketing: New developments with implications for research and practice. *Journal of Marketing* 54 (4): 3-19.

Grindle, S. G. 2001. In quest of the political: The political economy of development policy-making. In *Frontiers of development economics – The future perspective.* Meier, G. M. *et al.* (ed.): 345-380. Washington DC, USA: Oxford University Press.

GSO. 1995. *Vietnamese Living Standard Survey 1992/93*. Hanoi, Vietnam: General Statistical Office (GSO), Statistical Publishing House.

GSO. 2000. *Vietnamese Living Standard Survey 1997/98*. Hanoi, Vietnam: General Statistical Office (GSO), Statistical Publishing House.

GTZ. 2002. Support for the Establishment of a People's Credit Fund (PCF) System. Hanoi, Vietnam: Gesellschaft für Technische Zusammenarbeit (GTZ). <http://www.gtz.de/vietnam/projects/projects_refpriv_pcf_eng.htm> (accessed: March 2002).

Guillen, M. F., and A. E. Tschoegl. 2002. Banking on gambling: Banks and lottery-linked deposit accounts. *Financial Services Research* 21 (3): 219-231.

Hammann, P., and B. Erichson. 1994. *Marktforschung*. Stuttgart, Germany: Gustav Fischer Verlag.

Hanh, H. T. 1999. Presentation of the General Director of VBP in Hanoi at the Agricultural University No 1. 13.03.1999. Hanoi Vietnam: Agricultural University No 1.

Hanh, H. T. 2001. Expert interview with the General Director of the VBP in Hanoi. Hanoi, Vietnam: 25.05.2001/2001.

Härdle, W., and L. Simar. 2003. *Applied multivariate statistical analysis*. Berlin, Germany: Springer Verlag.

Häuser, I., T. Dufhues, and G. Buchenrieder. 2005. Reliability and applicability of different poverty measurements – A case study from Northern Vietnam. Research in Development Economics and Policy. Discussion Paper No 01/2005 (forthcoming). Stuttgart, Germany: Grauer Verlag.

Heidhues, F. 1995. Rural financial markets – An important tool to fight poverty. *Quarterly Journal of International Agriculture* 34 (2): 105-108.

Heidhues, F., and G. Schrieder. 1998. Rural development and financial markets in Romania. Paper presented at the 46th International Atlantic Economic Conference (IAES) in Boston, October 8-11, 1998. Boston, USA: IAES.

Heidhues, F., and G. Schrieder. 1999. Rural financial market development. Research in Development Economics and Policy. Discussion Paper No 1/1999. Stuttgart, Germany: Grauer Verlag.

Heidhues, F., B. Sossoh, and G. Schrieder. 1997. Transaction costs of group and individual lending as an influencing factor of access: The case of poverty oriented microfinance in Cameroon. Sacramento, USA: Paper presented at the 22nd International Conference of Agricultural Economists (IAAE) on food security, diversification, and resource management: "Refocusing the role of agriculture". August 10-16, 1997.

Henry, C., M. Sharma, C. Lapenu, and M. Zeller. 2003. *Microfinance poverty assessment tool*. Washington DC, USA: The World Bank.

Herring, R. J., and A. M. Santomero. 2000. What is optimal financial regulation? In *The new financial architecture – Banking regulation in the 21st century.* Gup, B. E. (ed.): 51-84. Westport, USA: Quorum books.

Hickson, R. 2001. Financial services for the very poor – Thinking outside the box. *Small Enterprise Development* 12 (2): 55-67.

Hien, D. P. 1999. Development under decentralized administration: A case study of Soc son district, Vietnam. Master Thesis. Bangkok, Thailand: Asian Institute of Technology, School of Environment and Development.

Hoff, K., and J. E. Stiglitz. 2001. Modern economic theory and development. In *Frontiers of development economics – The future in perspective.* Meier, G. M. *et al.* (ed.): 389-459. Washington DC, USA: Oxford University Press.

Holtmann, M. 2001. Designing financial incentives to increase loan officer productivity: Handle with care! *The Microbanking Bulletin* 6 (April): 5-9.

Huber, J. 2000. The importance of multinominal logit analysis of individual consumer choices. In *CBC system manual 2.6.* F1-F18. Washington DC, USA: Sawtooth Software.

Hulme, D., and P. Mosley. 1996. *Finance against poverty – Volume 1.* London, UK: Routledge.

Hung, B. D. V., and B. M. Giap. 1999. Country Report: Microfinance sector in Vietnam. Hanoi, Vietnam: Asian Development Bank (ADB).

Izumida, Y. 2003. Programmed lending for social policies – Challenges for the Vietnam Bank for Social Policies. Report No. 03-F-02. Tokyo, Japan: The University of Tokyo.

Izumida, Y., and P. B. Duong. 2001. Measuring the progress of rural finance in Vietnam. *Savings and Development* 15 (2): 139-166.

Janssen, W., J. Ashby, M. Calier, and J. Castano. 1991. Targeting new technology at consumer food preferences in developing countries. *Food and Quality Preference* 3 (2): 175-182.

Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4): 305-360.

Kanbur, R., and L. Squire. 2001. The evolution of thinking about poverty: Exploring the interactions. In *Frontiers of development economics – The future perspective.* Meier, G. M. *et al.* (ed.): 183-226. Washington DC, USA: Oxford University Press.

Karlan, D. S. 2001. Social capital and group banking. Cambridge, USA: Massachusetts Institute of Technology (MIT), Department of Economics.

Klump, R., and A. Spitzenpfeil. 1998. Vietnam: The financial system of an economy in transition. In *Asian financial markets.* Menkhoff, L. *et al.* (ed.): 335-352. Baden-Baden, Germany: Nomos Verlag.

Köcher, W. 1990. Die Steuerung von Forschung und Entwicklung mit Hilfe der Maieutischen Systemanalyse. Miami, USA: Conference on Management of Technology.

Kovsted, J., J. Rand, F. Tarp, L. V. Thai, V. N. Huong, and N. M. Thao. 2003. Financial sector reforms in Vietnam: Selected issues and problems. Discussion paper 0301. Hanoi, Vietnam: Central Institute of Economic Management (CIEM) and Nordic Institute of Asian Studies (NIAS).

Ledgerwood, J. 1999. *Sustainable banking with the poor – Microfinance handbook – An institutional and financial perspective*. Washington DC, USA: The World Bank.

Leung, S., and J. Riedel. 2000. The role of the state in Vietnam's economic transition. Canberra, Australia: Australian National University.

Livingstone, I. 2000. Agriculture, small enterprise development and poverty eradication in Vietnam. *Journal of the Asia Pacific Economy* 5 (3): 173-189.

Llanto, G. 2000. Vietnam. In *The role of central banks in microfinance in Asia and the Pacific: Vol. 2, Country studies.* 331-356. Manila, Philippines: Asian Development Bank (ADB).

Luibrand, A. 2002. *Transition in Vietnam – Impact of the rural reform process on an ethnic minority*. Frankfurt am Main, Germany: Peter Lang Verlag.

Mas, I. 1995. Central bank independence: A critical view from a developing country perspective. *World Development* 23 (10): 1639-1652.

Matin, I., D. Hulme, and S. Rutherford. 1999. Financial services for the poor and poorest: Deepening understanding to improve provision. Finance and Development Research Programme. Working Paper No 9. Manchester, UK: University of Manchester, Institute for Development and Policy Management.

McCarty, A. 1999. The employment and social consequences of restructuring in Vietnam. Hanoi, Vietnam: Paper presented at UNIDO/UNDP/CIEM 'How to make integration work' conference, 31 March 1999.

McCarty, A. 2001. Microfinance in Vietnam: A survey of schemes and issues. Hanoi, Vietnam: Department for International Development (DFID) and the State Bank of Vietnam (SBVN).

McGuire, P. B., J. D. Conroy, and G. B. Thapa. 1998. *Getting the framework right – Policy and regulation for microfinance in Asia*. Brisbane: Australia: The Foundation for Development Cooperation.

Mehran, H., and B. Laurens. 1997. Interest rate: An approach to liberalization. *Finance & Development* 34 (2): 33-35.

Minot, N. 2000. Generating disaggregated poverty maps: An application to Vietnam. *World Development* 28 (2): 319-331.

Minot, N., and F. Goletti. 2001. Rice market liberalization and poverty in Vietnam. Washington DC, USA: International Food Policy Research Institute (IFPRI).

MOLISA, and UNDP. 2004. Taking stock, planning ahead: Evaluation of the national targeted program on hunger eradication and poverty reduction (135). Hanoi, Vietnam: United Nations Development Program (UNDP).

Montes, M. F. 2001. Vietnam: Transition as a socialist project in East Asia. In *Transition and Institutions – The Experience of gradual and late reformers.* Cornia, G. A. *et al.* (ed.): 94-113. New York, USA: Oxford University Press.

Montgomery, R. 1996. Disciplining or protecting the poor? Avoiding the social costs of peer pressure in micro-credit schemes. *Journal of International Development* 8 (2): 289-305.

Moore, W. L. 1980. Levels of aggregation in Conjoint Analysis: An empirical comparison. *Journal of Marketing Research* 17 (November): 516-523.

Morduch, J. 1999. The microfinance promise. *Journal of Economic Literature* 37 (December): 1569-1614.

Navajas, S., M. Schreiner, R. L. Meyer, and C. Gonzalez-Vega. 2000. Microcredit and the poorest of the poor: Theory and evidence from Bolivia. *World Development* 28 (2): 333-346.

Neefjes, K. 2001. Poverty reduction amongst ethnic minorities in the mountainous areas of Vietnam – Reaching targets. Paper presented at the Poverty Task Force Workshop 17.-19.09.2001. Hanoi, Vietnam: United Nations Development Programme (UNDP).

Nelson, P. 1970. Information and consumer behavior. *Journal of Political Economy* 78 (2): 311-329.

Nguyen, N. X. 1998. Review of rural finance environment in Vietnam – In the context of outreach (VCRFOP) DID-7001. Hanoi, Vietnam: Vietnam-Canada Rural Finance Outreach Project.

Nguyen, N. X. 2001. Rural credit schemes, poverty alleviation and nature conservation in mountainous areas (results of a field study). *Vietnam's Socio-Economic Development* 26 (2): 38-60.

Nguyen, T. 2002. Vietnams Börse und die Entwicklung eines Kapitalmarktes. *Südostasien aktuell* 2002 (Januar): 84-88.

Nguyen-Khac, T. Q., and G. von Guretzky-Cornitz. 1996. Das vietnamesische Bankwesen. *Die Bank* 1996 (5): 274-279.

Nhgia, L. X. 2001. Expert interview with the General Director of the department of Economic Strategy of the State Bank of Vietnam. Hanoi, Vietnam: 16.10. 2001/2001.

North, D. C. 1989. Institutional change and economic history. *Journal of Institutional and Theoretical Economics* 145 (1): 238-245.

Oh, S.-N. 1999. Financial deepening in the banking sector – Vietnam. In *Rising to the challenge in Asia: A study of financial markets, Vol. 12: Vietnam.* 19-52. Manila, Philippines: Asian Development Bank (ADB).

Orme, B. 1996. ACA, CBC, or both? Effective strategies for conjoint research. Washington DC, USA: Sawtooth Software.

Owens, J. V., and S. Wisniwski. 1999. Microsavings: What can we learn from informal savings schemes. Frankfurt am Main, Germany: Third Annual Conference on Microfinance.

Panjaitan-Drioadisuryo, R. D. M., and K. Cloud. 1999. Gender, self-employment and micro-credit programs – An Indonesian case study. *The Quarterly Review of Economics and Finance* 39 (5): 769-779.

Park, A., and C. Ren. 2001. Microfinance with Chinese characteristics. *World Development* 29 (1): 39-62.

Pill, H., and M. Pradhan. 1997. Financial liberalization in Africa and Asia. *Finance & Development* 34 (2): 7-10.

Posen, A. S. 1993. Why central bank independence does not cause low inflation: There is no institutional fix for policies. In *Finance and the international economy: The AMEX-Bank review prize essays – In memory of Robert Marjolin.* O'Brien, R. (ed.): 40-54. Oxford, UK: Oxford University Press.

Quach, M. H., A. W. Mullineux, and V. Murinde. 2003. Microcredit and household poverty reduction in rural Vietnam: A cross-sectional study. Paper presented at the Development Studies Association (DSA) International Conference in Glasgow, 9-11 September 2003. Devon, UK: Development Studies Association.

Quach, M. H., A. W. Mullineux, and V. Murinde. 2004. Rural credit and household poverty reduction in Vietnam: Evidence using panel data from household surveys. Paper presented at the International Conference on Access to Finance, 28-29 October 2004. Brussels, Belgium: World Savings Bank Institutes.

Que, L. X. 1997. Rural credit: Reality and problems. *Vietnam's Socio-Economic Development* 9 (1): 27-32.

Randolph, T., and L. Ndung'u. 2000. Gender and transaction costs: A conjoint analysis of choice livestock health services among smallholder dairy farmers in Kenya. Berlin, Germany: Background paper for a poster presented at the 24th Congress of the International Association of Agricultural Economists (IAAE), Berlin, 18-24 August 2000.

Richter, R. 1990. Sichtweise und Fragestellungen der Neuen Institutionenökonomik. *Zeitschrift für Wirtschafts- und Sozialwissenschaften* 110 (4): 571-591.

Richter, R., and E. Furubotn. 1996. *Neue Institutionenökonomik – Eine Einführung und kritische Würdigung*. Tübingen, Germany: Mohr Siebeck.

Riedel, J. 1999. Needed: A strategic vision for setting reform priorities in Vietnam. In *Vietnam and the East Asian Crisis.* Leung, S. (ed.): 9-30. London, UK: Edward Elgar Publications Ltd.

Riedel, J. 2000. The role of the state and the market in the economy of Vietnam. Hanoi, Vietnam: Ministry of Planning and Investment (MIP) and United Nations Development Program (UNDP).

Riedel, J., and W. S. Turley. 1999. The politics and economics of transition to an open market economy in Vietnam. Paris, France: Organization for Economic Co-operation and Development (OECD) – OECD Development Centre.

Robinson, M. S. 2001. *The microfinance revolution – Sustainable finance for the poor*. Washington DC, USA: The World Bank.

Rondinelli, D. A., and J. Litvack. 1999. Economic reform, social progress, and institutional development: A framework for assessing Vietnam's transition. In *Market reform in Vietnam – Building institutions for development.* Litvack, J. *et al.* (ed.): 1-30. Westport, USA: Quorum Books.

Rutherford, S. 2000. *The poor and their money*. New Delhi, India: Oxford University Press.

Ruthven, O. 2001. Money mosaics: Financial choice and strategy in West Delphi squatter settlement. Finance and Development Research Programme Working Paper No. 32. Manchester, UK: Institute for Development Policy and Management, University of Manchester.

Sarap, K. 1990. Factors affecting small farmers' access to institutional credit in rural Orissa, India. *Development and Change* 21 (2): 281-307.

SBVN. 2001. Annual report 2000. Hanoi, Vietnam: State Bank of Vietnam (SBVN).

Schenk, R. 1998. Einflußfaktoren auf den Kreditzugang bei Kleinbauern in Nordvietnam. Institute of Agricultural Economics and Social Sciences in the Tropics and Subtropics (490a), Chair of Agricultural Development Theory and Policy, University of Hohenheim.

Schlüter, A. 2001. *Institutioneller Wandel in der Transformation – Restitution, Transformation und Privatisierung in der tschechischen Landwirtschaft*. Aachen, Germany: Shaker Verlag.

Schmidt, R. H. 1999. Development of finance, microfinance, and banking regulation. *Savings and Development* 24 (1): 111-121.

Schmidt, R. H., and E. Terberger. 1996. *Grundzüge der Investitions- und Finanzierungstheorie*. Wiesbaden, Germany: Gabler Verlag.

Schmidt, R. H., and C.-P. Zeitinger. 1994. Critical issues in small and microbusiness finance. Paper presented at the seminar on financial services and the poor: U.S. and developing country experience. September 28-30. Washington DC, USA: The Brookings Institution.

Schreiner, M. 2002. Aspects of outreach: A framework for discussion on the social benefits of microfinance. *Journal of International Development* 14 (5): 591-603.

Schrieder, G. 1996. *The role of rural finance for food security of the poor in Cameroon*. Frankfurt am Main, Germany: Peter Lang Verlag.

Schrieder, G., and F. Heidhues. 1991. Conjoint Analysis and its predictive power for financial market development: A methodological framework. In *Finance and Rural Development in West Africa. Proceedings of the 12th Seminar on Rural Economics.* Cuevas, C. *et al.* (ed.): 83-91. Montpellier, France and Columbus Ohio, USA: Centre de Coopération Internationale en Recherche Agronomique pour le Dévelopment (CIRAD) and Ohio State University.

Schrieder, G., and F. Heidhues. 1998. Transition and rural finance. *Quarterly Journal of International Agriculture* 37 (4): 265-282.

Schrieder, G., and F. Heidhues. 2000. Transition and rural finance. In *Romania – Rural finance in transition economies.* Heidhues, F. *et al.* (ed.): 3-18. Frankfurt am Main, Germany: Peter Lang Verlag.

Schrieder, G., and M. Sharma. 1999. Impact of finance on poverty reduction and social capital formation – A review and synthesis of empirical evidence. *Savings and Development* 13 (1): 67-94.

Seibel, H. D. 1992. *The making of a market economy: Monetary reform, economic transformation and rural finance in Vietnam*. Saarbrücken, Germany: Breitenbach Verlag.

Seibel, H. D. 1996. Microfinance strategies: Strategies for developing viable microfinance institutions and sustainable micro-financial services in Asia. Working Paper No 2 1996. Cologne, Germany: University of Cologne, Development Research Center.

Seibel, H. D. 1997. Aufbau eines Verbundsystems für ländliche Spar- und Darlehenskassen in Vietnam. Gesamtbericht No 95.3521.2-006.00. Eschborn, Germany: Deutsche Gesellschaft für technische Zusammenarbeit (GTZ).

Seibel, H. D., and P. Schmidt. 2000. How an agricultural development bank revolutionized rural finance: The case of Bank Rakyat Indonesia. Rome, Italy: International Fund for Agricultural Development (IFAD).

Senanayake, S. M. P., and D. P. Ho. 2001. What makes formal rural financial institutions successful in Vietnam? *Savings and Development* 15 (4): 475-489.

SGT Daily. 2003. First policy bank set to make debut this month: Governor. March 6, 2003. (accessed: April 2003, <www.vneconomy.com.vn>). Saigon Times (SGT) Daily/2003. Ho Chi Minh City, Vietnam: Saigon Times Group.

Sharma, M. 2000. The scope for policy reforms in rural microfinance. In *microFINANCE: A pathway from poverty.* Sharma, M. (ed.): Washington DC, USA: International Food and Policy Research Institute (IFPRI).

Sharma, M. 2001. Microfinance. In *Empowering women to achieve food security.* Quisumbing, A. R. *et al.* (ed.): 19-20. Washington DC, USA: International Food Policy Research Institute (IFPRI).

Shimomoto, Y. 2003. Developing the capital market – Vietnam. In *Rising to the challenge in Asia: A study of financial markets, Vol. 12: Vietnam.* 53-72. Manila, Philippines: Asian Development Bank (ADB).

Sida-MARD. 1998. Strategy for rural financial services. Hanoi, Vietnam: Sweden International Development Agency (SIDA) and Ministry of Agriculture and Rural Development (MARD).

Simanowitz, A. 2000. Targeting the poor – Comparing visual and participatory methods. *Small Enterprise Development* 11 (1): 29-39.

Statistical Publishing House. 1999. Socio-economic statistical data of 61 provinces and cities. Hanoi, Vietnam: Statistical Publishing House.

Statistics book Nghien Loan. 2001. Statistics book Nghien Loan Commune. District Ba Be, Vietnam. Juli 2001.

Statistics book Xuan La. 2001. Statistics book Xuan La commune. District Ba Be, Vietnam. Juli 2001.

Stiglitz, J. E. 1986. The new development economics. *World Development* 14 (2): 257-265.

Stiglitz, J. E. 2002. *Globaslization and its discontents*. New York, USA: W.W. Norton & Company.

Stiglitz, J. E., and A. Weiss. 1981. Credit rationing in markets with imperfect information. *American Economic Review* 71 (3): 393-410.

Tam, L. M. 2000. Reforming Vietnam's banking system: Learning from Singapore's model. Singapore: Institute of Southeast Asian Studies.

Teufel, H. 1997. Banken und Finanzmärkte in Vietnam. *Kreditwesen* 1997 (2): 77-81.

Thai, T. D. 1998. Financial sector reform in Vietnam. In *Financial deregulation, capital flows and macroeconomic management in the Asia Pacific.* Hansen, T. *et al.* (ed.): 213-220. Seoul, Korea: The Korea Development Institute.

Thayer, C. A. 2000. Vietnam, the Asian financial crisis, and Doi Moi 2. *Harvard Asia Quarterly* 4 (1):

The Economist. 2003. A survey of global finance – The trouble with banks, nobody loves them, everybody needs them. The Economist 367/2003. London, UK: The Economist Newspaper Limited.

The Economist. 2004. Poor payers to a degree. The Economist 8379/2004.

Theesfeld, I. 2000. Vietnam's rural credit market – Determinants of farmers' bankability. Master Thesis. Stuttgart, Germany: Institute of Agricultural Economics and Social Sciences in the Tropics and Subtropics (490a), Chair of Agricultural Development Theory and Policy, University of Hohenheim.

Thu, H. 3-19-2001. Bank for the Poor 'under-capitalised'. Vietnam Investment Review (VIR)/ 3-19-2001. Hanoi, Vietnam: Ministry of Planing and Investment (MIP).

Todd, H. 1996. *Cloning Grammen Bank: Replicating a poverty reduction model in India, Nepal and Vietnam*. London, UK: Intermediate Technology Publications.

Toffler, A. 1990. *Power shift*. New York, USA: Bantam Books.

Tompson, W. 1998. The politics of central bank independence in Russia. *Europe-Asia Studies* 50 (7): 1157-1182.

Tran, H. A., and K. Dang. 1996. Vietnam – Banking regulatory regime in Vietnam. *World Reports* 7 (3): (accessed: May 2000,< www.hg.org/supp48.html>).

UN. 1998. Expanding choices for the rural poor – Human development in Vietnam. Hanoi, Vietnam: United Nations (UN).

UNDP. 1999. Completion of Vietnam's legal framework for economic development. Hanoi, Vietnam: United Nations Development Program (UNDP).

UNIDO, DSI, and MPI. 2003. Vietnam industrial competitiveness review. Hanoi, Vietnam: United Nations Industrial Development Organization (UNIDO), Development Strategy Institute (DSI), and Ministry of Planning and Investment (MPI).

Vaessen, J. 2001. Accessibility of rural credit in Northern Nicaragua: The importance of networks of information and recommendation. *Savings and Development* 25 (1): 5-32.

van de Walle, D. 2003. Are returns to investment lower for the poor? Human and physical capital interactions in rural Vietnam. *Review of Development Economics* 7 (4): 636-653.

VBARD. 1997. Annual report VBARD, District Ba Be. Ba Be, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD. 1998. Annual report VBARD, District Ba Be. Ba Be, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD. 1999. Annual report VBARD, District Ba Be. Ba Be, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD. 2000a. Annual report – Agribank – Steady development and integration into the international Community. Hanoi, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD. 2000b. Annual report VBARD, District Ba Be. Ba Be, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD. 2001a. Annual report VBARD, District Ba Be. Ba Be, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD. 2001b. Leaflet on guidelines, pre-conditions, and procedures for loans at the VBARD (available only in Vietnamese). Hanoi, Vietnam: Vietnam Bank for Agriculture and Rural Development (VBARD).

VBARD and Danida. 1999. Agriculture sector program support – Vietnam – Component description document. Hanoi, Vietnam: Government of Vietnam and Vietnam Bank for Agriculture and Rural Development (VBARD) and Danish Ministry of Foreign Affairs (Danida).

VBP. 1997. Annual report VBP, District Ba Be. Ba Be, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 1998a. Annual report VBP, District Ba Be. Ba Be, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 1998b. Policy guidelines of the Ba Be district. Ba Be, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 1999a. Annual report VBP, District Ba Be. Ba Be, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 1999b. Vietnam Bank for the Poor – Annual report. Hanoi, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 2000. Annual report VBP, District Ba Be. Ba Be, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 2001a. Annual report VBP, District Ba Be. Ba Be, Vietnam: Vietnam Bank for the Poor (VBP).

VBP. 2001b. Policy document on training of credit groups. Hanoi, Vietnam: Vietnam Bank for the Poor (VBP).

Viet Nam News. 2002a. Joint stock banks held back by low funds. October 31, 2002. (accessed: December 2003, <http://vietnamnews.vnagency.com.vn/202-10/30/Stories/18.htm>). Viet Nam News/2002a. Hanoi, Vietnam: Vietnam News Agency.

Viet Nam News. 2002b. Voice of Vietnam (VOV) reaches out to ethnic groups. Viet Nam News 3815/2002b. Hanoi, Vietnam: Vietnam News Agency.

Viet Nam News. 2003. Government enlist new bank in poverty fight. March 12, 2003. (accessed: April 2003, <www.vneconomy.com.vn>). Viet Nam News/2003. Vietnam, Hanoi: Vietnam News Agency.

Vietnam Economic Times. 2002. Chance for the poor people to have easy access to bank loans. October 16, 2002. (accessed: April 2003, <www.vneconomy.com.vn>). Vietnam Economic Times/2002. Ho Chi Minh City, Vietnam: Ringier Pacific Ltd.

Vietnam Economy. 2003. Vietnam's social policy bank established. March 12, 2003. Vietnam Economy/2003. (accessed: April 2003, <www.vneconomy.com.vn>).

Vietnam-Canada Rural Finance Outreach Project. 1999a. Diagnostic report on capacity of Vietnam Bank for Agriculture and Rural Development to outreach to low-income households. Hanoi, Vietnam: Vietnam-Canada Rural Finance Outreach Project.

Vietnam-Canada Rural Finance Outreach Project. 1999b. Proposal on testing units at VBARD. Hanoi, Vietnam: Vietnam-Canada Rural Finance Outreach Project.

VIR. 2001. Poverty fight given $ 1.4 bn price tag by officials. March 12, 2001. Vietnam Investment Review (VIR)/2001. Hanoi, Vietnam: Ministry of Planing and Investment (MPI).

VIR. 2003. Policy Bank opens to boost anti-poverty campaign. March 18, 2003. (accessed: April 2003, <www.vneconomy.com.vn>). Vietnam Investment Review (VIR)/2003. Hanoi, Vietnam: Ministry of Planing and Investment (MPI).

von Pischke, J. 1991. *Finance at the frontier – Debt capacity and the role of credit in the private economy*. Washington DC, USA: The World Bank.

Warner, B. 2001. Vietnam – Economic and financial management. Canberra, Australia: Australian Agency for international Development (AusAID).

Williamson, O. E. 1985. *The economic institutions of capitalism – Firms, markets, relational contracting*. New York, USA: Free Press.

Wittink, D. R., and P. Cattin. 1989. Commercial use of Conjoint Analysis: An update. *Journal of Marketing* 53 (3): 91-96.

Wolff, P. 1999. *Vietnam – The incomplete transformation*. London, UK: Frank Cass Publishers.

Woller, G., C. Dunford, and W. Woodworth. 1999. Where to microfinance? *International Journal of Economic Development* 1 (1): 29-64.

Wolz, A. 1997. The transformation of rural finance systems in Vietnam. Discussion Paper No 60. Heidelberg, Germany: Universität Heidelberg, Forschungsstelle für Internationale Wirtschafts- und Agrarentwicklung e.V. (FIA).

Wolz, A. 1999. Achievements and problems of people's credit funds in Vietnam. Heidelberg, Germany: Lehrstuhl für internationale Wirtschafts- und Entwicklungspolitik, Universität Heidelberg.

World Bank. 1995. Viet Nam – Environmental program and policy priorities for a socialist economy in transition. Hanoi, Vietnam: The World Bank.

World Bank. 1998. Vietnam – Deepening reform for growth. Hanoi, Vietnam: The World Bank.

World Bank. 1999. Vietnam attacking poverty – Vietnam development report 2000. Hanoi, Vietnam: The World Bank.

World Bank. 2000a. Selected world development indicators. Washington DC, USA: The World Bank.

World Bank. 2000b. Vietnam 2010: Entering the 21st century – Vietnam development report 2001 – Partnership for development. Hanoi, Vietnam: The World Bank.

World Bank. 2000c. Vietnam 2010: Entering the 21st century – Vietnam development report 2001 – Pillars of development. Hanoi: Vietnam: The World Bank.

World Bank. 2001. Vietnam development report 2002 – Implementing reforms for faster growth and poverty reduction. Hanoi, Vietnam: The World Bank.

World Bank. 2002a. Banking sector review. Hanoi, Vietnam: The World Bank.

World Bank. 2002b. Vietnam – Delivering on its promise – Development report 2003. Hanoi, Vietnam: The World Bank.

World Bank. 2003. Poverty – Vietnam development report 2004. Hanoi, Vietnam: The World Bank.

World Bank. 2004a. Financial sector policy issue note: Vietnam Bank for Social Policies. Hanoi, Vietnam: The World Bank.

World Bank. 2004b. Governance – Vietnam development report 2005. Hanoi, Vietnam: The World Bank.

World Bank, and DFID. 1999. Vietnam, voices of the poor; synthesis of participatory poverty assessments. Hanoi, Vietnam: The World Bank and Department for International Development (DFID).

Wright, G. 1999. Beyond basic credit and savings: Developing new financial service products for the poor. In *Challenges of microsavings mobilization: Concepts and views from the field.* Hannig, A. *et al.* (ed.): 45-54. Eschborn, Germany: Gesellschaft für Technische Zusammenarbeit (GTZ).

Wright, G., and L. Mutesasira. 2001. The relative risks to the savings of poor people. *Small Enterprise Development* 12 (3): 33-45.

Zeller, M. 1999. The role of rural financial services for alleviation of food insecurity and poverty. *Agriculture and Rural Development* 6 (2): 28-32.

Zeller, M. 2001. Promoting institutional innovation in microfinance – Replicating best practices is not enough. *Development and Cooperation (D+C)* 2001 (1): 8-11.

Zeller, M., G. Schrieder, J. Braun von, and F. Heidhues. 1997. *Rural finance for food security of the poor: Concept, review, and implications for research and policy*. Washington DC, USA: International Food Policy Research Institute (IFPRI).

Zeller, M., and M. Sharma. 1998. Rural finance and poverty alleviation. Food Policy Report. Washington DC, USA: International Food Policy Research Institute (IFPRI).

Zeller, M., and M. Sharma. 2000. Many borrow, more save, and all insure: Implications for food and microfinance policy. *Food Policy* 25 (2): 143-167.

Zeller, M., M. Sharma, C. Henry, and C. Lapenu. 2001. An operational tool for evaluating poverty outreach of development policies and projects. FCND Discussion Paper No 110/2001. Washington DC, USA: International Food Policy Research Institute (IFPRI) – Food Consumption and Nutrition Division (FCND).

Zeller, M., M. Sharma, C. Henry, and C. Lapenu. 2005. An operational method for assessing the poverty outreach performance of development projects: Results of case studies in Africa, Asia and Latin America. *World Development* 34 (3): 446-464.

Zeller, M., M. Wollni, and A. A. Shaban. 2003. Evaluating the poverty outreach of development programs: Results from case studies in Indonesia and Mexico. *Quarterly Journal of International Agriculture* 42 (3): 371-383.

Annex

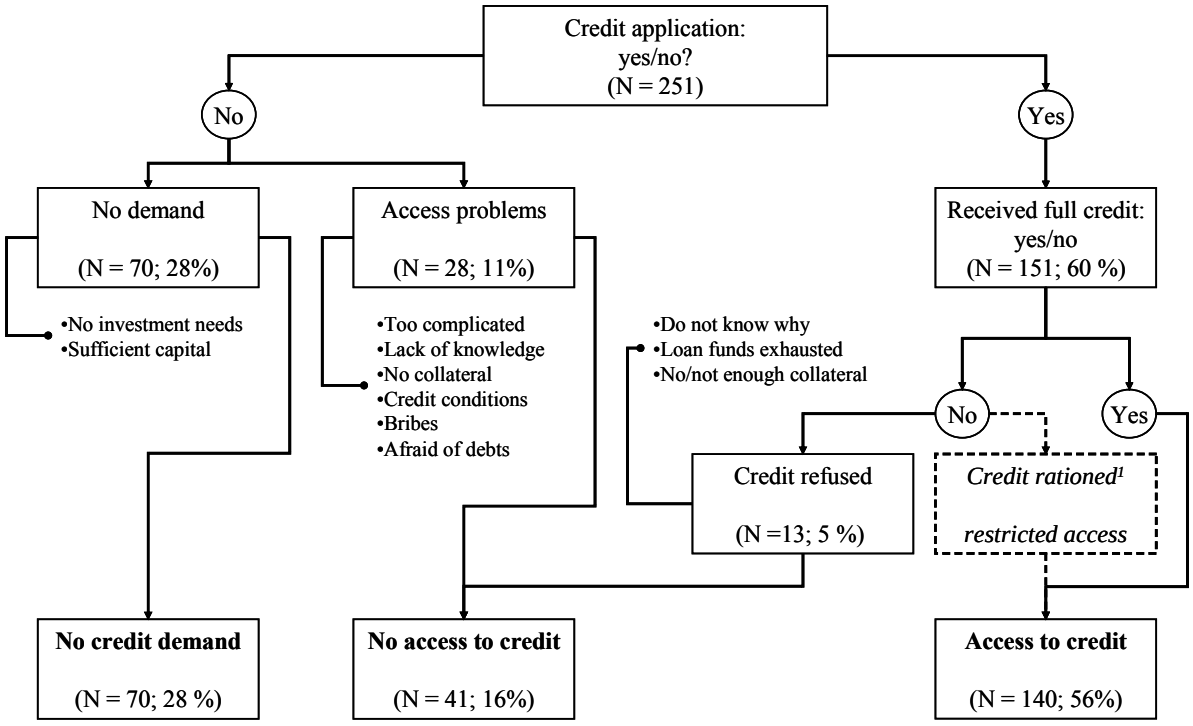
Table A-1: Descriptive statistics of the independent variables for the binary logistic regression model on credit access

Variable name	Unit	Minimum	Maximum	Mean	Std. deviation
Red or Green Books	(yes/no)	0.00	1.00	0.89	0.32
Agricultural land	(1000 m2)	0.00	65.00	9.51	7.82
Value of houses	(Mill. VND)	0.00	130.00	10.11	12.92
Government salary	(yes/no)	0.0.0	1.00	0.13	0.33
Cash savings	(Mill. VND)	0.0.0	55.00	1.48	5.57
School years of HH head	(years)	0.0.0	14.00	5.20	3.02
Vietnamese communication skills of the married couple	(yes/no)	0.0.0	1.00	0.83	0.38
Receiving agricultural extension service	(yes/no)	0.00	1.00	0.82	0.39
Active HH members	(numbers)	0.50*	7.00	2.83	1.26
Share of non-farm activities in total yearly income	(%)	0.00	100.00	15.17	21.51
Lost working days due to illness per year/HH	(days)	0.00	509.00	42.46	58.29
Giving help per year/HH	(days)	0.00	200.00	36.26	30.75
Receiving help per year/HH	(days)	0.00	300.00	25.76	36.96
Interest-free informal credit	(Mill. VND)	0.00	18.00	0.18	1.36
Thai/Tay village	(yes/no)	0.00	1.00	0.72	0.45
Market visits only by female HH members	(yes/no)	0.00	1.00	0.36	0.48
Age of the household	(years)	1.00	81.00	19.66	14.14
Remoteness	(km)	1.50	24.00	10.48	7.47
Market visits per month	(numbers)	0.00	30.00	5.63	6.46
Different markets visited	(numbers)	0.00	5.00	1.13	0.47
Poverty index		-1.82	3.09	0.00	1.00
Supply of day labor	(yes/no)	0.00	1.00	0.35	0.48
Receiving aid from government	(yes/no)	0.00	1.00	8.76	0.28

Source: Own calculations.

Notes: * Households containing only persons over the retirement age were counted as having 0.5 work-forces.
HH = household.

Figure A-1: Decision tree of the effective credit demand in the formal sector



Source: Adapted from BARHAM *et al.* (1996) and HEIDHUES and SCHRIEDER (1998).

Notes: [1] Credit-rationed households do have access to the formal financial system and are therefore not separated in the analysis. Besides, in one research area (Ba Be) not a single household was rationed. Nine households were excluded from the sample because of missing values. This decision tree includes the formal and semi-formal financial institutes, VBARD, VBP, and the State Treasury.

Figure A-2: Principal Component Indicators

Ten indicators were chosen for the PCA, including the benchmark indicator, three asset-related variables, one food-related variable, two dwelling-related variables and three indicators related to human resources. The poverty component is given by:

PC1	=	0.587 * per person expenditure on clothes and footwear
	+	0.674 * total value of assets per person
	+	0.662 * value of electronics and appliances per household (HH)
	+	0.596 * value of transportation-related assets per HH
	−	0.497 * months without enough to eat per year
	+	0.531 * type of roof
	+	0.566 * electricity supply
	+	0.675 * percentage of adults with only primary education
	+	0.592 * percentage of adults with college education
	+	0.542 * percentage of literate adults

This equation accounts for 35.4% of the total variance of the original data.

Source: HÄUSER *et al.* (2005).

Table A-2: Logit estimation of average utility values for credit attributes, by wealth classes

		Indigent (N = 134)		Medium (N = 82)[1]		Better-off/rich (N = 42)[1]		Total (N = 258)	
		Utilities	t-values	Utilities	t-values	Utilities	t-values	Utilities	t-values
Livestock insurance	Yes (5,000 VND per month and animal)	1.541	6.800***	1.239	4.794***	8.949	0.170	1.562	9.353***
	No	-1.541	-6.800***	-1.239	-4.794***	-8.949	-0.170	-1.562	-9.353***
	Relative importance in %	21%		15%		21%		20%	
Disbursal time	Seven days	2.078	4.801***	2.654	3.510***	6.019	0.130	1.947	7.032***
	60 days	-2.078	-4.801***	-2.654	-3.510***	-6.019	-0.130	-1.947	-7.032***
	Relative importance in %	28%		32%		14%		24%	
Lending scheme	Group lending	-1.109	-3.643***	-1.275	-2.942***	-3.903	-0.074	-1.184	-5.414***
	Individual lending	1.109	3.643***	1.275	2.942***	3.903	0.074	1.184	5.414***
	Relative importance in %	15%		15%		9%		15%	
Collateral requirement	Land use certificates	0.857	2.616**	0.880	1.916*	5.106	0.098	1.261	5.744***
	Durable consumer goods	-1.645	-2.822***	-0.873	-1.011	-14.739	-0.196	-2.298	-5.989***
	No collateral	0.788	1.940**	-0.007	-0.013	9.632	0.128	1.037	3.658***
	Relative importance in %	17%		11%		29%		22%	
Location of credit negotiation, disbursal, etc.	District	-0.947	-2.648***	-0.756	-1.563	-11.481	-0.148	-1.388	-5.763***
	Commune	-0.931	-1.622*	-1.894	-2.214**	10.405	0.146	-0.281	-0.823
	Village	1.878	4.857***	2.650	4.264***	1.075	0.023	1.669	6.519***
	Relative importance in %	19%		27%		26%		19%	
None option		3.566	6.466***	3.895	4.338***	16.330	0.185	3.521	9.100***
Percentage of households choosing none option		10%		7%		14%		10%	
Chi-square		385.170		277.465		113.648		734.149	

Source: Own calculations.

Notes: * Significant at 10% level. **Significant at 5% level. ***Significant at 1% level. [1] Due to the small sample size or little variance, the default settings did not yield interpretable results for all attributes or the regression model did not converge. Therefore, the settings were changed to 30 iterations in stead of 20, with a smaller step size between the iterations 0.5 instead of one, and the change of log-likelihood from one iteration to the next was changed from 1e-005 to 1e-004. The attribute 'interest rate' was excluded from the analysis, as the level '0.5% interest rate/month' was chosen in 100% of the cases.

Table A-3: Logit estimation of average utility values for saving attributes, by wealth classes

	Indigent (N = 134)		Medium (N = 82)[1]		Better-off /rich (N = 42)[1]		Total (N = 258)	
	Utilities	t-values	Utilities	t-values	Utilities	t-values	Utilities	t-values
Interest rate and term								
No interest rate / demand deposit	-1.750	-2.355**	-2.120	-0.271	-2.026	-0.243	-1.401	-3.702***
0.3% Per month for a one-month deposit	-0.063	-0.105	-1.063	-0.136	-1.789	-0.214	-0.347	-1.075
0.5% Per month for a three-month deposit	1.813	5.614***	3.184	0.204	3.815	0.229	1.747	8.243***
Relative importance in %	45%		26%		30%		38%	
Incentive scheme								
No lottery	-0.069	-0.154	-3.802	-0.163	-3.297	-0.132	-0.612	-2.070**
Lottery	0.069	0.154	3.802	0.163	3.297	0.132	0.612	2.070**
Relative importance in %	2%		37%		33%		15%	
Location of depositing and withdrawing								
Village	1.935	5.820***	0.645	0.083	-0.124	-0.015	1.448	8.077***
Commune	-0.571	-1.083	1.537	0.099	1.827	0.110	-0.251	-0.839
District	-1.364	-3.018***	-2.182	-0.279	-1.704	-0.205	-1.196	-4.755***
Relative importance in %	42%		18%		18%		32%	
Minimum requirement for account opening								
No minimum requirement	0.458	1.483	1.828	0.156	1.884	0.151	0.589	3.045***
20,000 VND	-0.458	-1.483	-1.828	-0.156	-1.884	-0.151	-0.589	-3.045***
Relative importance in %	12%		18%		19%		14%	
None option	2.283	6.012***	4.251	0.218	2.726	0.131	1.864	6.483***
Percentage of households choosing none option	17%		11%		5%		13%	
Chi-square	249.034		168.742		73.906		459.531	

Source: Own calculations.

Notes: * Significant at 10% level. **Significant at 5% level. ***Significant at 1% level. [1] Due to the small sample size or little variance the default settings did not yield in interpretable results for all attributes or the regression model did not converge. There-fore, the settings were changed to 30 iterations instead of 20, with a smaller step size between the iterations 0.5 instead of one, and the change of log-likelihood from one iteration to the next was changed from 1e-005 to 1e-004.

Studies on the Agricultural and Food Sector in Central and Eastern Europe
edited by Leibniz Institute of Agricultural Development in Central and Eastern Europe (IAMO)
ISSN 1436-221X

Vol. 1 **The Importance of Institutions for the Transition in Central and Eastern Europe with Emphasis on Agricultural and Food Industry**
ed. by Klaus Frohberg and Witold-Roger Poganietz
1998, 137 pages, ISBN 3-8175-0258-3

Vol. 2 **The Significance of Politics and Institutions for the Design and Formation of Agricultural Policies**
ed. by Klaus Frohberg and Peter Weingarten
1999, 254 pages, ISBN 3-8175-0289-3

Vol. 3 **Food Processing and Distribution in Transition Countries. Problems and Perspectives**
ed. by Monika Hartmann and Jürgen Wandel
1999, 349 pages, ISBN 3-8175-0293-1

Vol. 4 **Die private Nachfrage nach Nahrungsmitteln im Transformationsprozeß Tschechiens und Polens**
Stephan Brosig (PhD)
2000, 171 Seiten, ISBN 3-8175-0319-9

Vol. 5 **Integrating Estonia into the EU: Quantitative Analysis of the Agricultural and Food Sector**
Achim Fock (PhD)
2000, 286 pages, ISBN 3-8175-0320-2

Vol. 6 **Competitiveness of Agricultural Enterprises and Farm Activities in Transition Countries**
ed. by Peter Tillack and Frauke Pirscher
2000, 216 pages, ISBN 3-8175-0322-9

Vol. 7 **Конкурентоспособность сельскохозяйственных предприятий и фермерской деятельности в странах переходного периода**
под редакцией Петера Тиллака и Фрауке Пиршер
2000, 253 страницы, ISBN 3-8175-0324-5

Vol. 8 **Perspectives on Agriculture in Transition: Analytical Issues, Modelling Approaches, and Case Study Results**
ed. by Witold-Roger Poganietz, Alberto Zezza, Klaus Frohberg and Kostas G. Stamoulis
2000, 433 pages, ISBN 3-8175-0323-7

Vol. 9 **Land Ownership, Land Markets and their Influence on the Efficiency of Agricultural Production in Central and Eastern Europe**
ed. by Peter Tillack and Eberhard Schulze
2000, 485 pages, ISBN 3-8175-0325-3

Vol. 10 **Landwirtschaft und Industrie in Russland – der Transformationsprozeß in der Ernährungsindustrie**
Jürgen Wandel (PhD)
2000, 361 Seiten, ISBN 3-8175-0334-2

Vol. 11 **Food Consumption in Russia. An Econometric Analysis Based on Household Data**
Karin Elsner (PhD)
2001, 256 pages, ISBN 3-8175-0335-0

Vol. 12 **Alexander Wasiljewitsch Tschajanow – die Tragödie eines großen Agrarökonomen**
hrsg. u. übers. von Eberhard Schulze
2001, 192 Seiten, ISBN 3-8175-0342-3

Vol. 13 **Analysis of Food Consumption in Central and Eastern Europe: Relevance and Empirical Methods**
ed. by Stephan Brosig and Monika Hartmann
2001, 253 pages, ISBN 3-8175-0349-0

Vol. 14 **Wettbewerbsprozesse und Firmenwachstum in der Transformation am Beispiel der polnischen Fleischindustrie**
Agata Pieniadz (PhD)
2002, 291 Seiten, ISBN 3-8175-0360-1

Vol. 15 **Agricultural Enterprises in Transition: Parallels and Divergences in Eastern Germany, Poland and Hungary**
ed. by Ludger Hinners-Tobrägel and Jürgen Heinrich
2002, 455 pages, ISBN 3-8175-0366-0

Vol. 16 **Agricultural Technology and Economic Development of Central and Eastern Europe. Results of the Workshop in Halle, 2nd – 3rd July 2001**
ed. by Peter Tillack and Ulrich Fiege
2002, 160 pages, ISBN 3-86037-199-1

Vol. 17 **Региональные аспекты аграрных преобразований: политика, реструктуризация, рыночная адаптация**
под редакцией Петера Тиллака и Виталия Зиновчука
2003, 236 страницы, ISBN 3-928466-55-0

Vol. 18 **Alexander Vasilievich Chayanov – the Tragedy of an Outstanding Agricultural Economist**
ed. by Eberhard Schulze
2003, 188 pages, ISBN 3-86037-201-7

Vol. 19 **Development of Agricultural Market and Trade Policies in the CEE Candidate Countries**
by the Network of Independent Agricultural Experts in the CEE Candidate Countries
2003, 72 pages, ISBN 3-86037-212-2

Vol. 20 **Large Farm Management**
ed. by Alfons Balmann and Alexej Lissitsa
2003, 396 pages, ISBN 3-86037-213-0

Vol. 21 **Success and Failures of Transition – the Russian Agriculture between Fall and Resurrection**
ed. by Eberhard Schulze, Elke Knappe, Eugenia Serova, Peter Wehrheim
2003, 521 pages, ISBN 3-9809270-1-6

Vol. 22 **Subsistence Agriculture in Central and Eastern Europe: How to Break the Vicious Circle?**
ed. by Steffen Abele and Klaus Frohberg
2003, 233 pages, ISBN 3-9809270-2-4

Vol. 23 **Pfadabhängigkeiten und Effizienz der Betriebsstrukturen in der ukrainischen Landwirtschaft – Eine theoretische und empirische Analyse**
Andriy Nedoborovskyy (PhD)
2004, 197 Seiten, ISBN 3-86037-216-5

Vol. 24 **Nichtmonetäre Transaktionen in der ukrainischen Landwirtschaft: Determinanten, Spezifika und Folgen**
Olena Dolud (PhD)
2004, 190 Seiten, ISBN 3-9809270-3-2

Vol. 25 **The Role of Agriculture in Central and Eastern European Rural Development: Engine of Change or Social Buffer?**
ed. by Martin Petrick and Peter Weingarten
2004, 426 pages, ISBN 3-9809270-4-0

Vol. 26 **Credit rationing of Polish farm households – A theoretical and empirical analysis**
Martin Petrick (PhD)
2004, 254 pages, ISBN 3-9809270-6-7

Vol. 27 **Drei Jahrhunderte Agrarwissenschaft in Russland: Von 1700 bis zur Gegenwart**
Alexander Alexandrowitsch Nikonow und Eberhard Schulze
2004, 232 Seiten, ISBN 3-9809270-8-3

Vol. 28 **Russlands Weg vom Plan zum Markt: Sektorale Trends und regionale Spezifika**
Peter Voigt (PhD)
2004, 270 Seiten, ISBN 3-9809270-9-1

Vol. 29 **Auswirkungen des Transformationsprozesses auf die sozio-ökonomischen Funktionen ukrainischer Landwirtschaftsunternehmen**
Helga Biesold (PhD)
2004 182 Seiten, ISBN 3-938584-00-9

Vol. 30 **Agricultural policies and farm structures – agent-based modelling and application to EU-policy reform**
Kathrin Happe (PhD)
2004, 291 pages, ISBN 3-938584-01-7

Vol. 31 **How effective is the invisible hand? Agricultural and Food Markets in Central and Eastern Europe**
ed. by Stephan Brosig and Heinrich Hockmann
2005, 361 pages, ISBN 3-938584-03-3

Vol. 32 **Erfolgsfaktoren von landwirtschaftlichen Unternehmen mit Marktfruchtanbau in Sachsen-Anhalt**
Kirsti Dautzenberg (PhD)
2005, 161 Seiten, ISBN 3-938584-06-8

Vol. 33 **Agriculture in the Face of Changing Markets, Institutions and Policies: Challenges and Strategies**
ed. by Jarmila Curtiss, Alfons Balmann, Kirsti Dautzenberg, Kathrin Happe
2006, 544 pages, ISBN 3-938584-10-6

Vol. 34 **Making rural households' livelihoods more resilient – The importance of social capital and the underlying social networks**
ed. by Gertrud Buchenrieder and Thomas Dufhues
2006, 106 pages, ISBN 3-938584-13-0

Vol. 35 **Außerlandwirtschaftliche Diversifikation im Transformationsprozess. Diversifikationsentscheidungen und -strategien ländlicher Haushalte in Slowenien und Mazedonien**
Judith Möllers (PhD)
2006, 323 Seiten, ISBN 3-938584-14-9

Vol. 36 **Accessing rural finance – The rural financial market in Northern Vietnam**
Thomas Dufhues (PhD)
2007, 166 Seiten, ISBN 3-938584-16-5