



ACCESS TO FINANCE

MICROFINANCE INNOVATIONS IN THE PEOPLE'S REPUBLIC OF CHINA

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6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
Tel +63 2 632 4444
Fax +63 2 636 2444
www.adb.org

For orders, please contact:
Public Information Center
Fax +63 2 636 2584
adbpub@adb.org

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Foreword

From the early 1990s to 2005, the People's Republic of China (PRC) used a top-down approach to rural finance and microfinance reform and development. The top level policy issues were largely the focus and market issues at the micro level received little attention. This approach could not have sustainable results. Since 2005, the government has therefore taken a more market-oriented approach and promoted institutional reforms in the sector.

This study was conducted by the Asian Development Bank (ADB) for the People's Bank of China in support of the government's inclusive growth and balanced development agenda. Using case studies, it identifies and advocates innovations to improve the sustainability of rural finance and microfinance institutions. The study is a sequel to *Rural Finance in Poverty-Stricken Areas in the People's Republic of China*, which was published in 2010.

Several unresolved issues in the PRC's rural finance and microfinance markets are analyzed on the following pages. While more players have entered the markets in recent years, competition among institutions that lend to rural households and microentrepreneurs in most parts of the country is still lacking. The financing outreach to rural households and microentrepreneurs also remains far from adequate, and many small farmers, rural households, and businesses face serious credit constraints. Instead of simply being a poverty reduction tool, rural microfinance has to be used as a sustainable, innovative tool to empower rural agricultural communities, as well as micro and small enterprises in both the rural and the urban areas.

ADB has partnered with the PRC's financial regulatory agencies in developing rural finance and microfinance over the past 20 years, and that partnership continues to this day. With this study, ADB hopes to contribute once again to a better understanding of the sector and to encourage policy makers to pay greater attention to market realities in developing policies.



Ayumi Konishi

Director General, East Asia Department
Asian Development Bank

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- Xu Zhong, PhD in economics, senior research fellow and deputy director general, Financial Market Department, the People's Bank of China. Dr. Xu is an adjunct professor at the University of Foreign Economic Relations and Trade, and has been engaged in rural finance and microfinance policy making and research for more than 15 years.
- Cheng Enjiang, PhD in economic development, currently an associate professor with the Center for Strategic Economic Studies at Victoria University, Australia, and an adjunct professor with the College for Rural Development at Zhejiang University. Dr. Cheng's main research interests are rural finance, microfinance, and finance and economic development. Liu Xichuan, PhD in economics, currently associate professor at Zhejiang University of Science and Technology. Dr. Liu's main research areas are rural finance, small and medium-sized enterprise financing, and finance for poverty reduction. Dr. Liu is the chief investigator of a young scientist project for the PRC's Natural Science Research Fund. He is the author of two books and more than 10 academic journals in the PRC.
- Zhang Xuechun, PhD in economics, senior research fellow and deputy director general, Financial Research Institute, People's Bank of China. Dr. Zhang is the editor of the *Journal of Financial Research* and has published widely in the areas of finance, rural finance, and finance for poverty reduction.
- Ma Jiujiu, PhD in agricultural economics, currently professor at the School of Rural Development, People's University. Professor Ma is an expert in rural and agricultural finance and has recently been doing research mainly in agricultural and food chain financing.

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Abbreviations

| | |
|-------|---|
| ABC | Agricultural Bank of China |
| ADBC | Agricultural Development Bank of China |
| BOC | Bank of China |
| BOCQ | Bank of Chongqing |
| BSB | Baoshang Bank (formerly Baotou Commercial Bank) |
| CBRC | China Banking Regulatory Commission |
| CCB | city commercial bank |
| CDB | China Development Bank |
| CDF | community development fund |
| CFPA | China Foundation for Poverty Alleviation |
| CMFP | China Development Bank Microfinance Project |
| COFCO | China National Cereals, Oils and Foodstuffs Corporation |
| DQCB | Daqing Commercial Bank |
| DYCB | Deyang Commercial Bank |
| GB | Guiyang Bank |
| GLCB | Guilin Commercial Bank |
| IFC | International Finance Corporation |
| IPC | International Project Consulting |
| JB | Jiujiang Bank |
| KfW | Kreditanstalt für Wiederaufbau |
| JZCB | Jingzhou Commercial Bank |
| LCB | Lanzhou Commercial Bank |
| LGOP | (State Council) Leading Group Office of Poverty Reduction |
| MCC | microcredit company |
| MFI | microfinance institution |
| MOF | Ministry of Finance |
| MRCB | Maanshan Rural Commercial Bank |
| MSEs | micro and small enterprises |
| NGO | nongovernment organization |
| NPL | nonperforming loan |
| PBC | People's Bank of China |
| PFI | partner financial institution |
| PSB | postal savings bank |
| PSBC | Postal Savings Bank of China |
| QJCB | Qujing Commercial Bank |
| RBSCs | Rural Buying and Sales Cooperatives |
| RCB | rural commercial bank |
| RFCs | rural fund cooperatives |
| RCC | rural credit cooperative |
| RCCU | rural credit cooperative union |
| RCOB | rural cooperative bank |
| RFI | rural financial institution |

| | |
|------|------------------------------------|
| RFM | rural financial market |
| RMB | Renminbi Yuan |
| SMEs | small and medium-sized enterprises |
| MSEs | micro and small enterprises |
| SOCB | state-owned commercial bank |
| TA | technical assistance |
| TB | Taizhou Bank |
| VTBs | village and township banks |
| MIS | Management Information System |
| PAD | Project Appraisal Document |
| TA | Technical Assistance |
| TOR | Terms of Reference |

Rural Financial Innovation in the People's Republic of China

Rural Financial Reform

Rural financial markets and institutions have an important role in resource allocation and economic development: they mobilize rural resources and channel them to efficient investors. Financial services, especially credit services to rural households and to microenterprises in the urban and the rural areas, help the economy grow. They provide jobs for the low-income population, bridge the income gap, raise domestic consumption, and help advance social justice and social harmony.

But in the People's Republic of China (PRC), the question of how the government should promote rural and microenterprise financing still has to be answered. Lending to low-income groups and to micro and small enterprises (MSEs) is riskier and more costly. There is disagreement as to whether the government should use direct (administrative) or indirect (market) controls when extending such credit. Direct controls long used by many governments in developing countries to spur rural and microenterprise lending by rural financial institutions (RFIs) include, among others, interest ceilings, subsidized interest rates and low rediscount rates from the central bank for loans to priority sectors, minimum lending ratios for agriculture or small-scale enterprises, subsidies for rural lending, and specialized agricultural development banks created by the government specifically for rural lending. Such direct controls have, however, given rise to a high proportion of RFI nonperforming loans (NPLs), ever-increasing subsidies, and distortions in rural financial markets. Among the indirect controls are liberalized interest rates, concessionary tax rates for lenders, better rural infrastructure, and the entry of more RFIs including microfinance institutions (MFIs), into the market to increase competition, improve operating efficiency, attain wider lending outreach, and eventually lower lending rates and upgrade financial services.

Whichever approach is chosen will have significant socioeconomic implications for the PRC. In the course of its economic development, reforms in factor markets, particularly in the financial markets, have lagged behind reforms in the product markets. Integrated development, with a better balance between the urban areas and the countryside, and large-scale agricultural production—two priorities set recently by the central government—also call for rural financial reform, as do service sector development and job creation, both crucial for industrial growth and economic progress.

Rural finance, as defined in this book, encompasses the financial markets, institutions, and policies related to rural and agricultural financing, as well as microfinance policies, institutions, and services. In the PRC, microfinance is essentially microcredit, which has a narrower outreach than microdeposit and microremittance services. Microfinance in the PRC is inextricably linked with the rural economy and rural finance. Most loans for households in the rural areas, including village and county seats and other large townships in a county, are microloans. Financial services provided to microentrepreneurs and small business owners operating in urban areas, many of whom come from and still reside in the rural areas, can

also be regarded as part of rural finance. The integration of urban and rural development has further blurred the urban–rural boundaries.

Since 2005, the government has taken what is basically a market approach to promoting microfinance and rural financial reform in the PRC. Before 2005, microcredit was presented more as a loan product of RFIs, mainly the rural credit cooperatives (RCCs), though the Grameen Bank microfinance model was introduced into the PRC in the early 1990s and mid-1990s.

Pre-reform Rural Financial Markets and Rural Financial Institutions

From the early 1990s to 2005, financial services to rural households in the PRC and the financial sustainability of RFIs were affected by the reform of state-owned commercial banks (SOCBs) and by the pilot projects involving microfinance nongovernment organizations (NGOs). SOCB reform from the mid-1990s reduced the access of rural households and MSEs to institutional credit, which had contributed to the RCC monopoly in rural lending. After they were commercialized, SOCBs, particularly the Agricultural Bank of China (ABC), withdrew from the rural areas by merging and closing down many rural branches and service centers, and channeled more funds to urban areas and to large clients and projects. This drastic reduction in rural bank locations and in the monopolistic operation of the RCCs further constrained farmers' access to institutional credit and squeezed farming incomes. The microfinance NGO pilot projects in the early 1990s and mid-1990s, though limited in extent and progress, introduced the Grameen Bank microfinance model into the PRC with wide-ranging effects on government agencies, the central bank, and financial regulators, as well as the general public.

Against this background of bank commercialization, low access to formal credit among rural households and microenterprises, and the widening income gap between rural and urban households, the government took several measures to increase the supply of credit. *First*, it put off reforming the RCCs when it commercialized the SOCBs, and later applied a different reform model to the RCCs to encourage them to stay in the rural areas. *Second*, even as the government strictly curbed the entry of new RFIs, it did not allow the existing RCCs to operate beyond county boundaries, thus reducing the flow of funds to the urban areas and between counties through the RCC system. But it encouraged the RCCs to experiment with uncollateralized microcredit and with lending based on group or third-party guarantees to maintain reasonable coverage of rural households in a county. *Third*, at a time when borrowing rates of commercial banks were up to four times the base lending rate, RCC lending rates for rural households were capped at 2–2.5 times the base lending rate. *Lastly*, to compensate the RCCs for their rural lending programs the government provided them with implicit deposit insurance (no exit mechanism), low-interest loans from the People's Bank of China (PBC) for on-lending to agriculture, and direct subsidies. RCCs with a high proportion of NPLs and negative equity were not allowed to fail, but neither could well-performing RCCs expand their operations.

Deterioration in RCC performance prompted the central government to initiate pilot RCC reforms in Jiangsu province in 2000 and to replicate the reforms across the country from 2003 to 2005. Responsibility for RCC management was transferred from the China Banking Regulatory Commission (CBRC) to the provincial governments and RCC equity capital increased, among other major reform outcomes. However, until 2005, little progress

was achieved in corporate governance and in RCC operations. Because of problems with ownership structure, governance, and management, monopolistic operations did not generate monopolistic profits. Subsidies from the central and local governments therefore had to continue. The territorial restriction on RCCs also did not stop the overall flow of funds from rural to urban areas and to large clients and projects, mainly through SOCBs and the postal savings system.

The pre-2005 reforms centered on institutional and management reform, especially of RCCs. Little effort was made to improve the quality and outreach of rural finance and microfinance services by allowing the entry of new RFLs and liberalizing interest rates for more competitive lending. In the urban microfinance market, there was a supply vacuum. The SOCB reforms made the RCCs the principal suppliers of rural credit services, with a lending rate ceiling, territorial restrictions, and government subsidies, contrary to the market approach to financial liberalization. Monopolistic operation and the absence of an exit mechanism led to inefficient and low-quality RCC services.

Reforms Since 2005 and Their Outcomes

The rural finance and microfinance reforms in the PRC since 2005 marked a significant change in approach, from a focus on RCC institutional reforms to gradually liberalized rural lending, from the use of microfinance purely as a subsidized tool for poverty reduction to its sustainable use in rural and urban development, from a narrow lending outreach to a more open rural finance and microfinance market with the help of government incentives, and from a limited number of rural finance and microfinance products to product and service innovations, again with government assistance.

Gradual liberalization of the rural lending market. Instead of its former focus on institutional reforms in the RCCs, the government worked toward gradual rural market liberalization, to reduce the market dominance of the RCCs. The entry of new RFLs and MFLs, and microfinance downscaling and rural lending by commercial banks, laid the necessary political and strategic foundations for deeper RCC reform.

Around December 2005, with the PBC's endorsement, seven microcredit companies (MCCs) were created in five pilot provinces, marking the start of the commercialization of microfinance in the PRC. In May 2008, the CBRC and the PBC jointly issued guidelines for an MCC pilot project, which was later replicated throughout the PRC. MCCs are lending-only institutions subject to nonprudential regulation by provincial government agencies. Another distinguishing feature of MCCs is their private capital investment and ownership.

One year after the MCC pilot project, the CBRC started its own pilot project involving village and township banks (VTBs). VTBs are county-level, deposit-taking banks subject to CBRC regulation and allowed to engage in full banking operations. However, VTBs can be set up only by an existing commercial bank with at least a 20% share in the total equity investment.

The Postal Savings Bank of China was created in March 2007 and immediately started its microlending program. By May 2010, the bank had loaned over RMB170 billion to more than 3 million MSE clients.

With the reforms in rural financial institutions, the State Council's Leading Group Office of Poverty Reduction (LGOP) and the Ministry of Finance (MOF) started pilot village community development funds (CDFs) in more than 100 villages in 6 provinces in 2006,

expanded coverage to 27 provinces in 2007, and by the end of 2008 had set up CDFs totaling RMB660 million in 4,122 poor villages in 28 provinces. About 10,000 villages now have CDFs, and these have had an active role in poverty reduction.

The development of RCCs, new types of rural financial institutions and microfinance institutions, their loan portfolios and portfolio quality after the reforms in the 2005–2006 are presented in Tables 1–4.

Table 1. Regulated Rural and Microfinance Institutions in the PRC, as at the end of 2012

| | Numbers ² | No. Branches | No. Employees |
|---------------------------------|----------------------|--------------|---------------|
| RCCs | 1,927 | 49,034 | 502,829 |
| Rural Commercial Banks (RCBs) | 337 | 19,910 | 220,042 |
| Rural Cooperative Banks (RCOBs) | 147 | 5,463 | 55,822 |
| New Types of RFIs ¹ | | | |
| VTBs | 800 | 1,426 | 30,508 |
| Loan Companies | 14 | 14 | 111 |
| Rural Fund Cooperatives | 49 | 49 | 421 |
| Total | 3,274 | 75,896 | 809,733 |

Notes: 1. The new types of rural financial institutions refer to the RCFs permitted in 2006, with the license issued by CBRC. MCCs are not included in the new types of RFIs here. 2. By the end of 2013, the number of RCBs, RCOBs and VTS changed to 468, and 987 respectively.

Source: CBRC.

Table 2. Performance of RCCs and New RFIs in the PRC 2010–2011

| | 2010 | | 2011 | |
|--|------------------|------------------|------|-------|
| | ROA ³ | ROE ⁴ | ROA | ROE |
| Commercial Banks in the PRC ¹ | 1.1 | 19.2 | 1.3 | 20.4 |
| RCCs | 0.36 | 8.34 | 0.74 | 15.3 |
| Rural Commercial Banks | 1.01 | 13.82 | 1.2 | 15.43 |
| Rural Cooperative Banks | 1.19 | 16.05 | 1.3 | 17.06 |
| New RFIs and PSBC ² | 0.34 | 16.17 | 0.59 | 20.01 |

Notes: 1. The commercial banks here include rural commercial banks but not RCCs and rural cooperative banks.

2. Same as note 1 in Table 1. 3. Returns on assets %. 4. Returns on equity %.

Source: CBRC.

Table 3. The Total Loan Portfolio and Nonperforming Loans for Commercial Banks in the PRC (2010–2012)

| | 2010 | | 2011 | | 2012 | |
|------------------------|----------------------|-------------------|----------------------|-------------------|----------------------|-------------------|
| | Total L ¹ | NPL% ² | Total L ¹ | NPL% ² | Total L ¹ | NPL% ² |
| All Commercial Banks | 394,182 | 1.1 | 427,900 | 1.0 | 518,842 | 0.95 |
| Large Commercial Banks | 240,385 | 1.3 | 272,364 | 1.1 | 312,626 | 0.99 |
| Joint Stock banks | 80,857 | 0.7 | 93,833 | 0.6 | 110,694 | 0.72 |
| City Commercial banks | 36,222 | 0.9 | 42,375 | 0.8 | 51,728 | 0.81 |
| Rural Commercial banks | 14,263 | 1.9 | 21,313 | 1.6 | 32,045 | 1.76 |
| Foreign Banks | 9,800 | 0.5 | 10,000 | 0.4 | 10,385 | 0.52 |

Notes: 1. The total loan portfolio in RMB 100 million. 2. The ratio of nonperforming loans.

Source: Calculated from the data from CBRC website, www.cbrc.gov.cn.

Table 4. The Development of Nonbanking Microloan Institutions in the PRC 2012

| | MCCs | Pawnshops | Leasing Companies ¹ | NGO MFIs |
|-------------------------------------|--------------------------------------|--|--------------------------------|-------------------------|
| Number ² | 7,839 | 6,084 | 540 | about 100 |
| Total portfolio RMB bn ³ | 819.1 | 70.61 | 890 | |
| Supervisors | Local Governments ⁴ | Ministry of Commerce | Ministry of Commerce | Unclear |
| Main Clients | MSEs, micro entrepreneurs Farmers | MSEs, micro entrepreneurs Individuals | Enterprises | Mainly Rural Households |

Notes: 1. Refer to financial leasing companies. 2. The number of MCCs in the table is for 2013, and 2012 for all the other institutions. 3. RMB billion. 4. In most cases, local government financial offices.

Source: Hanhua Co. unpublished report, 2014.

Sustainable use of microfinance in rural and urban development. From being purely a tool for poverty reduction with government or donor subsidies, microfinance came to be viewed as a sustainable, institutionalized service to rural communities, agriculture, and MSEs in both the rural and the urban areas. The Grameen Bank microfinance model introduced in the PRC in the early 1990s and mid-1990s, with subsidies from donors and the national government, primarily targeted landless women in small trading activities and had its pilot run mainly in remote mountainous areas among very poor rural farming households. In the 21st century, and especially after 2005, sustainable and commercially oriented microfinance models started to be introduced into the PRC. The PBC-backed MCCs were commercially oriented and unsubsidized, and so was the microfinance downscaling project of the China Development Bank (CDB), which received support from the World Bank and KfW. The rapid growth in the number of MCCs and VTBs since 2005 and the increase in the volume of microlending by city and rural commercial banks indicate the huge potential for commercial microfinance in the PRC.

Wider outreach. The rural finance and microfinance market gradually opened up and RFI outreach to rural households and microenterprises improved, with government guidance and incentives. But the RFIs and MFIs needed to lend at higher rates to offset the higher transaction costs and credit risks associated with the lack of physical collateral. When the government gradually lifted the ceiling on lending rates for commercial banks, a number of city commercial banks (CCBs) moved into microfinance and raised their lending rate from below 10% per year to 18%. The interest spread was now sufficient to cover the higher transaction costs. The government has also used tax incentives to encourage RFIs to provide microloans. For example, RFIs have tax concessions for loans below RMB50,000.

Innovative rural financial products and services. Given the small number of rural finance and microfinance products, the government started paying more attention to innovations in rural financial products and services. In 2008, the PBC and the CBRC pilot-tested rural financial innovations in six provinces in central PRC and three provinces in the northeastern part of the country. The pilot program promoted uncollateralized and group-guaranteed rural microloans, tried out new forms of credit guarantees and collateral (such as agricultural product procurement contracts and insurance coverage), and promoted electronic finance using bank cards in the rural areas.

The reforms since 2005 indicate that the market approach is the right approach to rural financial reform in the PRC. There are three major lessons in this regard. *First*, RFIs and rural financial markets (RFMs) need a clearly defined ownership structure and good corporate

governance to perform well. The reformed ABC and the new types of RFIs (MCCs and VTBs) provide good examples. *Second*, liberalized market entry and competition is crucial for good and efficient RFMs. The lifting of the interest rate ceiling on lending by commercial banks has given commercial microfinance, with its higher operating costs, more room to develop. *Lastly*, the government must support and encourage outreach to rural finance and microfinance clients. In recent years, the government has provided more help and guidance to RFIs to increase their outreach.

Unresolved Issues

For the PRC's rural finance and microfinance markets to develop, a number of issues, some of them serious, must be resolved. On the whole, despite the entry of more players in recent years, lending to rural households and microentrepreneurs in most regions suffer from a lack of competition. Outreach to these entities is still far from adequate, and for many rural households and MSEs the credit constraints are severe.

RCC reform is at a standstill, trapped in game playing among interest groups. The role, as well as the institutional form, of the provincial RCC federation is far from clearly defined. The federation serves as the management agency for the legally independent county-level RCC unions, in what is virtually an administrative approach to RCC reform that runs counter to the overall market approach to the reform of RFIs and RFMs. As a result, county-level RCCs can hardly be expected to have sound corporate governance, nor their boards to perform their duties and responsibilities. Real progress in RCC reform was attained after 2005 when a few rural commercial banks in the RCC system were allowed to operate beyond their county borders. With respect to outreach, most RCCs have extended assistance to the richer 10%–20% of rural households but have difficulty downscaling.

Both traditional and new RFIs have generally been slow to penetrate the lending market for average rural households and microenterprises in the rural areas and large townships. Recent reforms indicate that limited market opening and commercialization alone cannot push RFIs and MFIs to lend to average rural households and microenterprises. Many new VTBs do not operate very differently from other commercial banks and do not have a significantly high ratio of loans to rural households and microenterprises in their loan portfolio. Most MCCs established since 2005 target small and medium-sized enterprises (SMEs), have a low proportion of microenterprise loans in their portfolio, and rarely lend to rural households. Some CCBs have been active in microfinance downscaling, but many have not reached economies of scale in their microlending operations; Baoshang Bank (BSB) in Inner Mongolia and Taizhou Commercial Bank (TB) in Zhejiang are among the rare exceptions. The proportion of rural household and microenterprise loans in ABC lending also remains low overall, though the bank has made a genuine effort to return to the rural market. On the whole, except in a few markets, competition in rural household and microenterprise lending in the PRC is still limited and for most rural households and microenterprises credit is very tight.

The slow progress of outreach to rural households and microenterprises by traditional and new institutions can be attributed to several factors. *First*, the lending focus of SOCBs and other shareholding banks on large enterprises and projects, especially those of state-owned enterprises and local governments, has created a chronic shortage of formal credit to SMEs, which new market entrants have been eager to fill. Most of those with private equity investment are driven by a strong profit motive. Moreover, new MCCs were expressly created to supplement the commercial banks in SME financing. They lend to SMEs that are

unable to meet the collateral requirements of commercial banks or are unhappy with their loan size and terms, or to SMEs that are excluded from borrowing by regulatory restrictions. *Second*, the risks and transaction costs of microlending to average rural households and microenterprises are still higher because of the slow growth of social protection and social welfare and the absence of microinsurance in the rural areas, as well as insufficient progress in mobile banking and branchless banking.

Third, current regulations and financial policies do not encourage lending by new market entrants to rural households and microenterprises. MFIs cannot be operationally and financially sustainable if they operate on a small scale. Yet both MCCs and VTBs are not allowed to operate outside the county and are constrained in sourcing funds. The territorial restriction puts VTBs at a disadvantage in organizing savings deposits. Likewise, the limit set on borrowing by MCCs as lending institutions—up to 50% of their equity fund—is very low by international standards. *Lastly*, the current regulatory framework does not reward good performers by allowing them to expand and does not weed out poor performers, in accordance with economic law. Institutional and market efficiency therefore cannot improve.

Entry and regulatory problems for new entrants bring inherited risks such that reforms could be winding back. The registered and invested capital required of new VTBs is low, but these banks have to be initiated and sponsored by an existing commercial bank, which is apparently expected to assume their risks. At present, when a target number of VTBs to be created has been set, some local commercial banks sponsor 20–30 VTBs, without benefit of risk assessment and risk prevention measures. MCCs, on the other hand, are subject to nonprudential regulation, but supervising bodies vary greatly in motivation, capacity, and responsibilities across provinces in the PRC. Given the territorial and borrowing restrictions, it is highly likely that some risk-taking MCCs will raise funds illegally, lend at rates higher than four times the base rate, or use unlawful means to collect debts.

Providing subsidies mainly to RFIs rather than to the borrowers may lead to moral hazard problems. The Chinese government has provided subsidies and other support to the regulated formal financial institutions. For example, RCCs have been eligible for on-lending support from the PBC at low rates of interest (about 2% p.a.). The government has waived sales tax for the interest incomes of microloans (loan amount below RMB 50,000) provided by formal financial institutions. To improve market efficiency and raise the demand for rural loan services, government subsidies and support should have been provided directly to poor rural households and microenterprises than selected financial institutions.

Rural credit is not closely linked to rural insurance. Purchases of agricultural insurance have not yet become a prerequisite for farmers to access rural credit in the PRC, with small scale farming and microloans used for multiple purposes. However, credit risk tends to rise for agricultural chain credit and loans provided for large-scale farming, as these loans are usually larger and long term in contrast to rural microloans. By linking rural credit to insurance services, the risks for agricultural loans can be mitigated.

Rural Financial Regulation and Supervision

Introduction

Rural financial regulation and supervision entails monitoring the liquidity, risk and profitability, capital adequacy, and operational compliance of RFIs to ease and defuse financial risks and guarantee the stability of the rural financial system. It covers the following three main stages in the operation of RFIs: (i) market entry (regulation of new entrants with respect to minimum capital requirements, experience and qualifications of bank executives, operational scope, and necessary service facilities and equipment); (ii) operation (supervision of the operation, scope of business, and risks of existing RFIs); and (iii) market exit (termination of dysfunctional RFIs).

Rural financial regulation and supervision implements three types of measures corresponding to these three stages: (i) ex-ante (preventive), (ii) during the event (rescue), and (iii) ex-post (remedial). Ex-ante regulatory and supervisory measures, used during market entry, consist of requirements related to licensing, capital adequacy, repayment capacity, operational scope, credit concentration and large loan exposure, management, and auditing. Their main purpose is to prevent or restrict the operational risks of banks. Supervisory measures during the event pertain to the operations of RFIs and restrictions on their scope of business. For instance, RFIs are of three possible types: savings-only institutions, lending-only institutions, and institutions permitted to engage in both savings and lending operations. Ex-post supervision, involving mainly deposit insurance, is a final defense to protect depositors and to stabilize the financial system.

Sustained economic growth and integrated development in the urban and rural areas of the PRC have led to significant changes in the objectives of rural finance policy, in market demand, and in the types of institutions. Regarding changes in policy objectives, the central government launched a new round of rural financial reforms in 2002 and 2003, aimed at building a multilayered, inclusive, and sustainable rural financial system. As far as changes in market demand are concerned, demand for microcredit from rural households for farm production, particularly for seeds and fertilizers in traditional agriculture, has been in decline. In contrast, demand for larger loans for rural structural adjustment, such as loans for large-scale livestock production, cash crops, and agricultural processing, is on the rise (PBC Zhangjiajie Branch 2005), and so is demand for loans from large-scale agricultural producers and from new economic entities, such as agricultural cooperatives and agricultural companies. With regard to changes in types of financial institutions, the most noticeable has been the entry into the market of new RFIs, such as VTBs, following partial financial deregulation. In addition, some existing RFIs have been permitted to engage in cross-regional operations. All these changes call for innovations in financial regulation and supervision.

Innovations in rural financial regulation and supervision can be adaptive changes made by supervisory authorities in the concept, targets, subjects, approaches, and techniques of supervision in response to changing market demand and institutions. In this study,

innovations in rural financial regulation and supervision are treated as an integral part of innovations in rural finance, mainly in the banking sector (comprising cooperative, commercial, and policy banks), given the lag in the development of rural insurance in the PRC. Changes in the regulatory and supervisory framework are prerequisites for rural financial innovation including the development of innovative rural financial products, procedures, and institutions (Qi 2010).

The following sections review the regulatory and supervisory changes that have occurred in rural finance in the PRC, particularly after the reforms of 2005. The distinct features of the rural financial markets and the urgent need for innovations in rural financial regulation and supervision are discussed first, against the PRC's dual economic development model. Next, three main obstacles to financial regulation and supervision—information asymmetry, inefficient exchange of information, and staffing and technical constraints—are analyzed and recent efforts to introduce innovations are presented. The concluding section summarizes the issues that require further study.

Rural Financial Markets

Common features. High risk, high transaction costs, and low returns – these common features of rural financial markets in developing countries have driven many commercial financial institutions away from the rural market in the PRC (Yaron et al. 2002). The huge development gaps between regions and regional variations in animal and crop varieties, production seasons, and level of government support for farm production and marketing are complicating factors. These differences must be kept in mind when designing an appropriate financial supervision system (Tang 2010). Automatically applying urban commercial banking standards to agricultural financial supervision would be both illogical and unsustainable (Song and Tang 2009).

Institutional categories. According to the PBC Rural Finance Service Research Group (2008), there are four categories of rural financial service institutions in the PRC: (i) the Agricultural Development Bank of China and its branches; (ii) large state-owned commercial banks, such as the Industrial and Commercial Bank of China, ABC, Bank of China (BOC), China Construction Bank, and Bank of Communications, and their branches in villages and towns; (iii) rural branches of national shareholding commercial banks; and (iv) the Postal Savings Bank of China, RCBs, rural cooperative banks (RCOBs), RCCs, VTBs, lending cooperatives, and rural mutual financial organizations. Song and Tang (2009) note that these organizations differ in institutional category and setting and in economies of scale, among other features. Moreover, their commercial status, equity mode, and business cooperation patterns are becoming more diverse. Even within institutions, risk management and internal controls can vary. Hence, a sweeping approach to supervision cannot be applied.

Besides, insurance and securities companies are gradually entering the rural financial markets and there is increasing business overlap between these companies and banks. The tendency toward more comprehensive operations by the financial institutions has presented new challenges to PRC's financial supervisors.

Financial institutions in the PRC are divided into deposit taking and nondeposit taking institutions. The former is regulated and supervised by CBRC and PBOC, and the latter are regulated and supervised by other institutions. The ADBC, commercial banks, RCCs

(including rural commercial banks and rural cooperative banks) and VTBs are deposit taking institutions and these institutions are supervised by CBRC and PBOC. Of nondeposit taking institutions, pawnshops and financial leasing companies are supervised by the Ministry of Commerce and MCCs are supervised by the provincial governments, mainly the provincial financial offices following a guideline on the operation of MCCs issued jointly by the PBOC and CBRC in 2006. NGO MFIs, most of them registered with the county civil affair bureaus, are supervised mainly by the relevant county level government departments.

As far as the services to the financial and microfinance industries are concerned, first, the credit bureau services in the PRC are provided by PBOC and there are no alternative credit bureau service providers (such as private ones) in the PRC. However, most nondeposit taking financial institutions in the PRC, such as MCCs and NGO MFIs have no access to the credit bureau services. Next, there are three major associations for microfinance and SME finance in the PRC. The China Association of Microfinance created in 2003 is the earliest microfinance association in the PRC. The association was initially sponsored by the staff and researchers from the Chinese Academy of Social Sciences (CASS) and the the PRC International Centre for Economic and Technical Exchange (CICETE) under the Ministry of Commerce. Currently the association has a wide ranging of institutional members, from NGO MFIs to MCCs, P2P companies, city and rural commercial banks and commercial banks in the PRC. China Microfinance Institution Association, created on 2011, serves mainly MCCs with a higher membership fees. China Village and Township Banks Association was established in September 2012, with the support from CBRC. Discussions have been held for merging the above three associations into one. The major functions of the associations include the organization of annual conferences and meetings, undertaking of training and study tours and policy lobby on behalf of their members. Finally, rural and microfinance trainings have been provided by mainly by donors (such as UNDP, the World Bank Institute, Ford Foundation and UNICEF in the PRC), NGOs such as Planet Finance and Accion International, as well as private training providers. The fee paying training courses by private providers have been focused on microfinance downscaling, commercial microfinance and SME financing. So far there is no professional microfinance rating agencies in the PRC.

Risk management constraints. Beyond market demand and supply, the rural financial markets are unique in other respects. System, policy, and legal constraints and the limitations of economic growth have resulted in the lack of a mechanism for risk diversification and compensation (Gong 2009). There is no established guarantee mechanism in the rural areas, where farmland cannot be used as collateral, production materials are relatively low in value, and most farmers can hardly meet the collateral requirements of banks. Small-scale mutual guarantee and credit guarantee corporations find it difficult to survive and grow in the relatively backward legal environment for rural credit. In addition, the insurance markets in the rural areas are even more backward than the lending markets. Agricultural insurance in particular has limited variety and a low coverage ratio. According to a widely held view in the rural financial markets, the existing mechanisms for risk sharing are insufficient for the effective management of risk in agriculture, the operational risks in financial institutions, and the market risk caused by excessive competition. A significant shortage of supervision agents is also contributing to the muddle in agricultural insurance. In a large number of counties in Hebei province, for example, unlicensed insurance agents and faulty accounting are creating management confusion (Liu 2009). Given these conditions, there is increasing demand for innovations in rural financial supervision.

Urgent Need for Improving Financial Supervision in the Rural Areas

Entry of new financial institutions. At the end of 2006, the CBRC issued Document No. 90 (2007) titled “Policies about Economic Adjustment and Flexible Implementation of Permits for the Entry of Financial Institutions into the Rural Banking Market and Certain Opinions on Improving Support for the Construction of the New Socialist Countryside.” According to the principle of “low-entry threshold and strict supervision,” it encouraged the setting up of three kinds of RFIs—VTBs, finance companies, and agricultural mutual fund cooperatives. These new institutions would stimulate the growth of rural financial services, but their creation would also raise new issues in rural financial supervision (Gao 2010). Striking an appropriate balance between financial market dynamism and more efficient and secure operations will be difficult (Tang 2010).

The difficulties with informal finance. Informal finance has been active in the PRC’s vast country areas. After the government shut down rural credit foundations in 1997 in an effort to maintain financial security, many unregulated rural financial institutions went underground. Informal finance has an important role in the economy and is very active across the country, including its Southern, Eastern (Zhejiang province), and Southeastern (Fujian province) regions of PRC (Zhang et al. 2002; He 2002; Guo and Liu 2002). For farmers and SMEs that are disadvantaged by restrictions on formal lending, informal finance is an alternative. Informal finance institutions can screen and supervise clients and ensure the implementation of loan contracts with the help of their own sources of “soft” information.

Financial supervisors are, however, critical of informal finance (Liu et al. 2006). Informal finance in agriculture is inadequately supervised. Private lending is regulated by the Contract Law of 1999, the Guarantee Law of 1995, and the “Judicial Explanations from the Supreme People’s Court on Lending in Private Sector” of 1991. But according to the regulation “Approaches to Clamping Down on Illegal Financial Institutions and Operations,” RFIs in the private sector are controlled mainly through blocking.

Views of informal finance in the PRC differ significantly. Informal finance helps meet the demand for financial services in the rural areas, especially among the under-banked, and is therefore beneficial to economic growth. At the same time, the potential harm it poses should be considered and dealt with properly. Liu (2006) assert that the supervision and monitoring of rural informal finance requires a better understanding of the characteristics and operations of informal financial markets.

Fund outflow from the rural areas. There has been a serious outflow of funds from the rural areas through RFMs and RFIs, thereby weakening credit support for agriculture and infrastructure. Three major factors are behind this outflow: (i) the high rate of interest on the transfer of deposits from the postal savings system to the PBC; (ii) the reduction in the rural presence of commercial banks, which have closed down rural branches and moved up lending authority; and (iii) purchases of Treasury bonds by the RCCs and their interbank lending operations (Liu 2006). The fund outflows through the RCC and postal savings channels alone reached over RMB800 billion in 1994–2003, according to official data (*China Statistical Yearbook* and *China Finance Yearbook*, 1994–2003). Reducing the outflow through the banks is a serious challenge for rural financial regulation and supervision.

Factors that Impede Supervision

Innovations in rural financial supervision must adapt to these changes, motivated by pressure to improve supervision. The research department in PBC Zhangjiagang branch identified three main constraints on the effectiveness of supervision: (i) information asymmetry between supervision authorities and the entities they supervise; (ii) inefficient information gathering and exchange caused by limitations in institutional systems and in supervisory approach, raising supervision costs; and (iii) staffing and technical constraints.

Information asymmetry. Internal controls, among their other functions, ensure that data produced by an institution are accurate and reliable. However, internal controls in most RFIs are unsound. Deficiencies in coordination and corporate governance structure within supervised institutions, such as stated-owned commercial banks and quasi-collective RCCs, stand in the way of effective internal controls (Yin 2003). Some institutions do not comply strictly with accounting standards or with the required data accuracy in financial statements. Others set up controls but these are discrete and not mutually supportive. Supervision authorities cannot base their on-site and off-site supervision on financial statements provided by RFIs with serious internal control problems (Xu 1999). Moreover, irregular and opaque disclosure of information within RFIs, which does not allow the supervising officers to obtain correct and timely information about the RFIs' operations and risks, would also result in wrong supervisory decisions.

Inefficient information gathering and exchange. Inefficient information gathering and exchange within financial institutions, due to institutional limitations and a rudimentary and inflexible approach to supervision, increase the transaction costs of supervision and diminish its effectiveness.

To supervise effectively, supervisors should have fairly complete information at their disposal and be able to implement regulatory measures. The financial supervision of RFIs, however, rests on a weak institutional base. Poor coordination among the PBC, the CBRC, the China Securities Regulatory Commission, and the China Insurance Regulatory Commission in financial supervision hampers information sharing and, hence, supervisory performance. The three commissions, despite their relative independence, have overlaps and conflicts in responsibilities. The supervision performance of the CBRC, in particular, would be significantly affected by inadequate information from the PBC about rural finance.

Rudimentary approaches and a lack of technical means of financial supervision lead to inefficiencies in financial regulation and supervision. In the PRC, where it is difficult for financial regulators and supervisors to shed the inertia of administrative regulation, the criteria for measuring the performance of financial institutions and the systems of reward and punishment are ill-defined and ambiguous. Supervision depends mainly on on-site supervision, especially surprise inspections. Off-site supervision through continuous monitoring is deficient. Emphasis is placed on determining operational compliance with laws, rules, and regulations through administrative methods. Overall operational safety, profitability, and risk control are often overlooked. Supervision of this type, while aimed at safeguarding national laws and policies, cannot effectively track the risks faced by financial institutions, much less meet the demand for effective supervision in the PRC's changing rural financial markets. Advanced supervision techniques for risk management that have been tested in other countries have not yet been introduced into the PRC.

Staffing and technical constraints. The limited number of supervisors and their lack of skills and technical know-how are also partly responsible for the inefficient use of information

resources and supervision instruments. On-site and off-site supervision demands the services of capable supervisory professionals, who are well-versed in supervision theories and operations. However, CBRC supervisory institutions at the primary level are in poor condition. The supervision unit of primary-level branches of the PBC is severely understaffed, with about three supervisors. In some villages, there is only one supervisor (Zhao 2007). Moreover, information on all the primary-level branches for horizontal and vertical analysis and comparison is difficult to obtain, for lack of proper technical equipment and software. For the same reason, monthly, quarterly, and annual financial reports and other analytical data needed to determine the condition of RFIs and their risk management cannot be delivered on time. Coping with the rapid growth of RFIs presents an additional challenge.

In conclusion, prudential risk supervision in rural financial markets are still inadequate, which hampers effective supervision of rural financial risk and may also seriously impede further innovations in rural financial supervision.

Recent Efforts to Introduce Innovations in Rural Financial Regulation and Supervision

Differential guidance and supervision of RFIs; classification of delinquent loans. As RCCs dominate the agricultural financial markets, they receive much supervisory attention. At the start of 2006, the CBRC stated that commercial banking standards were to be regarded as benchmarks in the financial supervision of cooperatives and that differential guidance and supervision would be carried out for the different institutions in the various regions. This ruling marked a significant change in the supervision of RCCs. Previously, RCCs classified delinquent loans into loans that were up to 1 year overdue, loans that were more than 1 year overdue, and bad loans. Supervision and management procedures were applied later, according to loan maturity. Consequently, many loan risks were concealed and capital was not accurately classified.

The CBRC subsequently issued certain institutional measures. These included the “Comprehensive Carrying-Out Organizational Implementation Plan for Rural Cooperative Financial Institutions to Classify Loans into Five Categories”¹ and the “Classification Guidance for Rural Cooperative Financial Institutions’ Credit Assets”. The improvements in the credit risk management system placed the risk assessment criteria and process, limits of authority, and loan classification mostly under regulation. RFIs now had rules to follow when implementing the five-category risk classification. Using modern technology, the CBRC also developed specialized software, the “Rural Credit Cooperatives’ Risk Classification on Deviated On-Site Inspection and Statistical Analysis.” Thus, rural financial cooperatives could be inspected to determine their degree of loan delinquency.

In 2007, the CBRC introduced the ‘The Guidance for the Supervision and Rating of Rural Cooperative Financial Institutions’. This guidance took a step further to strengthen the supervision of rural financial institutions following the implementation of the five-category loan classification.

Compared with their urban counterparts, many rural financial institutions have lower ratings due to their higher ratios of nonperforming loans and lower operational efficiency. With 6 grades for the rating of financial institutions in PRC, CBRC created three sub-grades

¹ The five loan categories are normal, attention, sub-standard, doubtful and loan losses.

for each of the three low-section grades (Grade 4–6) in an effort to distinguish rural financial institutions.

Differential supervision applies different measures according to the type of RFI, the type of financial service, and the type and population of the rural financial market. In particular, the supervision requirements for RCBs, RCOBs, RCCs, VTBs, finance corporations, rural mutual funds, and MCCs are significantly different in several respects. *First*, the standards of commercial bank supervision are quite strict for RCBs and RCOBs, given their rural context. *Second*, for the RCCs, the supervision standards involve adhering to the bottom line, exercising appropriate tolerance, and achieving the standards gradually. *Third*, as far as provincial RCC associations are concerned, the performance of their duties is evaluated yearly. The CBRC at the provincial level reports to the provincial government and the national CBRC reports to PRC's State Council for the supervision of the provincial RCC federations. *Fourth*, a transitional space is provided for the newly created VTBs to meet the major regulatory requirements, including the loan deposit ratio set by the CBRC. *Fifth*, the supervision of the lending-only microloan companies is focused on the loan uses and quality. *Sixth*, supervision for the small scale rural cooperative funds is mainly on compliance.

Policy change affecting the entry of banks into the rural areas. In December 2006, the CBRC issued the document “Certain Opinions about Adjustment to Lift the Control over Banking Financial Institutional Permits for Entry in Rural Areas to Effectively Support New Agricultural Construction.” Significant changes in the entry permits eased the entry of VTBs, finance corporations, and rural mutual funds. This striking shift in policy will help improve the rural finance organization and service system of the PRC.

Registered capital requirements for new banks. The registered capital requirements for the new rural financial institutions, which are supervised by the CBRC, are relatively low. For example, the minimum registered capital for VTBs is RMB3 million in counties and RMB1 million in villages and towns. For cooperative institutions, it is RMB0.3 million in villages and towns, and RMB0.1 million in administrative villages. For commercial banks setting up wholly-owned subsidiaries, the minimum registered capital is RMB0.5 million. Rural cooperative banks need at least RMB10 million in registered capital.

In addition, the State Council issued “Several Opinions on Encouraging and Guiding the Healthy Development of Investments from the Private Sector”, which encouraged private investors to launch or participate in establishing VTBs, financial corporations, rural mutual funds, and other financial institutions. It also relaxed restrictions on the minimum capital contribution for VTBs and community banks.²

Stratified supervision. In May 2008, the CBRC and the PBC published the paper, “Guidance for Pilots on Microfinance Lending,” which presented new developments in rural financial supervision and introduced the concept of stratified supervision. Provincial institutions, including financial offices and financial service authorities of microfinance companies, are now allowed to supervise microcredit companies. The stated premise is that the institutions are willing to assume the risk management responsibilities of the microcredit companies. This is a significant change in the PRC's financial supervision system. Stratified supervision aims to encourage supervision innovation and diversification, and will benefit competitive supervision and financial innovation (Lin 2009).

² See the State Council Document No. 13, issued in 2010.

Microfinance companies. Microfinance companies are allowed to lend to, and borrow money from, no more than two commercial banks. On the one hand, this benefits commercial banks by increasing their wholesale credit business while a platform is built for bank participation in rural development. On the other hand, financial institutions in the wholesale credit business could also take responsibility for supervising microfinance corporations. These institutions will work with provincial supervision departments to regulate the behavior of microfinance companies. Multichannel supervision could harden the budget constraints of microfinance companies—an important form of market power to supervise financial institutions.

Supervision linkage mechanism. Improving supervision approaches and building an efficient supervision linkage mechanism with vertical and horizontal dimensions is a great challenge for supervision authorities. The main problem in this case is that small and medium financial institutions in the rural areas are dispersing and diversifying, and their management is becoming more complex. Therefore, the CBRC formulated the “Guidance for Rural Cooperative Financial Institutions on Supervision Process System” to establish the process linkage for supervision “with two vertical and two horizontal dimensions.”

CBRC supervision authorities have specially designed a complicated linkage mechanism based on the characteristics of small and medium financial institutions. With off-site supervision as center pivot, a horizontal leverage mechanism tries to link the various departments, including market entry permit, on-site supervision, risk management, administrative penalty, case management, and financial service supervision.

When the rural financial reform deepens, some RFIs would like to expand their operations into other regions. Cross-region merging and acquisition have also become an issue for bank supervisors. As vertical reform progresses, supervision departments strive to establish a communication and consulting mechanism to achieve horizontal linkage across regions for effective supervision and risk protection. Vertical linkage is mainly intended to shorten the process of supervisory decision-making. By providing the supervisory guidance and support to RFIs under their jurisdiction and establishing links with the bank supervisors in other regions, the CBRC local offices are in a position to track and deliver on time information to the CBRC headquarters.

Apart from this linkage mechanism in the CBRC system ‘with two vertical and two horizontal dimensions,’³ the bank supervisors have also established linkages with the provincial governments and Provincial RCC Associations. These linkage mechanisms should enable the authorities to coordinate supervision and administration of RFIs more efficiently.

Issues Needing Further Study

Progress has been made in rural financial supervision with the help of lessons from international experience, especially recent developments, modified to suit the specific conditions in the PRC. But some problems need further study to move the innovations in rural financial supervision forward.

³ With the two vertical and two horizontal supervision model, the two vertical links refer to the links between the CBRC offices at the different levels, and the cross-regional links between the CBRC offices at different levels. The two horizontal coordination refers to (i) coordination among the various supervision departments, from market entry, to on-site and off-site supervision and risk control under the CBRC and (ii) coordination among the CBRC local offices in different regions.

Regulatory requirements for RFIs. Government requirements with respect to minimum registered capital, cash reserve ratio, and capital adequacy ratio are lower for RFIs than for commercial banks. But these requirements are not stated in detail and are still contestable. For example, in the current supervision system, concentration risk is clearly ruled only for rural mutual funds and VTBs, and not for other financial institutions. The problem of how to supervise concentration risk in rural cooperative financial institutions should be urgently addressed. The supervision of new financial institutions focuses on entry and compliance permits. Continued research and renewed efforts are required to improve regulations.

Laws specific to financial cooperatives. Since RCC reform started in 2003, a multichannel management system has been formed by the CBRC, in coordination with the local governments and provincial associations. However, the authority and responsibilities of these three entities still have to be defined, and the related legal standards and guidelines still have to be developed. The PRC also has no laws specifically for financial cooperatives.

Supervision of supervisors. Supervisors in PRC are inadequately supervised. Financial supervision has not been objective and fair for various reasons. In countries with strict rules, the behavior of supervisors is closely regulated. In the PRC, the interests of the supervisors and those supervised are extraordinarily complicated, because of regulatory insufficiency, culture, weak implementing mechanisms, and other factors. This situation is not conducive to efficient financial supervision and financial risk protection. In fact, it may increase financial rent seeking and corruption. The PRC does not have the appropriate legal and regulatory systems in place to clearly discipline rural financial activities. Due to the absence of the Cooperative Finance Act and the Cooperative Finance Supervision Act, the boundary between the bank supervisors and managers remains ambiguous (Zhao 2007).

Primary-level supervision. Primary-level supervision is weak and needs to be strengthened immediately. Some national-level supervision agencies should be moved to the sub-office or substation level in places where the governance area is wide, the population is large, and financial services are at a relatively advanced stage. Their staff and supervisory teams must correspondingly expand. Investments must be made in supervision facilities and in the construction of modern communication networks. The approach to, and capacity for, timely supervision and off-site supervision should likewise be improved.

Framework for rural financial supervision. The external economic environment is a key element of effective rural financial supervision, and fiscal and monetary policies have a unique role (Meng 2009). The main challenges for rural credit are high costs, high risks, and low profits. Fair compensation, such as finance discounts and insurance subsidies, can therefore be provided to RFIs and to the users of financial services. This may be a feasible way of promoting the sustainable development of RFIs. The support system of monetary policies consists of differential reserve requirements, refinancing policy for agricultural support, and market-oriented interest rate reform in the rural areas. A significant issue in rural financial supervision is how to support differential supervision with reasonable fiscal and monetary policies. The coordination between fiscal and monetary policies is another major topic that needs to be investigated.

MSE Finance

Introduction

Lack of access to banking and other external sources of finance, a major obstacle to enterprise development, is a common feature of small businesses around the world. From the perspective of financial institutions, difficulties in providing financial services to small businesses are related to severe information asymmetry—a logical starting point for theoretical research and policy discussions on small-enterprise financing.

A great deal of effort has been made by the national government, donors, and researchers to overcome problems with small-enterprise financing. Yuan and Cai (2010) argue that the causes differ between countries and over time, and the policy solutions should as well. Yin and Weng (2007) note that bank mergers and acquisitions, and the consequently higher bank concentration rate in the Western economies since the 1980s, have had a negative impact on small-enterprise financing. In the PRC, the research has so far focused on bank size: whether small and medium-size banks are more likely to provide financial services to MSEs.

Improving the access of small enterprises to financial services is beneficial not only to the national economy and small enterprises, but also to the lenders. Research shows that as small businesses develop, the economy flourishes and employment grows, income distribution improves, and poverty is reduced (Yuan and Cai 2010). Access to financial services for small businesses has, however, been discriminatory, despite the fact that supporting small enterprises could diversify and improve the lenders' loan portfolio and thus lower their loan concentration rate, lessen their risk exposure, and strengthen their core competitiveness. Liu (2005) points out that increasing small business lending would lead not only to a lower loan concentration rate for the lenders through a more diversified loan portfolio, but also to innovations in risk management techniques and system, and enhanced risk management capacities.

There is information asymmetry between small businesses and banks in the credit market. In particular, (1) small enterprises generally do not have standardized and accurate financial statements; (2) it is difficult to measure credit risk of small enterprises, especially those with short operating history, because there is no accumulation of historical data and reliable external credit rating; (3) uncertainty from frequent and significant business fluctuations (Zhou, 2006); and (4) small enterprises have less fixed assets, and usually of low value. On the other hand, special requirements on information may also hinder information transmission (He & Rao, 2008). Information required by most commercial banks is “hard information”, while information on operations generated by SMEs mainly take the form of “soft information”. Information asymmetry may also occur if soft information is not communicated accurately, which is obviously related to the misguided notion that there is no cost advantage of collecting and processing such information.

Financial innovations are the key to small-enterprise financing. In the 1990s, some international institutions, including the European Bank for Reconstruction and Development, started to improve the lending models and procedures for small enterprises. They showed that small-enterprise financing could be profitable if the lenders were to ensure that their products are responsive to the needs of small enterprises, set interest rates according to market conditions, focus on loan repayment capacity when assessing loans, simplify lending procedures, and provide good incentives to their loan officers (Liu 2005). Wells Fargo introduced credit scoring to small-enterprise lending and designed the first-generation credit scorecards. Wells Fargo ranked first in small-enterprise lending in the US in 2004 and maintained the ranking for 3 consecutive years, reaching 15% of the American market, with a lower bad-debt ratio than initially expected (Jiang 2006).

The government has adopted several policy measures in an effort to deal with the problems that beset small-enterprise lending. The Small and Medium Enterprise Supporting Act passed in 2002 called on commercial banks to devote a higher proportion of their loan portfolio to SME lending. The PBC has also repeatedly lowered its basic lending rates for small-enterprise lending. In April 2005, a joint international workshop on MSE lending was held in Beijing, with the support of the PBC, the CBRC, and the World Bank. That same month, the CBRC issued “A Guideline for Commercial Banks to Undertake Small Enterprise Lending,” which encouraged commercial banks to establish small-enterprise lending operations with risk pricing, independent accounting, specified loan assessment and approval procedures and incentives, and training programs tailored to the character of MSEs. The market mechanism and commercial principles were emphasized in the guideline, to prevent moral hazard problems with commercial banks in the PRC.

The CBRC released the “Guidelines for Banks to Establish Small Enterprise Service Department (Centers) Specializing in Servicing Small Enterprise” in 2008. In 2011, the CBRC issued “An Announcement for Commercial Banks Further Improving Financial Services for Small Enterprises,” which discounted small-enterprise loans in the calculation of a bank’s total loans (the CBRC set loan deposit ratios for commercial banks to control total lending), as well as risk-weighted assets in the determination of the capital adequacy requirement, to reduce the pressure on commercial banks to meet the equity requirement.

China Development Bank (CDB) has pioneered in small-enterprise lending in the PRC and invested large amounts of capital, technology, and manpower. In 2004 and 2005, the CDB and the World Bank launched a microfinance downscaling project in which participating commercial banks received technical support and wholesale loans. International Project Consulting (IPC), a German consulting firm, was selected as technical assistance (TA) adviser. In the IPC microfinance model, the loan assessment method depends much less on physical collateral, thereby easing difficulties in small-enterprise lending. Following the example set by the project, many rural and city commercial banks started their own MSE lending experiments. Even the ‘Big Four’ banks (BOC, China Construction Bank, the Industrial and Commercial Bank of China, and ABC) and joint-stock banks formed special small-enterprise loan departments or centers, and a number of commercial banks decentralized, to varying degrees, the decision-making authority for small-enterprise lending.

There have been many studies on small-enterprise lending in the PRC, among them: “A Review on Small Enterprise Financing Theory and Empirical Evidence” (Tian 2004), “Comments on Relationship Lending and Small Banks’ Advantages” (Yin and Weng 2007), “Research on Progress in Relationship Lending” (Li 2009), and “Research Review of Small Business Financing Policy” (Yuan and Cai 2010b). This chapter is focused more on

relationship lending in the PRC context and includes the results of econometric research and case studies. Relationship lending is the starting point for studies on small-enterprise lending. Unlike large enterprises, small enterprises generate mainly the soft information on which relationship lending is based. In view of technological advances and the hardening of soft data, the importance of relationship lending in explaining small-enterprise lending should be reconsidered.

The spotlight here is on MSEs because difficulties in gaining access to finance mainly affect them, especially MSEs with a short operating history. According to Li and Yang (2001), the loan rejection rate declines with the length of time an enterprise has been in operation and as the enterprise grows in size. For instance, a firm with fewer than 500 employees is three times more likely to have its loan application rejected than a firm that employs 500 or more. On the supply side, this chapter concerns itself mainly with bank loans, as no other formal channels of finance are available to a large majority of unlisted small firms (He 2010).

In the rest of this chapter, MSEs are defined and the current state of MSE financing, based on survey results, is documented; the reasons behind the difficulties in MSE financing are summarized; the literature on relationship lending, with a focus on information, credit technique, and organization, is reviewed; the latest IPC Model and the Credit Factory Model are examined; and, finally, conclusions are made.

Micro and Small Enterprise Financing in the PRC

Definitions

Before the problems of small-enterprise lending can be dealt with, medium, small, and microenterprises must first be defined (Wang 2007). Small enterprises must also be distinguished from the rest of the enterprises in the “SME” category (Yuan and Cai 2010b). Indicators such as number of employees, total assets, and annual sales are commonly used to define micro, small, and medium enterprises. Table 5 lists the criteria used by the World Bank. In the PRC, the revised “Small and Medium-Sized Enterprises Classification Standards (2011)” classify as “small” those enterprises with 20 or more employees or at least RMB3 million in annual operating income, and as “micro” those enterprises that employ fewer people or have less annual operating income. The CBRC defines small enterprises as independent entities with a credit line of up to RMB5 million, and total assets of up to RMB10 million or annual sales of up to RMB30 million. In practice, however, commercial banks treat loans of RMB1–RMB5 million as small business loans, and loans below that range as microenterprise loans (or microloans).

The research conducted by the PRC’s National Bureau of Industrial and Commercial Administration (BICA) in 2014 show that by the end of 2013, of 15.3 million registered enterprises in the PRC, 76% were small and micro enterprises, based on the classification of enterprises in the PRC. In addition, there were an additional 44.4 million registered individual industrial and commercial households, these households are de facto microentrepreneurs. In other words, in terms of number of enterprises, MSEs accounted for 94% of all enterprises in the PRC. The same study indicates that SMEs have contributed to over 60% of GDP growth and over 50% of the tax incomes in the PRC whilst MSEs provided jobs for 150 million labourers in the PRC. The statistics above are based on the classification of the enterprises in the PRC presented in Table 5.

Table 5. The Classification of Enterprises in the PRC by Industry

| | Medium Size Firms | | Small Size Firms | | Micro Firms | |
|-------------------|-------------------|------------------------|------------------|-----------|--------------|-----------|
| | Annual Sales | Employees ¹ | Annual Sales | Employees | Annual Sales | Employees |
| | RMB mn | | RMB mn | | RMB '000 | |
| Agriculture | 5–200 | | 0.5–5 | | <500 | |
| Manufacturing | 20–400 | 300–<1,000 | 3–20 | 20–<300 | <2,000 | <20 |
| Construction | 60–800 | | 3–60 | | <3,000 | |
| Wholesale | 50–400 | 20–<200 | 10–50 | 5–<20 | <1,000 | <5 |
| Retails | 5–200 | 50–<300 | 1–5 | 10–<50 | <1,000 | <10 |
| Transportation | 30–300 | 300–<1000 | 2–30 | 20–<300 | <2,000 | <20 |
| Food and Beverage | 20–100 | 100–<300 | 1–20 | 10–<100 | <1,000 | <10 |
| Others | | 100–<300 | | 10–<100 | | <10 |

Notes: 1. Number of Employees.

Source: The Ministry of Industrial and Information Technology, Document 300, 2011.

Table 6. World Bank Definition of Micro, Small and Medium-Sized Enterprises

| Enterprise | Number of Staff | Total Assets (\$ million) | Annual Sales (\$ million) |
|------------|-----------------|---------------------------|---------------------------|
| Micro | 1–10 | 0–1.0 | 1.0 below |
| Small | 10–50 | 1.0–3.0 | 1.0–3.0 |
| Medium | 51–300 | 3.0–1.5 | 3.0 above |

Source: Wang (2007).

Following Yuan and Cai (2010b), this study refers to small and medium-sized enterprises as “SMEs,” and micro and small enterprises as “MSEs.”

Given the lack of statistical data on SME financing in the PRC, classified according to firm size and loan amount, this study uses data and information from ad hoc field surveys. The results of some key surveys on credit demand, credit channels, loan access, lending methods and credit guarantees for small enterprises are summarized in Table 7.

Table 7. A Summary of Surveys on Credit Demand, Channels and Loan Conditions

| Literature | Investigators | Time | Sample Size | Scope of Investigation | Content |
|--------------|---|---------|-------------|--|---|
| Luo (2004) | Credit and Statistics Department of Suzhou Branch | unknown | 79 | Suzhou City | The degree of difficulties in SME obtaining loans and the external and internal environment for SME financing. |
| Liang (2005) | People's Bank of China | 2003 | 820 | Six cities from the eastern, central and western part of PRC | The basic situation of SMEs, history of development, sales management, recovery of arrears, inputs, investment plan and fund management, and relationship with financial institutions, and credit guarantee institutions. |

continued on next page

Table 7. *continued*

| Literature | Investigators | Time | Sample Size | Scope of Investigation | Content |
|--|---|-----------|-------------|---|---|
| Hongwei Li (2006) | People's Bank of China, Chengdu Branch | 2005 | 233 | Sichuan Province | Financing situation of small and microenterprise in Sichuan province. |
| Small Business Financing Research Group (2006) | Author | unknown | 100 | Yichun City | Financing situation of small enterprises between 2002–2004. |
| PBC Qingdao branch (2008) | Author | 2006–2007 | 191 | Qingdao City | Changes in behaviors of banks and financing situation of micro and small enterprise since tightening monetary policy. |
| Xu & Li (2009) | Author | 2008 | 351 | Part of the Economic Park in Shanghai | Financing demand for small enterprise in Shanghai and financing characteristics. |
| Dong (2010) | Author | 2009 | 156 | A western industrial city | The basic situation of small-enterprise financing and main influencing factors. |
| Yuan & Cai (2010a) | PRC's Small Businesses' Financial and Ecological Environment Evaluation Group | unknown | unknown | 31 provinces, municipalities and autonomous regions | Causes of difficulties in small-enterprise lending. |

Types of MSE Loans

Working-capital loans are most in demand among MSEs. Li (2006) reports a large gap between demand for formal loans and credit supply, according to two-thirds of a sample of 233 randomly selected MSEs from 21 prefectures in Sichuan province. Most of these businesses look for small, short-term loans, with quick and easy access.

Another survey of small enterprises, this time in Shanghai, indicates that small enterprises borrow mainly for working capital (42% of the 351 enterprises in the sample) and market development (34%) (Xu and Li 2009). The rest borrow to finance technology upgrades (14%), to repay bank loans or settle unpaid wages (9%), or to fund capital investments (2%).

MSE Financing Channels

Enterprises have two broad channels for their financing: internal and external channels. Internal channels of financing are equity finance, allowable depreciation on capital goods, retained earnings, and borrowings from employees. External channels, on the other hand, can be divided into direct financing (raising funds through the stock market) and indirect financing (borrowing from financial intermediaries like banks and nonbank financial institutions).

Most small enterprises in the PRC engage in labor-intensive industries with relatively simple technology and stable market conditions (Liang 2005). The nature of these enterprises helps to shape their channels of finance: internal finance and indirect financing (Lin 2003). This hypothesis has been confirmed by many field surveys. In a large-scale survey of SME financing by the PBC, 62% of the sample (820) chose to borrow from banks to meet their financial needs.

MSE Loan Application Rates

Surveys have also shown that, on the whole, SMEs in the PRC have difficulties gaining access to bank loans (Luo 2004; PBC Qingdao Branch 2008; Dong 2010). Others disagree. SME loan application rates have been very low, say Xu and Li (2009), and loan approval rates have been high. Of the 351 small firms in their study, 53 (15%) applied for bank loans; 39 of those 53 (74%) succeeded in getting loans. The application rate may be low because only those enterprises that are likely to have their loan applications approved do apply. Yuan and Cai (2010) note that, according to their survey of SMEs, small enterprises from more developed areas of the PRC, including enterprises with good credit ratings, find it more difficult to borrow from banks.

MSE Loan Collateral Requirements

Physical collateral is the most important requirement for small-enterprise lending, and real estate is the most common form of collateral, Xu and Li (2009) report. Twenty of the 39 successful loan applications in their study were secured by real estate, 4 by discounted bank bills, 4 others by movable assets, 2 by discounted commercial bills, and 8 by accounts receivable. Another survey in Qingdao City showed that, of the total enterprise borrowings at the end of September 2007, 91% (RMB740.11 million) were bank loans. Moreover, 98.8% of the bank loans were secured by physical collateral or third-party guarantees (PBC Qingdao Branch 2008).

According to Li and Yang (2001), valuation and liquidity are two important factors that determine the choice of collateral by banks. Their preference for real estate can be attributed to the undeveloped market for capital goods in the PRC and to the limited ability of banks to evaluate capital goods such as machines, inventory, and accounts receivable.

The provision of noncollateral loans in the PRC has been constrained by information asymmetry and the lack of credit history for many small enterprises. On the other hand, the role of credit guarantee companies in easing difficulties with SME financing in the PRC is minor. A large-scale survey in Beijing, Guangdong, Shanxi, Shandong, and Zhejiang showed that 76% of the firms in the sample had never used the services of credit guarantee companies. Among those firms that had used the services, only 6% of their bank loans were obtained through credit guarantee companies (Liang 2005). Luo (2004) also states that in a sample of 115 enterprises in Suzhou, only 9 used the services of credit guarantee companies. Credit guarantee companies and investment advisory firms provide little support for small enterprise lending in the PRC, Xu and Li (2009) conclude.

Causes of SME Financing Difficulties and Possible Solutions

Causes of the Difficulties in SME Financing

In an attempt to explain the problems experienced by SMEs in obtaining financing, academics in the PRC have put forward four major hypotheses. These are the size-based discrimination hypothesis, the financial market structure hypothesis, the ownership-based discrimination hypothesis, and the external environment determination hypothesis.

Size-based discrimination hypothesis. Li (2002) contends that, compared with larger firms, small firms suffer from more severe information asymmetry because many of them

do not have standardized and transparent financial records. Moreover, small firms are more vulnerable to economic cycles and have higher operating risk.

Financial market structure hypothesis. Financial market structure here refers to the composition of commercial banks, including the market shares of banks of different sizes, the bank concentration ratio, and the geographic distribution of commercial banks. The financial market structure largely determines the extent of market competition and bank performance.

Small banks are good at processing soft information, the type of information generated by most SMEs. Large banks, on the other hand, process hard data and cannot ease the information asymmetry between the banks and small enterprises. Applying organization theory with a trade-off between information and agent costs, Zhang (2002) proves the advantages of small banks with their flatter organization structure for relationship lending to SMEs. Li (2002) also sees small and medium-size banks as having the edge in information and cost in servicing SMEs, under a monopolistic competition model for banks, thus tending to lower the transaction cost of processing loans to SMEs.

From a market structure perspective, the PRC's banking market is more monopolistic, dominated by the Big Four. Research by Lin and Li (2001) shows that, for a considerable period of time, labor-intensive SMEs will be the most dynamic part of the economy, because of the PRC's relative labor abundance and capital scarcity. However, financial institutions will have differential lending policies toward large and small enterprises because small firms are at a disadvantage where operating transparency, availability of collateral, and economies of scale are concerned. As a result, large banks, which are better suited to serving large firms, are more willing to lend to such firms. The large bank-dominated financial system, which is inconsistent with the structure of enterprises in the country, is mainly responsible for the difficulties in small-enterprise financing. Dong (2005), however, argues that automatically matching firms and banks on the basis of size ignores the impact of technical innovations in organizations and in lending systems, among others, on SME financing.

Ownership-based discrimination hypothesis. As defined by Yin and Weng (2007), the hypothesis attributes SME difficulties in gaining access to formal loans to a systematic preference for supporting the state-owned economy, rather than privately owned small enterprises, among state-owned commercial banks, which dominate the banking sector. From the state banks' perspective, as state banks and nonbanking enterprises are all owned by the state, the banks are less responsible for the nonperforming loans of SOEs than for the NPLs of private enterprises. Zhang (2000) contends that, as a result of the gradual reforms in the PRC, state-owned enterprises have developed a binding relationship with state-owned banks, with the former depending on the latter for support, whereas privately owned SMEs are discriminated against by the banks. Research by Zhang and Wang (2002), however, indicates that the market-oriented reforms will weaken the impact of ownership on SME financing in the long run and increase the importance of size-based discrimination. This point is confirmed by a study made by the PBC Research Bureau and the Japan International Cooperation Agency (JICA) (2005), which finds little correlation between the ownership of the 150 SMEs in the sample and their access to formal loans.

External environment determination hypothesis. According to this hypothesis, the undeveloped credit support system and the poor credit environment have increased the transaction costs and risks of loans to SMEs in the PRC, and hence have contributed greatly to the difficulties in SME lending. Here, the credit support system includes the credit guarantee system and the credit rating of SMEs. The credit environment refers mainly to enterprise behavior, such as strategic loan defaults and frauds. Creating a credit guarantee framework

for SMEs has been the focus of the government's efforts to ease SME lending. Since its pilot run in 1999, such a framework has been established in all the provinces (Ying 2004). Many surveys, however, conclude that credit guarantee organizations have an insignificant role in supporting SME financing (Luo 2004; Liang 2005; Xu and Li 2009). The credit guarantee system has three deficiencies: (i) the dominance of government fiscal funds; (ii) problems with the way compensation and risk sharing are designed, and the lack of experienced staff; and (iii) government agencies' assumption of the responsibility for many risks that should instead be mitigated and managed by markets, making it difficult to establish a market mechanism for managing risks. At the micro level, excessive credit guarantees by government agencies have created moral hazard problems for SMEs (Chen and Sun 2003).

Possible Solutions to the Difficulties in SME Financing

Several other hypotheses have been put forward to ease difficulties in SME financing. According to the long-term interaction hypothesis, long-term specialization in serving local SMEs has gradually increased knowledge of these SMEs and their owners among small and medium-sized financial institutions, and helped to overcome information asymmetry (Banerjee, Besley, and Guinnane 1994). The relationship lending hypothesis puts banks in a position to gain soft information about the SMEs through long-term, multichannel contacts (Berger and Udell 2002). A third hypothesis is based on the comparative advantage of small banks (Lin and Li 2001).

All three hypotheses focus on the advantages of locally based small banks in serving SMEs. Ying (2004), however, maintains that these hypotheses fail to examine the issue from the perspective of SMEs. According to him, raising the credibility of SMEs is equally, if not more, important in SME lending, and small enterprises can improve their credibility and their access to credit through cooperation with large enterprises. A more valid criticism comes from Kang (2007), who contends that the three hypotheses overlook the information processing and credit risk-sharing advantages of large banks. Compared with small banks, large banks generally have more advanced credit risk management systems and methods, such as the application of credit scoring techniques for SME lending, and more sophisticated credit risk analysts to screen, classify, process, and maintain information. Moreover, while localized small banks may have advantages in information gathering, they often operate in a limited area and therefore have difficulty diversifying their credit risks.

Relationship Lending

Hard and Soft Data Defined

Relationship lending is an important topic in research on financial intermediaries and on SME lending. Berger and Udell (1995) divide information on SMEs into hard and soft data. Hard data, such as data on physical collateral and the financial statements of SMEs, are not personalized and can be measured against uniform standards. They are low cost, durable, comparable, and provable, and are easy to code, quantify, and transmit.

Soft data, on the other hand, are personalized and are usually obtained through long-term personal contact between loan officers and the owners and other stakeholders of SMEs (shareholders, creditors, customers, and employees), as well as other members of the community, rather than through market channels. Soft data are difficult to quantify, identify, and transfer through normal channels, and are closely linked to their environment.

The data collectors themselves are part of the data, and may even be users of such data or decision makers.

Boot and Thakor (2000) adds that soft information can only be perceived but cannot be proved to a third party. It consists mainly of information about the capacity of a firm to achieve its operating objectives, the character and ability of its leaders, its resources, its production capacity and the loyalty of its staff, and the relationship between the firm and its suppliers and customers.

Problems with Soft Data

SMEs provide mostly soft data, which are difficult to verify and transfer because of problems with accounting and financial management systems and the high operational risks involved. Loan officers (or investigators) usually report information on prospective borrowers to the loan approving authority, together with relevant verifiable materials, such as audited financial statements, legal documents concerning a project, proof of collateral ownership, and assessment reports. The loan approving authority has no direct contact with the borrower and cannot verify the information. Obviously, the information asymmetry between borrowers and lenders is thus exacerbated.

Petersen (2004) compares the features, methods of collection, and processing of hard and soft data, and the results of the comparison are summarized in Table 8.

Table 8. Comparison between Hard Information and Soft Information

| | Hard Information | Soft Information |
|------------------------------|--|---|
| Characteristics | Normally in digital form; quantitative | Normally in the form of words; qualitative |
| Methods of collection | Cannot be personified | Must be personified |
| Cognitive factors | Without subjective judgments, opinions or observation | Subjective judgments, opinions or observation is part of soft information |
| Extension | Hard information is more objective, easy to quantify, independent of their environment, and not distorted easily in the transmission process. Soft information is more subjective and qualitative, cannot be divorced from the context and is easily distorted in the transmission process. Therefore, hard information is easily transferred, whereas the soft information is the opposite. Collection and usage of hard information can be separated. Conversely, it is difficult to separate the collection and use of soft information, with collectors and users of soft information generally being the same person. | |

Bank Lending Techniques

Types of Lending Techniques

Lending techniques refer to the methods and procedures used by lenders in designing loan products (loan amounts and duration) and risk control measures, screening loan applicants, underwriting credit, contracting loans, and monitoring and recovering loans (Berger and Udell 2006; Li 2009). Berger and Udell (1995) classify the credit techniques used by Western banks into four types (Table 9):

Table 9. Comparison of Loan Technique Classification of Western Banks

| Name | Loan Evidence | Characteristics | Scope of Application | Strengths and Weaknesses |
|------------------------------|---|--|--|---|
| Financial Statements Lending | Qualified financial information from financial statements | No need for collateral; belongs to credit loan | Large enterprises with transparent information | Not suitable for SMEs; lack of financial information |
| Asset-based Lending | The quantity and quality of valuable collaterals | Can reduce transaction cost; powerful postmonitoring ability | Enterprises with collateral | Complicated mortgage formalities; high transaction cost |
| Credit Scoring Approach | Credit history derived by statistical models | Low credit cost; high operational efficiency | Small-sized loan of enterprises | Complicated analytical technique; no widespread application |
| Relationship Lending | Corporate reputation; the owners' character and other private information | Convenient information exchange; continuing lending relationship | Various types of SMEs | Enterprise budget-constraint; bank "robbery" |

- **Financial statement lending.** Credit analysis is focused on ex-ante screening of borrowers and loans are approved mainly on the basis of financial information from the financial statements submitted by applicants. Financial statement lending is mainly used for large enterprises with highly transparent information and for outstanding medium-sized enterprises that have been operating for a long time. Most SMEs are not able to meet the information and financial standards required for loans of this type.
- **Asset-based lending.** Lending decisions are based on the quantity and quality of collateral offered by borrowers. Collateral and guarantees, as substitutes for credit assessment, have a powerful monitoring function, and are therefore suitable for SME financing. But the procedures of asset-based lending are complex and can easily lead to a loan supply gap.
- **Credit scoring.** This new technique uses modern statistical models and information technology to make loan decisions based on quantitative analyses of clients' credit history. Given its low cost and high efficiency, this approach is able to ease the problem of information asymmetry. But it requires an advanced computerized information system and a large database on clients' credit history.
- **Relationship lending.** Decisions in this type of lending depend on information collected through long-term contact with the borrowing enterprises. The information involved is not only financial and operational, but also pertains to the reputation of the firms and the character of their owners. Loan disbursements are usually made according to the approved line of credit, suitable for lending by small and medium-sized banks to SMEs.

Uses of Lending Techniques

The application of these four lending techniques depends on the type of information problem between banks and enterprises. The first three techniques use mainly hard data. Relationship lending, however, mainly involves soft information, which can be regarded as specialized knowledge produced by banks about specific companies and their owners.

Financial statement lending is generally believed to be more appropriate for large enterprises, asset-based lending for medium-sized enterprises, and relationship lending, which relies on soft information, for SMEs. The credit scoring approach, which depends mainly on hard data, is considered more suitable for lending by large banks to SMEs. In fact, the dependence of various banks on either hard or soft data is relative. While large banks use the credit-scoring approach, the opinions of the branch manager (soft data) also have an important part in lending decisions. Information from financial statements (hard data) plays a considerable role as well in relationship lending and asset-based lending.

Innovations in lending techniques based on hard data that have recently been developed by large banks have also come into increasing use in SME financing. Transaction-based lending to SMEs has developed from financial statement lending and asset-based lending to new approaches such as credit scoring and factoring. These innovations enable large banks to replace the past strict ex-ante screening and costly ex-post monitoring with frequent monitoring and timely intervention, and thus compensate for large banks' disadvantage in collecting and transmitting soft information on SMEs (Petersen and Rajan 2002).

Bank Organization for Small-Enterprise Financing

Differences in Organization Structure

Small and medium-sized banks generally use a centralized, geographically concentrated banking system that combines operations and decision-making. These banks usually have clearer operational and geographic boundaries, more suited to the local economic structure and stage of development. In contrast, large banks tend to use a decentralized system with headquarters in large metropolitan areas and geographically dispersed branches. This type of organization structure is able to achieve economies of scale, but it also leads to bank concentration.

Agency Problem

An analysis of the agency problem of banks with operations of varying scale by Berger and Udell (2002) shows that relationship lending by a bank depends on its long-term accumulation of soft information on clients, which relies in turn on direct contact between its branch managers and loan officers and its clients. The agency problem arises from the ambiguity and personalized nature of soft information, and the difficulty of transmitting such information within a complicated organization structure. Berger and Udell's study also indicates that the extent of the agency problem is determined by the scale of a bank's operations and by organizational complexity: small banks with a relatively simple organization structure are less likely to have an agency problem, whereas for large banks with several layers of management, the agency problem is likely to be serious.

Organization Size and Information Processing

Stein (2002) analyzes the impact of a market structure with organizations of varying scale and management structure on productive investment and capital allocation. The study results indicate that with regard to soft information, the market structure tends to be dominated by small, single-owner entities, as their flat management structure does not pose additional difficulties in the transmission of information. When soft data is transformed to

hard data, large organizations with multilayered management have the advantage of being able to reduce the variable cost of processing information.

Berger et al. (2005), however, argue on the basis of the incomplete contract theory that small and medium-size institutions have an advantage in processing soft information by virtue of their daily use of such information and their greater willingness to lend to SMEs without standard financial statements.

Two Business Models for Small-Enterprise Financing

Promotion of Small-Enterprise Financing

In 2005, the CBRC began promoting small-enterprise lending by (i) using a policy bank as an implementation unit to organize and coordinate technical cooperation and to provide wholesale loans to participating commercial banks; and (ii) encouraging large banks with a national branch network to form a separate small business loan unit with a performance assessment, management, and incentive system separate from that for lending to large and medium enterprises (Han Wang 2011).

Implementation unit. The China Development Bank (CDB), which was already in contact with the World Bank, was selected as the implementation unit. CDB provides microfinance support, using the KfW model, to participating financial institutions in the form of wholesale loans and technical support to improve their capacity for microlending (Wang 2011). The import of the IPC model of microfinance, described below, has had notable and far-reaching impact on the PRC's financial markets.

Small-business lending by large banks. In addition, the Bank of Construction, Bank of China, and other state-owned commercial banks have begun to introduce the credit factory model developed by Singapore's Temasek Holdings, in response to the CBRC's "Guidance for the Banks to Establish Small Enterprise Financial Services Units" (2008).

Both microlending models have generated some success. The IPC model has been successfully applied in the microlending operations of BSB and TB, among others, and the credit factory model has also been used by Minsheng Bank, Hangzhou Bank, and PingAn Bank.

IPC Model of Microfinance

Core of the model. The IPC model is centered on evaluating the capacity and willingness of clients to repay loans. The procedure for assessing loan repayment capacity includes field visits by a credit officer to understand the client's production, marketing, and fund flows, and to prepare financial statements for the client to harden soft data. During the field visits, the loan officer collects information on the purposes of the loan and on the client's assets and liabilities, income, profit and loss, cash flows, and sources of funds for loan repayments, according to IPC procedures. As far as willingness to repay loans is concerned, the IPC model uses soft data, such as personal reputation and credit history, to make judgments. For instance, TB collects nonfinancial information about the client, pertaining to honesty, family relations, and reputation, and cross-checks the information.

Postdisbursement monitoring of loans. The IPC model uses loan installment payments for postdisbursement monitoring. The payments serve as early-warning system for credit risks.

Loan officers are required to visit their clients before the first installment, and to contact them by telephone or other means before each succeeding repayment. This process provides the loan officers with information about loan uses and cash flows, and allows them to take timely measures against possible risks. The installments, and the regular follow-up visits and monitoring as well as the oversight by the loan committee, also help prevent the possibility of collusion between borrowers and loan officers. In loan monitoring, the IPC model attaches great importance to the frequency of contact between loan officers and clients, and to the loyalty of clients. Through the regular client visits, loan officers are expected to build personal relationships with borrowers and thus reduce the cost of information collection.

Positive effects on microlending. A comparison of the lending procedures of CCBs before and after the pilot implementation of the IPC model (described below) will improve understanding of how information asymmetry for small enterprises is dealt with in the model. According to He (2007), before the pilot project TB was more focused on soft data, mainly the character of clients and the repayment capacity of guarantors. Since the project, TB has paid more attention to profitability and debt ratios and other hard data.

Zhang and Tong (2011) studied the impact of technological innovations in lending on the internal organization structure and incentive mechanism for lenders, and in particular on microlending by TB. They noted that decentralized decision-making and positive incentives for loan officers, who are responsible for collecting soft data, are two keys to the success of the microlending program in Taizhou.

Credit committees. However, difficulties in transmitting soft data between different layers of management gave rise to an agency problem (Zhang and Tong 2011). In response, TB created credit committees at headquarters and in the branches, with different lending authorities. Each loan had to be approved by at least two members of the credit committee. The credit committee is an important internal control mechanism. Its members are required to check the logic and accuracy of the information provided by loan officers. This system provides loan officers with positive incentives for soft data gathering and mitigates their moral hazard problems. Moreover, the flatter (two-layer) decision-making mechanism is good for the flow of soft data within the bank and provides quicker access to microentrepreneurs.

Incentives for loan officers. On the other hand, given the labor-intensive nature of the microlending services (TB loan officers account for one-third of the total staff; see PBC Taizhou Branch, 2006), the IPC model requires incentives for loan officers as well as effective controls over credit risk. The model uses performance-based salaries to accommodate both staff incentives and credit risk controls. Salaries are linked to the number of loans disbursed, the number of loans managed, and the amount of nonperforming loans. The model also sets a tolerance level for nonperforming loans, considering the high risks involved in microlending. Loan officers are not penalized for nonperforming loans of less than 2% in the loan portfolio (Wu 2009).

Credit Factory Model of Microfinance

Business model for SME financing. Pioneered by Singapore's Temasek Holdings, the credit factory model is a business model for SME financing. The model applies standard factory products and procedures in SME lending. Under the model, the assembly line for SME lending consists of the following standard procedures: customer contacts and interviews; loan application; field investigation; loan assessment, approval, and disbursement; and monitoring and collection of loans. Since its introduction by the China Construction Bank

and the BOC in 2008, the credit factory model has been effective in improving the access of SMEs to loans in the PRC (Hu 2010).

Credit appraisal and monitoring procedures. The credit factory model standardizes both the hard and the soft data on SMEs, or hardens soft data. Information and documents from a particular enterprise or industry are categorized and simplified for analysis. In general, the head office of the lender bank makes available three basic tools for loan investigation and appraisal: a credit operations manual, an internal rating manual (a credit scorecard for working-capital loans), and reporting templates. The loan officer appraises loan applications on the basis of the credit operations and rating manuals, and, for those applications that pass the credit rating, proceeds to loan investigation and reporting, according to the reporting templates. The credit rating (or scoring) should be simple and quick so it can be completed by a loan officer in 10–30 minutes. The reporting templates are standardized and computerized. Each loan applicant is given a special code for client maintenance, loan approval, and monitoring. Due diligence and reporting for a small enterprise should be completed within a day.

Credit risk controls. To control credit risk, the lenders, using the model, also conduct cross-checking by collecting additional information, mainly soft data from various sources, including insiders, industry associations, and upstream and downstream clients in the value chain. For example, item 31 in the risk assessment manual of Hangzhou Bank requires a great deal of nonfinancial information, such as tax payment certificates, electricity payment invoices, bank balances, and transport invoices.

Organization structure for small-enterprise lending. Commercial banks using the credit factory model, such as the China Construction Bank, BOC, and Hangzhou Bank, have all adopted the quasi-division system, that is, they have established a separate small-enterprise department under the head office, to be responsible for the operation and management of small-enterprise lending. The small-enterprise department mainly uses the existing bank branches for its lending operations, though the department can have its own specialized branches. The Bank of China, Zhejiang branch, for example, has set up a small-business department at the provincial division level, small-business centers at the prefecture (*shi*) level, and small-business service teams at the county level. The small-enterprise department is mainly responsible for building and designing the incentive system; the centers, for credit appraisal and personal assessment; and the teams, for sales (Zhang 2010). Vertical and horizontal reporting systems have been implemented. Vertically the teams report to the center, and the latter to the small-enterprise department. Horizontally, the small-enterprise units report to the division or branch management at the same level in administrative matters. The small-enterprise department and centers design tasks and assessment indicators, and take responsibility for providing training and guidance for daily operations. Staff performance assessment remains the responsibility of the branches.

Decentralized lending authority. A distinguishing feature of the model for the PRC's commercial banks is the decentralization of lending authority. The divisions and branches have more freedom in lending decisions to improve operating efficiency. Professional loan assessors are appointed to conduct independent loan assessment and approval, unlike the arrangement in the IPC model (Lin 2009).

Mass loan processing and separation of duties. The credit factory model emphasizes mass loan processing (including loan application, appraisal, disbursement, and risk management) to improve operating efficiency. The separation of duties, such as those of loan officers, loan assessors, and postloan disbursement monitors, is also emphasized. In addition, independent

internal control officials are appointed for antifraud and compliance checking, and these officials have played an important role in preventing moral hazard caused by collusion, cheating and fraud, and compliance risks (Lin 2009).

Incentive mechanisms. The credit factory model uses a balanced scorecard in assessing staff performance, with key performance indicators designed for each position, to provide incentives for employees and encourage cooperation and teamwork. For instance, the diamond team at the county branches is rated according to these key performance indicators: number of clients served, volume of loans in the portfolio, number of visits to clients, number of effective proposals submitted, and other quantitative and qualitative indicators (Lin 2009). Meanwhile, to motivate front-office staff, the credit factory model also defines the responsibilities of loan investigators and officials. As long as the staff performed their duties, have no improper contacts with clients, and accept no kickbacks, they will not be held responsible for loan delinquency.

Findings of the Field Survey

Field surveys were conducted for this study to gain a better understanding of the IPC and credit factory models and their use in the PRC. The findings are presented in this section.

Categories of Commercial Banks in the PRC

Commercial banks in the PRC can be divided into the following five categories: (i) large state-owned banks (the Big Four and the Postal Savings Bank of China [PSBC]); (ii) joint-stock banks with branches across the country; (iii) CCBs; (iv) RCCs, many of which have been converted into rural commercial banks (RCBs) and RCOBs after a number of reforms; and (v) new VTBs. In terms of regulation and management structure, RCBs and RCOBs remain part of the RCC system. The major difference between an RCC and a VTB lies in each VTB's sponsorship by a qualified commercial bank with not less than 20% (more recently, 15%) of the shares.

Category I banks in the PRC usually have a national headquarters with provincial divisions and branches at the prefecture (*shi*) and county levels. Compared with the Big Four, PSBC is a new bank whose lending license was granted only in 2007. So PSBC has neither a client base of borrowers nor a base of experienced credit officials. But with its postal savings network, PSBC has branches all over the PRC and has more branches at the rural county and township level than any other big bank in the country. Category II (2nd tier) banks have a similar organizational structure, but the distribution of their branches is heavily biased toward more developed urban areas: most branches are in metropolitan areas and provincial capitals, and there are few branches at the county level.

Compared with Category I and II banks, Category III–V banks have a much smaller scale, in terms of their capital base, total deposits, and loan portfolios. Moreover, these banks have a simpler organization structure, with a head office and branches concentrated in a city or a county, allowing them to make quick decisions. Finally, these banks have more connections with local enterprises while the bigger banks have lent more to large SOEs. The CCBs, as their name suggests, are located mainly in the urban areas, mostly in provincial capitals and prefecture-level cities. Geographic restrictions are applied to RCCs and VTBs to ensure that these banks serve the rural areas and farmers. Most RCCs and almost all VTBs can operate only within a county. But some RCBs have been granted licenses to operate across regions.

Focus of Lending

Governments and banks in the PRC have given more emphasis to MSE lending instead of SME lending. Owing to differences in definition, MSE lending in the PRC is similar to SME lending in other countries. The terms “MSE lending” and “MSE finance” are used here instead of “SME lending” and “SME finance.”

Before MSE lending models were introduced into the PRC around 2004–2005, banks, including CCBs, were focused on lending to large and medium-size enterprises. Complicated organizational structures, centralized lending decisions, and a lack of proper credit techniques have been blamed for the failure to reach out to MSEs. Unlike other commercial banks in the PRC, the RCCs introduced a modified Grameen model of microcredit in the late 1990s in an effort to serve rural households. The techniques they used included keeping the loan size small, accepting group guarantees, and providing continuous loan access. However, RCCs have made few innovations in their lending to MSEs in both the rural and the urban areas.

Pilot Implementation of the IPC Model in the PRC

Introduction and Development of the IPC Model

The China Development Bank Microfinance Project (CMFP), which began in December 2005, consisted of two closely linked components: (i) a credit facility for on-lending to eligible partner financial institutions (PFIs); and (ii) a technical assistance facility to support the capacity building of the CDB and the partner financial institutions (PFIs). After slow progress at the start, the pilot project quickly grew, and the model has since been tested and proven by at least 10 CCBs serving urban or peri-urban MSEs with an average loan size of RMB100,000 (range: RMB20,000–RMB500,000) and nonperforming loans below 1% of the loan portfolio (generally below 0.5%), and reaching breakeven point in 12–24 months. The technology is spreading to the rural areas. The lending operations are profitable, but implementation depends on conditions in the local market, corporate loan profitability, and bank strategy. The major events and activities during project implementation are summarized in Table 10.

IPC Support

With consulting input from IPC, CDB provided on-lending and on-site TA support to the PFIs from December 2005 to 30 June 2008. As shown in Table 10, the IPC consulting team initially included nine experts, as well as one project assistant and a trainee, who were assigned to the two pilot banks, BSB and TB, in November 2005. After intensive preparation and training, the first CMFP loan was disbursed by BSB in December 2005. In parallel and on the basis of the experience at the two pilot PFIs, generic MSE lending policies and procedures, loan processing forms, and other documents were developed and tested by February 2006.

PFI Participation

The CMFP was launched at a third bank, Jiujiang Commercial Bank (JB), in September 2006, and then at Lanzhou Commercial Bank (LCB), Guiyang Commercial Bank (GB), and Maanshan Rural Commercial Bank (MRCB) in May 2007, Daqing Commercial Bank (DQCB) in August 2007, Bank of Chongqing (BOCQ) in September 2007, and Deyang

Table 10. Major Events with Project Implementation

| | |
|------------|---|
| Nov 2005 | <ul style="list-style-type: none"> Project Launch A team of nine IPC experts arrived in PRC Introductory Workshop with CDB Deployment of Experts to the 2 pilot PFIs: BSB and TB |
| Dec 2005 | <ul style="list-style-type: none"> First loan officers selected First training sessions conducted First CMFP loan disbursed in Baotou |
| Feb 2006 | <ul style="list-style-type: none"> First version of loan processing documents prepared and tested |
| March 2006 | <ul style="list-style-type: none"> Monthly disbursements exceeding 100 loans |
| Sept 2006 | <ul style="list-style-type: none"> CMFP MSE lending was launched at JB |
| Jan. 2007 | <ul style="list-style-type: none"> CDB requested IPC to develop a strategy for mass outreach |
| March 2007 | <ul style="list-style-type: none"> Monthly disbursements exceeding 1,000 loans |
| April 2007 | <ul style="list-style-type: none"> TB graduated from on-site technical support |
| May 2007 | <ul style="list-style-type: none"> CMFP MSE lending was launched at LCB, GB, MRCB BSB opened its first remote MSE branch in Chifeng of IMAR IPC presented its CMFP strategy draft 2008-2010 to CDB, the World Bank and KfW |
| June 2007 | <ul style="list-style-type: none"> BSB graduated from on-site technical support |
| Aug 2007 | <ul style="list-style-type: none"> CMFP MSE lending was launched at DQCB |
| Sept 2007 | <ul style="list-style-type: none"> CMFP MSE lending was launched at BOCQ JCB graduated from on-site technical support Monthly disbursements exceeding 2,000 loans |
| Nov 2007 | <ul style="list-style-type: none"> CMFP MSE lending was launched at DYCB Agreement on contract extension reached between IPC and CDB |
| Jan 2008 | <ul style="list-style-type: none"> CMFP MSE lending was launched at GLCB |
| Feb 2008 | <ul style="list-style-type: none"> CMFP MSE lending was launched at QJCB |
| April 2008 | <ul style="list-style-type: none"> CMFP MSE lending was launched at JZCB Monthly disbursements exceeding 3,000 loans Outstanding portfolio exceeding RMB1 billion |
| May 2008 | <ul style="list-style-type: none"> GCB graduated from on-site technical support MRCB graduated from on-site technical support |
| June 2008 | <ul style="list-style-type: none"> IPC's assignment under the CMFP ends |

Commercial Bank (DYCB) in November 2007. All the other PFIs joined the project in 2008: Guilin Commercial Bank (GLCB) in January 2008, Qujing Commercial Bank (QCB) in February 2008, and Jingzhou Commercial Bank (JZCB) in April 2008.

As shown in Table 10, the duration of the on-site technical support varied. In general, banks in the early start-up phase received more on-site support. When a PFI graduated from the support, CDB made efforts to provide continuous long-distance support and monitoring services, especially to the first three PFIs (BSB, TB, and JB). Since graduation, these PFIs have successfully developed their own MSE operations. At the start of 2008, CDB withdrew its on-site support for Lanzhou Commercial Bank, in accordance with an agreement reached with IPC.

Loan Disbursement

The MSE loan disbursement and portfolios of PFIs increased over time. Monthly disbursements of microloans exceeded 100 loans by March 2006, 1,000 loans by March 2007, 2,000 loans by September 2007, and 3,000 loans by April 2008.

Major Results Achieved

Loan quality. The quality of MSE loans disbursed by the PFIs was consistently excellent. As shown in Table 6, the percentage of loans overdue for more than 30 days was less than 0.3% of the total loan portfolio, and well below the 3% level set in the project appraisal document.

Training of loan officers. The project performed well in terms of the number of MSE borrowers and the loan officers trained. Over the 5 years of project implementation, the PFIs trained more loan officers (including back-office and MSE management staff) and provided MSE loans to more borrowers than expected under the project agreement (Table 11). By 2010, in the six selected PFIs alone, more than 1,000 loan officers, 148 back-office staff, and 203 middle level managers had been trained.

Table 11. Project Results as Compared to Targets 2006–2010

| | | No. of MSE Loan Growth %1 | Amount MSE Loan Growth %2 | Loans Overdue>30 days %3 | Loan Officials Trained4 | Number of Borrowers5 |
|---------|--------|---------------------------------|---------------------------------|--------------------------------|-------------------------------|-------------------------|
| Year 16 | Target | – | – | 3 | 80 | 3,360 |
| | Actual | 4,226 | 14,892 | 0.1 | 97 | 4,227 |
| Year 2 | Target | 305 | 305 | 3 | 265 | 13,200 |
| | Actual | 437 | 571 | 0.2 | 265 | 22,715 |
| Year 3 | Target | 146 | 146 | 3 | 398 | 40,100 |
| | Actual | 232 | 278 | 0.04 | 566 | 75,347 |
| Year 4 | Target | 67 | 67 | 3 | 596 | 72,300 |
| | Actual | 64 | 86 | 0.05 | 642 | 123,813 |
| Year 5 | Target | 65 | 65 | 3 | 894 | 119,600 |
| | Actual | 66 | 92 | 0.06 | 1,079 | 205,372 |

Notes: 1. Annual growth rate of the number of MSE loans disbursed. 2. Annual growth rate in the amount of the MSE loans disbursed. 3. The percentage of the total loan portfolio. 4. The number of loan officials trained. 5. The number of borrowers is represented by the cumulative loan disbursements. 6. Year 1–5 corresponds to the years of 2006, 2007, 2008, 2009 and 2010.

Sources: CDB, and six PFIs.

Loan size. The project also put the average size of MSE loans under some control. The average loan size for the 12 PFIs was RMB15,000 in 2005, RMB52,857 in 2006, RMB68,981 in 2007, and RMB79,189 in 2008. For the six selected PFIs, the average loan size was RMB110,561 in 2008–2009, and RMB118,370 in 2010. The increase in the average MSE loan size (in nominal terms) over time may partly explain the rapid increase in national incomes in the PRC.

Sustainability and profitability of MSE lending. The following indicators are used here to measure the sustainability and profitability of the MSE operations of the PFIs: the breakeven month, the length of time (months) required for the MSE lending operations of PFIs to break even, the lending rate of interest, and the costs of the MSE lending operation. As shown in Table 12, for the six selected PFIs, on average, the MSE lending operation was projected to reach the breakeven point by the 11th month. Of the six banks, three reached the breakeven point by the sixth month. Again for the six PFIs, on average, MSE lending was projected to cover its costs within 2 years. TB reached the breakeven point for its whole MSE operation within a year, a remarkable result. Jiujiang Bank, the slowest of the six to reach the two breakeven points, has set a profit target of RMB500,000 for each MSE loan officer.

Table 12. Breakeven Months Required for Partner Financial Institutions

| | MSE Start-up ¹ | Breakeven Month 1 ² | Breakeven Month 2 ³ |
|---------------|---------------------------|--------------------------------|--------------------------------|
| Baoshang Bank | Dec 2005 | 15 | 25 |
| Taizhou Bank | Oct 2005 | 6 | 12 |
| Jiujiang Bank | Sept 2006 | 27 | 33 |
| Guiyang Bank | May 2007 | 7 | 14 |
| Maanshan RCB | May 2007 | 6 | 14 |
| Daqing Bank | July 2007 | 6 | 15 |
| Average | | 11.2 | 18.8 |

Notes: 1. The time for the MSE lending start-up; 2. The number of months required for the MSE lending operation to reach financial breakeven point for the month. 3. The number of months required for the whole MSE lending operation to reach breakeven.

Source: Field visits in PRC.

Commercial viability and profitability of PFIs. The commercial viability and profitability of the PFIs can also be demonstrated by their lending rates and the cost of providing the microloans. As shown in Table 13, the average lending rate of PFIs is around 14.6%, whereas the average total cost of providing the microloans is around 4.5%. The 10-percentage-point difference is due to the low funding costs, low loan-loss provision due to good loan quality, and low staff costs.

Table 13. The Lending Interest Rates and Cost Structure for Microloans by the 6 Partner Financial Institutions (Unit: percentage of the loan portfolio)

| | Interest Charged (%) | Fund Costs (%) | Loan Loss Provision (%) | Staff Costs (%) | Other Cost Shared (%) | Management Cost Shared (%) | Total Costs (%) |
|------|----------------------|----------------|-------------------------|-----------------|-----------------------|----------------------------|-----------------|
| BSB | 14.6 | 1.96 | 0.48 | 1.02 | 0.25 | | 3.71 |
| TB | 11.28 | 1.99 | 0.32 | 0.38 | 0.18 | 0.5 | 3.37 |
| JB | 16.2 | | | | | | 0 |
| GB | 18 | 0.7 | 1 | 2.28 | 0.3 | 1.89 | 6.17 |
| MRCB | 13 | 1.04 | 1.224 | 0.131 | 0.034 | 0.999 | 3.428 |
| DB | 12–18 | 2 | | 2.7 | 0.1 | 1 | 5.8 |
| Mean | 14.6 | 1.5 | 0.8 | 1.3 | 0.2 | 1.1 | 4.5 |

Source: Field visits in PRC.

Technology transfer. Under the TA component, the project succeeded in transferring the MSE lending technologies to PFIs and in building the capacity of CDB and the PFIs. After the training provided by the consultants, CDB created a microfinance business unit, consisting of two special teams for MSE lending, with one team specializing in the evaluation and monitoring of commercial banks and the other specializing in the provision of technical support for PFIs. Two manuals were compiled by CDB: a project monitoring and evaluation manual and an MSE lending operations manual. CDB selected the 12 PFIs for the project implementation and has participated in the provision of technical support to these 12 PFIs.

The project's TA component has been singled out for positive comment by the PFIs. An overwhelming number have expressed the view that the TA component has been much more useful to them than the provision of wholesale loans, as the city and rural commercial banks in the PRC have adequate low-cost funds. According to the PFIs, the two major contributions of the project were: (i) the training provided by the consultants, and the selection and management of loan officers, and (ii) the systematic approach to MSE lending characterized by cash flow analysis.

CDB capacity to provide in-house TA to PFIs. The main institutional and implementation arrangements for the project detailed in the project appraisal report involved CDB's responsibility for project implementation, including the selection of PFIs, on-lending to these PFIs, organization of the TA, and project monitoring. As a state-owned policy bank, CDB was well positioned to implement the project, given its focus on SME lending, its policy orientation, and its links with CCBs in the country. The project design also made CDB a project beneficiary, to spur project implementation.

CDB contributed to the success of the project by contracting the TA provider, selecting PFIs and providing them with on-lending assistance, and providing project monitoring and technical support. At the same time, CDB improved its own capacity for project implementation and in-house technical support. To some extent, it has maintained its technical support capacity and provided wholesale loans to many lending-only microcredit companies at market rates of interest. (The reshuffling of the MSE department within CDB could, however, affect the provision of TA support by CDB.)

CCBs and RCBs, on the other hand, have generally shown a lack of interest in borrowing from CDB for MSE loans. A few PFIs also regard the CDB on-lending expensive, compared with their own costs of funding. It appears that a better result could have been achieved from the project if the low costs of funds for CCBs, as well as the profit motives for both CDBs and PFIs, had been taken into account.

Fulfillment of PFI objectives. The PFIs that were surveyed had the following common objectives, in addition to the project objectives:

- Introduce advanced lending techniques and approaches to MSE lending in order to meet the demand from MSEs and develop the MSE lending business;
- Apply the techniques and approach in other lending operations in the bank;
- Diversify the bank's loan portfolio to mitigate credit risks; and
- Train loan officers.

The MSE clients interviewed were very positive about the project. Besides the easier access to microlending under the project, they were deeply impressed by: (i) the speedy delivery of PFI microlending services, and (ii) the good services provided by loan officers (although a few clients mentioned protracted field investigation). In general, the clients expressed

preference for a purely commercial relationship with financial institutions instead of a personal relationship with loan officers or managers. They also said they were willing to pay a higher but transparent lending rate of interest instead of paying hidden costs in the form of kickbacks or gifts to loan officers and managers.

The PFIs agreed that they benefited from the project in various ways. They

- learned MSE lending technology, as well as a systematic approach to microlending;
- used MSE lending technology in their small-business and agricultural lending;
- were introduced to a well-structured and efficient method of recruiting, training, and managing loan officers and other MSE lending staff;
- significantly increased their MSE lending market share and profits from MSE lending (some PFIs from zero), thus helping to build a good foundation for increased bank competitiveness in the local markets;
- gained a diversified loan portfolio with reduced credit risk for the bank as a whole;
- achieved a good MSE client base, to which the PFIs provide not only MSE loans but also deposits and other financial services; and
- established their MSE lending reputation and brand in the local markets, with local governments, and with bank regulators.

In other words, by participating in the project, most PFIs established at least five major assets for their bank: well-trained and experienced loan officers and middle-level managers in MSE lending, a good microlending client base, a good-quality microlending portfolio, an established methodology and system for microlending and training, and a good reputation in MSE lending. Some PFIs have used these assets to develop their business further. For example, Maanshan RCB and TB have transferred and, in some cases, promoted trained and experienced MSE loan officers to other bank operations, especially small-business, corporate, and rural lending. Most PFIs have extended the microlending methodologies, with certain modifications, to their other lending operations as well. Many PFIs have been able to provide their microlending clients with comprehensive financial services, including savings to raise the savings deposits of these clients. A couple of PFIs have used their reputation in MSE lending to expand their territory and establish new branches in other cities and provinces.

The fieldwork and communications with the PFIs, microfinance consultants, and others indicated that the project also had a profound impact on others beyond the PFIs. A number of bank leaders pointed out that what they gained most from the project was a change in their understanding of, and approach to, the overall lending operation and to the training and management of loan officers and middle-level managers. To them, this new understanding has been much more important than the introduction of a lending methodology alone.

Impact on the microfinance industry in the PRC. The microlending technologies and management systems introduced by the project have been transferred to a growing number of microfinance institutions in the PRC through the PFIs and consultants, many of whom were trained by IPC under the project. To the limited knowledge of the authors of this report, the following financial and nonfinancial institutions have hired former project consultants to provide MSE technical support in the past 2 years:

- Changchun Rural Commercial Bank (Jilin province)
- Changshu RCB (Jiangsu province)
- Chengdu Rural Commercial Bank (Sichuan province)
- China Postal Savings Bank
- Dongying City Commercial Bank (Shandong province)

- Jiaxing Rural Commercial Bank (Zhejiang province)
- Jijin Rural Cooperative Bank (Jiangsu province)
- Jingjiang Rural Commercial Bank (Jiangsu province)
- Jining Bank (Shandong province)
- Pingdingshan City Commercial Bank (Henan province)
- Suqian Minfeng Rural Cooperative Bank (Jiangsu province)
- Wuhan Rural Commercial Bank (Hubei province)
- Xinyu Rural Cooperative Bank (Jiangxi province)
- Zhangjiagang Rural Commercial Bank (Jiangsu province)

In addition to the city and rural commercial banks, many MCCs and VTBs have received similar technical support in microlending. A number of project consultants have been employed as high-level or middle-level managers in charge of MSE lending operations by the banks, such as TB and Quanjing Commercial Bank. It is expected that more city and rural commercial banks and other MFIs will follow suit as the financial reforms deepen.

Some PFIs, such as BSB and MRCB, have since hired IPC to provide further TA for the development of small-business lending, and for their training and capacity-building needs.

Impact at the national level. At the national level, the project impact can be understood from the following two perspectives. *First*, the implementation of the project among the 12 PFIs strongly indicates that microloans to urban and semirural microentrepreneurs and small enterprises in the PRC can be provided in a commercially sustainable way. In other words, commercial financial institutions, especially the local banks, can benefit in terms of profit, local market share, and a diversified loan portfolio by providing MSEs with microloans ranging from RMB10,000 to RMB500,000, without subsidies from the government. On the other hand, urban and semirural microentrepreneurs and small enterprises can benefit from the institutional microloans, which provide them with increased working capital and funds for business expansion. *Second*, the universally accepted lending methodologies, such as the microlending methodologies based on cash flow analysis that were introduced by IPC into the PRC, can be applied elsewhere in the country, with certain modification. This shows the importance of international cooperation and mutual learning in the PRC's banking and rural finance reforms.

Project sustainability. The foregoing discussions also indicate that the project has achieved sustainability beyond its life. *First*, all the six PFIs interviewed have continued and expanded their MSE finance operations since the project's completion. These institutions have benefited from the project through an increased microlending portfolio and client base, increased profitability from microlending operations, well-trained microlending officers, and lending technologies. *Second*, many city and rural commercial banks in the PRC have started their own microlending operations, following the example of the PFIs. *Third*, CDB has continued its microlending operations, providing wholesale loans to microcredit companies and technical support in microfinance to retail financial institutions.

Challenges Met during Implementation

While the PFIs under the project support have generally performed well, the project encountered a number of challenges during implementation. One important challenge was the uneven development of the PFIs. Of the six PFIs visited for this study, BSB and TB alone achieved over 80% of the targets with respect to number of loan officers trained and number of microloans disbursed by the end of 2010 (Table 11). In other words, the project could hardly have hit its targets without BSB or TB.

Project Success Factors

Project timing and market-oriented reforms. The success of the project should be attributed, first of all, to the timing of the project and the market-oriented reforms in rural finance and microfinance undertaken by the government before the project. In the mid-1990s and late 1990s, the government and bank regulators initiated market-oriented reforms, including, among others: (i) the commercialization of state-owned commercial banks and the reform of urban and rural credit cooperatives (many urban credit cooperatives were turned into CCBs); (ii) partial interest rate liberalization, involving the gradual lifting of restrictions on the lending rates charged by commercial banks (although the rates still cannot go beyond four times the base lending rate);⁴ and (iii) the opening up of the market to competition, allowing the entry of new types of rural financial institutions, such as VTBs and MCCs, and giving local commercial banks opportunities to open new branches across the regions. These reforms made commercial microfinance possible in the PRC. CDB, the World Bank, and KfW contributed in a major way by promoting and initiating the project at the right time, when commercial microfinance was possible in the PRC and the government was anxious to support the development of MSEs.

Selection of PFIs. The success of the project can also be attributed in part to the selection of the PFIs. The World Bank and CDB selected mainly CCBs as partner institutions on the assumption that these banks were more likely to support MSE lending. The rightness of this approach to the selection of PFIs has been validated by the development of microfinance in the PRC in recent years. It is mainly the small-scale and locally based city and rural commercial banks that have developed their microfinance operations. It appears that, at least for the time being, the small banks are more likely to support MSEs. This theory has been endorsed by a number of economists in the country.

Selection of IPC as project consultant. The selection of IPC as project consultant also contributed to the success of the project. Many PFIs were impressed by the technique and performance of the IPC consultants, though some would have preferred to increase the scale of their microlending earlier. Many people interviewed agreed that most consultants from IPC were committed to their work and provided good training and technical support.

Support from regulatory authorities. The regulatory authorities in the PRC, including CBRC and PBC, have been supportive of the PFI's MSE lending and showed themselves to be willing to accept or tolerate some PFI microlending practices that do not entirely conform to the current lending regulations.

Success Factors for Particular PFIs

For the PFIs, three factors were crucial for the success of the project at the institutional level: (i) a strong commitment to microlending operations from the board and top management, (ii) local market conditions, and (iii) the institutional set-up and incentives for MSE lending within PFIs.

Strong leadership commitment. The commitment of bank management and their vision, long-term goals, and patience were the most important factors in the successful implementation of the project at the bank level. Both BSB and TB, which have outperformed, have demonstrated a strong commitment to MSE finance on the part of their top management.

⁴ According to a court case in PRC, the contract for the loans with a lending rate higher than four times the base rate set by PBC is not legally enforceable.

Local market conditions. The development of MSE lending at MRCB, Daqing Commercial Bank, Jiujiang Bank, and Guiyang Bank was constrained to a certain extent by conditions in the local markets where the demand for microloans was not higher due to either a low population density (in Daqing of Helongjiang province) or undeveloped microenterprises at that time (for Guiyang and Jiujiang). Nevertheless, Jiujiang Bank expanded its MSE lending quickly when it initiated microlending operations in Hefei, the capital of Anhui province. MRCB and some other PFIs have applied the microlending technologies in its small-business and rural lending and achieved good results.

PFI institutional set-up and incentives. There are generally two kinds of internal institutional settings for banks in PRC to conduct microloan operations: (1) to create a separate microloan department (MSE department) to be responsible for designing microloan product, loan policies and procedures, and for monitoring and evaluating microloan operations while the actual microloan operations are conducted by the existing bank branches; and (2) to set up one or two new branches specializing on microloan operations (usually called microloan branches) and to restrict the microloan operation to those specialized microloan branches. Most PFIs under the project have taken the first approach. Under CMFP, PFIs have been required to design an incentive package for microloan officers and managers linked to the number of loans disbursed and managed and the loan quality to achieve the dual objective of outreach and sustainability for microloan programs. Some PFIs, such as TB, also linked the payment of a microloan officer to the cross-sales of other bank products by the officer, such as deposits, and to the profit target. The MSE department should be provided with sufficient autonomy and special rules and conditions to support the development of MSE lending. The support of other departments, including the branches, is important.

The implementation of the project in the PRC produced valuable lessons.

First, from the perspective of the PFIs, it is important to learn first and adapt later. A number of institutions that were interviewed said that they have adopted an attitude of learning and not making hasty changes in the technologies transferred by the consultants before fully understanding the technologies. Direct dialogue between the bank's top management and the consultants is therefore important. *Second*, the management is the key: the project could hardly have succeeded at the banks with poor management.

Donors and implementing agencies must select suitable partner institutions. The selection should be based more on the top management's understanding of, and commitment to, MSE lending, as well as the overall management of the bank, than on how the bank is currently performing.

Conclusions

Several conclusions can be drawn from this review and analysis. *First*, the development of the financing market for MSEs in the PRC and the results of further research have provided ample empirical evidence in support of the following key conclusions: (i) financial institutions base their lending decisions mainly on physical collateral, particularly real estate (Zhang, et al 2007); (ii) banks focus primarily on risk considerations, while ignoring "relationship" factors and the collection of soft data for more accurate loan pricing (Deng, et al 2010); and (iii) some of the earlier proposed policies, such as the use of inventory and accounts receivable as collateral, which would help solve the credit constraints of small enterprises (Zhang, et al 2007), have already been accepted by some financial institutions in supply-chain finance and in MSE lending.

Second, the discussion in this chapter on relationship lending demonstrates that the technical and financial innovations have reduced the explanatory power of certain theories, such as the theory on the advantages of small-size banks in MSE financing. The rapid development in computer technologies and in credit score has lowered the costs significantly for large banks to obtain information and provide loans to MSEs. It is however difficult to form the new theories on MSE lending based on current studies, as the evidence provided by empirical studies tends to be highly inconsistent because of the differences in data sources, measurement methods, and analytical models and techniques used.

Third, in recent practice, successful applications of the IPC model by the medium and small size banks, such as BSB and TB, indicates that the medium and small banks in PRC can provide microloans to MSEs on a sustainable basis. The successful application of the credit factory model by some big banks, including the China Construction Bank and BOC, shows that big banks in PRC can also do MSE lending. This helps to demonstrate the basic fact that as long as the credit technique and organizational structure are appropriate, banks of all sizes in PRC can serve small enterprises better. The successful application of these two models in PRC shows a clear direction for MSE lending by other financial institutions in PRC, and deepens our understanding of the relationship between credit technique, organizational structure, and successful small business lending in PRC.

Fourth, some domestic empirical research has data and procedural flaws. Specifically, in terms of data, most sample sizes are small and limited to a region or city. Some studies have problems with sample selection, with the samples limited to SMEs that have obtained loans from banks and exclude SMEs that have no loans. Moreover, most studies have investigated the borrowing enterprises without matching the borrowers' data with those of lenders, which makes the identification of the type and size of bank that enjoy the advantage in MSE lending difficult or not possible. In terms of the procedures, researchers have increasingly recognized that, for small-enterprise financing, information, lending technique, organization structure, incentives, and regulatory and macroeconomic policies are all important variables. But so far, many researchers have given insufficient attention to the causal relationship between these variables. In particular, the impact of financial regulation and changing market structure for the banks on MSE lending has been, to some extent, overlooked by many researchers in PRC. For research on PRC's MSE lending, the most urgent and fundamental task is to gather more comprehensive statistics and collect large sample data with good research design, including the data on banks and MSEs.

Financing the Agricultural Value Chain

Introduction

Rural economic development and rural finance are interrelated. On the one hand, rural finance provides substantial support for the development of the rural economy. The government's Decisions on Promoting Rural Reforms and Development (2008) and the State Council's Opinions on Supporting Agricultural Development and Farmers' Incomes (2009) highlight the role of rural finance in promoting rural reforms, boosting farmers' incomes, and maintaining rural stability. The reform of rural finance and its development, on the other hand, depend on rural economic development. On the demand side, rural economic restructuring and upgrading have an impact on strategic reform, product development, and staff training in RFI.

Agriculture is the foundation of the rural economy of the PRC. Since the household contract responsibility system was launched in the early 1980s, specialized farm production and rural cooperatives have become driving forces for agricultural development, connecting thousands of rural households to large markets and promoting large-scale production, rural structural adjustments, and the rise of agricultural value chains. *Chanyehua* (specialized large-scale farming) and cooperatives in particular have accelerated farming differentiation. Partly as a result of this development, the number of traditional farm households that rely on farm production has decreased, mixed households have grown in number, and many specialized farming households have emerged (Zhang 2007). Moreover, dragon-head enterprises⁵ and rural cooperatives now act as production service providers and investors, roles that collectives used to play before the advent of the household responsibility system. They are also in charge of quality control, new market development, and brand building. In this sense, specialized farm operations and rural cooperatives are improvements on the household responsibility system, combining decentralized household production and more centralized services.

According to the Farmers' Daily on 19 September 2013 and the information from the Ministry of Agriculture (MOA), by 2012, the number of agricultural organizations (mainly agricultural enterprises) exceeded 300,000. Over 110,000 dragon-head enterprises generated a total sales value of RMB6.88 trillion (about one sixth of the PRC's GDP), a net profit of RMB466.78 billion in 2012, with an employed labour force of 30 million. Moreover, the farm goods (include processed farm goods) provided by these dragon head enterprises made up over one third of all the farm goods on the PRC's markets, two thirds of the fresh vegetables supplied to the PRC's major cities and over 80% of agricultural exports.

The transformation of agricultural operations and the emergence of many new economic actors (e.g., large-scale plantations, dragon-head enterprises, and rural cooperatives) have

⁵ The PRC government awards the Dragon-head Enterprise status to companies considered to be leaders in their industry sectors. It allows companies to avail of certain incentives such as tax exemptions and other financial support.

significantly changed the demand for rural financial services. The demand for small amounts of farm input (seeds, fertilizer, etc.) and for short-term credit has decreased, while the demand for larger amounts of longer-term credit associated with rural industrial adjustment, specialized farm production, specialized cash cropping, and agricultural processing has increased (Task Force of PBC Zhangjiajie Branch 2005). Dragon-head enterprises need loans both for working capital and for long-term capital investment (Chou 2008). Cooperative members have more homogeneous, and often also more concentrated, demand for credit (Strategic Management Taskforce of ABC 2009). These changes in demand for credit require new approaches to rural finance and better loan products and services.

The financial institutions in rural PRC cannot meet the changing demand for rural financial services for various reasons. RCCs, the main providers of financial services in the rural areas, provide mostly microloans to rural households, household group guarantee loans, and collateralized loans. Household microcredit is high in risk because of the low profits from small-scale agriculture, the high market risk, and the lack of agricultural insurance, and entails high transaction costs because of the difficulties involved in gathering information and in disbursing, monitoring, and collecting small loans to thousands of households. Loans to farming household groups pose different problems: such groups are not easy to form and their group lending mechanism has little effective control over loan defaults. Collateralized lending, for its part, has a limited range of eligible collateral. Land-use rights and farmhouses, the two major properties owned by farmers, cannot be used as collateral under existing laws and regulations.

From the point of view of banks, on the other hand, agricultural loans cost more because lending is geographically dispersed and the loans are small in size and large in number. According to a study of Penghu Agricultural Cooperative Bank in Zhejiang province by Chen (2011),⁶ in 2006 the bank had 39 credit officers and 9 vice presidents in charge of agricultural credit, 18,842 rural household borrowers, and a household loan portfolio of RMB419 million. For rural household loans, the total interest income was RMB29.5 million and the total costs was RMB29.9 million, so each agricultural credit officer on average created a financial loss of RMB9,100, in comparison with a profit of RMB139,600 per employee in the bank.

A significant issue for researchers and policy makers, therefore, is how to meet the demand for rural finance and thereby promote innovations in financial products, techniques, organization, and loan supply mode, tailored to the new needs of farmers, rural cooperatives, and dragon-head enterprises. A question that should be addressed is whether the dispersed demand for credit in the rural areas can be integrated through *chanyehua* and farmers' specialized cooperatives, to improve access to credit and the quality of rural financial services.

The rest of this chapter discusses the background of agricultural value chain financing in the PRC, its current status, and relevant policies; summarizes the properties of demand for financial services in rural specialization and the development of cooperatives; and identifies key issues related to the use of the various models of agricultural value chain financing, and compares the strengths and weaknesses of the different models.

⁶ It is important to note with rapid industrialization in the county, the agricultural cooperative bank provided loans mainly for nonagricultural uses, including manufacturing, transport, construction and housing. Loans to rural households, regarded as agricultural loans in PRC, constituted a relatively small share of total bank lending.

Chanyehua and Financial Support

Chanyehua, a term increasingly used in agricultural development in the PRC, can be defined simply as specialized farm production on larger farms. The term is defined in more detail below.

The 21st century has seen dramatic changes in the external environment and the internal organization of agriculture in the PRC, followed by a shift in the way small farms operate. Guo (2009) sums up these developments in agriculture as follows. Changing markets and the rise of new types of organizations, such as rural cooperatives, heighten the challenges of market completion, food safety standardization, and government support for agriculture. Research shows that food safety standards are difficult to implement in agricultural value chains, where hundreds of millions of rural households engage in dispersed small-scale farming (Wan and Wang 2010).

Chanyehua requires financial support, especially large-scale capital investment (Jiang 2002). Intensive farm production as a developing trend in *chanyehua* needs capital to expand agricultural value chains, optimize the agricultural product mix, and become more competitive (Gao 2003). Dragon-head enterprises need more financial support, including more instruments for managing the natural and market risks associated with the production, storage, transportation, and consumption of agricultural products. Scientific and technical innovation, a key factor in the success of *chanyehua*, also demands substantial capital input (Gao 2003). RFIs and RFMs have an important role in allocating scarce resources and managing risks. They can reduce the transaction costs and uncertainties in farm production and marketing, and can also help to balance the benefits and interests of the different parties in the agricultural value chain.

This section defines *chanyehua* and the financial demand under different *chanyehua* models, analyzes the underlying causes of insufficiency of financial support for *chanyehua*, and, on the basis of case studies, tries to find new instruments and mechanisms for credit screening, risk control, and cost control by RFIs, through interaction between the agents (dragon-head enterprises, cooperatives, and farmers) in the agricultural value chain.

Definition, Characteristics, and Role of *Chanyehua*

Definition. *Chanyehua* is variously defined (Chou 2008). According to the Soft Science Committee of the Ministry of Agriculture (2005), *chanyehua* involves (i) market-oriented, efficient farm production using the latest farm technology; (ii) more specialized farm production based on family farming, with dragon-head enterprises and agricultural cooperatives taking the lead in marketing and other services; and (iii) the development of agricultural value chains with close links between farm production, processing, and marketing.

There is no commonly agreed definition of agricultural value chain. At the heart of the agricultural value chain concept is the idea of actors connected along a chain producing, processing and marketing farm goods to consumers through a sequence of activities. The definition of *nongye chanyehua* in Chinese is broader and vague. *Nongye chanyehua* as defined above covers agricultural value chain, agricultural specialization and technological progress in agriculture. However, in some cases *nongye chanyehua* have been mixed up with agricultural value chain development for the academic and policy discussions in the PRC. Agricultural cooperatives, also refer to farmers cooperatives in the PRC are an agricultural organization, which could be an actor in the agricultural value chain development and or *chanyehua*. Agricultural value chain finance is concerned with the flows of funds to and within a value

chain to meet the needs of chain actors for finance is concerned with the flows of funds to and within a value chain to meet the needs of chain actors for finance, to secure sales, to buy inputs or produce, or to improve efficiency (see Wikipedia).

Characteristics of *chanyehua*. Yu (2002) states that *chanyehua* enhances rural organization building, promotes vertical integration, and emphasizes agricultural specialization. Dragon-head enterprises or cooperatives organize individual farmers into agricultural value chains according to the principles of mutual benefit and common interest. Agricultural production, processing, and marketing are vertically integrated. Vertical integration in general can be either complete (the same agent performs all the activities in the value chain) or incomplete (different agents perform the various activities through contracting). In *chanyehua* vertical integration is mainly incomplete.

Agricultural specialization can take one of three forms: (i) agricultural institutions, including agricultural enterprises and households, specialize in the production of certain farm goods for the market; (ii) different agents specialize in different stages of farm production according to their comparative advantage, to improve production efficiency; or (iii) regions specialize to achieve regional comparative advantage in farm production.

By definition, *chanyehua* goes beyond farm production and integrates the processes of input supply, grading, and processing, and marketing of farm goods.

Role of *chanyehua*. *Chanyehua* has an important role in increasing the scale of farm production and augmenting farmers' income. It helps to integrate individual farmers into the market. The "enterprise + farming households," "cooperative + farming households," and "wholesale market + farming households" models have been proven effective in integrating individual farmers into the market so that they can organize their production on the basis of market demand. *Chanyehua* can also facilitate large-scale farm production and hence raise farm profits. In addition, by speeding up technical innovations in agriculture, *chanyehua* can promote the modernization of agriculture.

The Linkage between Households and Enterprises

Under *chanyehua*, individual farmers have been linked to dragon head enterprises in the following four manners (Soft Science Committee of the Ministry of Agriculture 2005):

- **Market based Linkage:** here farmers and enterprises do not have a formal relationship, and they buy and sell farm products on the market, such a link is unstable.
- **Contract based Linkage:** dragon-head enterprises and farming households are connected through formal contracts that specify the variety, quantity and prices of farm products to be traded, and the rights and responsibilities of both the parties. Some of these contracts involve the provision of farm input and technical support from companies to individual farm households.
- **Membership based Linkage:** dragon-head enterprises and farming households are connected by forming agricultural associations or cooperatives to achieve the benefits of with the division of labor and specialization.
- **Capital based Linkage:** both the enterprises and farm households invested their equity capital in their cooperatives or joint ventures, a more binding relationship.

The variation in the linkages discussed above impact on the financing mechanisms and techniques. It is therefore important for the financial institutions to identify and understand

how farm households are linked to the dragon head enterprises in the agricultural value chain development. For example, a more binding relationship between households and enterprises tends to provide additional security for external financing.

Financial Demand of *Chanyehua*

Chanyehua production has significantly changed, from small-scale and generalized to specialized operations, and from decentralized to centralized management. Meanwhile, the value chain has become more market-oriented. Large-scale farming households, dragon-head enterprises, and rural cooperatives are now the most dynamic and promising entities in rural economic development, and have created new requirements for rural financial services.

The following discussion starts with the impact of the diversification of entities on rural financial demand (Task Force of PBC Ganzhou Branch PBC 2010), then looks briefly into the specific features of the financial demand of dragon-head enterprises, intermediary organizations, and farming households. The changes in the financial demand of farming households, in particular, are viewed against the developments in *chanyehua*. The discussion on the financial demand of cooperatives resumes in the next section on rural cooperatives financing, to avoid repetition.

Sun (2009) notes several changes in rural financial demand, as a result of research done in Ganzhou city, Jiangxi province. *First*, as demand for rural credit has increased, so has the scale of agricultural processing and value added to agricultural products. *Second*, credit for production rather than capital turnover has come into greater use. *Third*, demand has shifted mainly to credit backed by property rights, with farming households now more willing to use their farming materials, houses, and land-use rights as collateral. *Fourth*, nonagricultural demand has gradually replaced agricultural demand. *Fifth*, organizational demand for credit (normally centralized and large-scale) has tended to replace individual demand, because of the rapid development of organizations and *chanyehua*.

Financial demand of dragon-head enterprises. Generally, the financial demand of dragon-head enterprises is both short-term and urgent (for farm production, processing, and marketing), and long-term and large-scale (for expansion and for technical improvements including farmland transformation, water conservation, and warehouse construction projects). Weng and Lv (2008) summarize the changes they observed in Shaoxing city, Jiangsu province, as follows. The demand for credit has increased in scale as agricultural dragon-head enterprises have gradually merged to form conglomerates. The financial products available have also widened in range to keep pace with the expansion of agricultural dragon-head enterprises and their financial service needs, from traditional credit settlement to comprehensive financial services such as line-of-credit, consulting, and agency services. Moreover, financial services have been systematized. Some dragon-head enterprises require comprehensive operation and financial planning services from financial institutions to help them avoid foreign exchange and interest risk.

From the standpoint of market specialization, *chanyehua* needs long-term capital to build input and product markets, such as markets for production materials, agricultural products, and community services.

Financial demand of cooperatives. The financial demand of cooperatives has several key characteristics. The majority of cooperatives in the initial stages of growth lack capital to purchase large or new machinery and equipment, and therefore require more credit

for such purchases. Cooperatives have a greater and more urgent need for liquidity than individual farming households, to procure and purchase agricultural input, and to process, produce, transport, and market agricultural products. Their demand for credit is also more sustained and frequent than the credit demand of individual farming households since many cooperatives expanded their scope of farm production through diversification.

Financial demand of farming households. Together with structural adjustment in agriculture and the development of *chanyehua*, there have been changes in the agricultural credit requirements of farming households. Specifically, the demand for small-scale credit for traditional agriculture (to pay for seeds, fertilizer, etc.) has decreased, while the demand for large-scale credit (for structural adjustment, specialized breeding, and the processing of agricultural and auxiliary products) continues to increase (Task Force of PBC Zhangjiajie Branch 2005). Moreover, because these cooperatives have integrated the supply of agricultural inputs, such as seed and feed, to farming households, the demand for microcredit has been greatly reduced (Chou 2008).

The transformation of agriculture and the construction of the new socialist countryside have considerably changed the credit needs of farmers of different types. Jiang and Wu (2006) classify farmers into three income categories: wealthy, average income, and poor. According to their survey on the credit required by farmers in Jingshan county of Hubei Province, wealthy farmers engage in large-scale cultivation, plantation, agro-processing, marketing, and social services, and have long-term and large demand for credit. Farmers of average income are mainly involved in small-scale cultivation and breeding, and therefore have less demand for credit. The majority of poor farmers also need credit, but in small amounts.

Main Problems with Financial Support for *Chanyehua*

The formal financial system provides inadequate support for *chanyehua* and cannot sustain the extension of the agricultural value chain. Insufficient funding has weakened ABC support for *chanyehua* in the past few years. RCCs are primarily in the microcredit business, with credit lines generally below RMB3,000 in remote areas and maximum loan amounts of only RMB20,000–RMB30,000 even in the developed suburbs — not enough to meet the needs of *chanyehua* (Zeng and Zhou 2008). Furthermore, the various channels of agricultural value chain financing are not connected. In the “enterprises and farming households” model, for example, agricultural dragon-head enterprises obtain credit mainly from large and medium-sized financial institutions, including CCBs, whereas rural households get credit from the RCCs, even informal financial organizations. Because banks and RCCs cannot reach consensus on cooperation and investment, separate financing channels serve the needs of enterprises and individual farmers, thereby reducing the efficiency of the value chain and complicating system management and risk control. Despite their importance in *chanyehua*, cooperatives cannot obtain loans from financial institutions under current lending policies, which encourage dispersed lending, contrary to cooperative principles.

The rural financial system cannot meet the needs of rural specialization. A stable and effectively functioning agricultural value chain needs production material markets, wholesale markets for agricultural products, intermediary service markets, and irrigation, storage, and other infrastructure. And all these need financial services, especially policy-oriented support. In view of the outflow of capital and the centralization of approval authority, formal financial institutions use their limited funds mainly to support agricultural enterprises and farm turnover. The support system for *chanyehua* and its specialized markets seriously lags behind.

Current financial products and procedures are not suitable for *chanyehua*. The maturity structure of loans does not match the demand for credit for *chanyehua*. Agricultural enterprises have seasonal demand for large amounts of long-term credit, but rural financial institutions, intent on controlling risk, are more willing to dispense short-term loans. Financial institutions also have difficulty providing credit rating, acceptance, discounting, foreign exchange, and other financial services required by modern agricultural enterprises and farmers who practice specialized farming.

The inability of formal financial institutions to meet the credit demand of specialized farming households has three aspects. One is line of credit. Formal financial institutions use microcredit models that restrict the development of businesses needing large amounts of capital. Another aspect is mortgage. When effective real estate mortgages or third-party guarantees are lacking, leading agricultural enterprises turn to high-quality agricultural products for collateral, but because of a shortage of relevant registration departments, it is not easy to have agricultural mortgages approved (Weng and Lv 2008). The third aspect relates to the reuse of lines of credit by farmers (Li 2008).

Policy Recommendations for Improving Financial Support for *Chanyehua*

Several measures are proposed for dealing with the problem of inadequate financial support for *chanyehua*.

New loan products. The design of innovative products, such as the pledge of agricultural warehouse receipts and purchase orders, with farm production and market risks mitigated by agricultural insurance contracts and futures contracts. The growth of *chanyehua* requires financial products and services that will improve and deepen relationships with clients. For dragon-head enterprises with seasonal demand for liquidity and rapid turnover, the amount of credit should be assessed and a comprehensive package of products and services, such as acceptances, letters of credit, guarantees, and fund remittances and transfers, must be arranged. For specialized farming households with a good credit history and stable operations, the credit line can be increased.

Better lending technology. To avoid information asymmetry between agricultural organizations and financial institutions, credit ratings and credit screening technology must be developed more quickly to enable a more accurate understanding and evaluation of *chanyehua* organizations and better risk control of agro-economic projects. Increasing participation in guaranteed loans and promoting a credit reputation mechanism can diversify and control the default risk of members of the organizations.

Use of intermediaries. Profit making is the core of *chanyehua*. Participants share both profit and risk. Formal financial institutions should therefore support farmers with timely and sufficient credit in establishing professional cooperatives, professional associations, joint-stock cooperatives, and other types of cooperatives that supply, transport, and store agricultural products; cultivate fine varieties; control pests; and provide information consulting, technical training, and other services. In addition, formal financial institutions should use intermediaries and put in place coordination mechanisms with specific responsibilities and benefits for dragon-head enterprises, cooperatives, industry associations, suppliers, and farming households, to promote convergence of the financial supply chain and increase operating efficiency.

Stronger financial support. *Chanyehua* offers business opportunities for financial institutions, but the agriculture sector itself is weak, as reflected in the uncertain incomes, long-term investments, low profitability, and dispersed production in the sector. What is more, the high transaction costs of financial support for *chanyehua*, in excess of those for industry and commerce, indicate that the support cannot come from commercial finance alone. The development of modern agriculture, says the Task Force of PBC Shangrao Branch (2006), not only improves the investment environment and channels domestic and foreign investment into agriculture and the rural areas, but also introduces talent, technology, and information resources together with the capital inflow. Agricultural resources can thus be better allocated, and agriculture and the rural economy can develop more sustainably.

Cooperative Financing

In recent years, various types of rural cooperative organizations have mushroomed across the country. Relevant laws and regulations like, the Law of the People's Republic of China on Farmers' Cooperatives (2006), The Demonstration Constitution for Farmers' Cooperatives in the PRC (2007), and the Accounting System (Trial) for Farmers' Cooperatives (2008) drive rural cooperative organizations to specialize and standardize. The specialized cooperatives are responsible for bringing about specialized, modern, and large-scale agriculture to increase farmers' income.

Most cooperatives face capital shortage during set-up and early expansion. The Law of the People's Republic of China on Farmers Cooperatives (2006) provides legal protection for credit services for cooperatives. However, as the main financing channel of cooperatives, banks cannot meet their demand with the present banking products, procedures, and technology. The reasons have to do as well with problems with the cooperatives themselves, the insurance-sharing mechanism, and the rural credit environment.

The financing difficulties of cooperatives indicate that the rural financial supply model now in use is obsolete. Rural financial institutions should create new financial products, technologies, and systems. Meanwhile, the development of cooperatives presents new opportunities for financial institutions. Each medium-size cooperative consists of about 100 farming households. Assume each household need RMB10,000–RMB15,000 in loans, the total demand for loans from around 150,000 cooperatives of various types in PRC totals RMB150–RMB225 billion, rising to RMB300–RMB400 billion 5 years later at a yearly rate of increase of 10% (Wang 2008).⁷ Moreover, higher capital demand is expected as the rural economy develops and farmers' incomes increase.

Definition, Types, and Role of Farmers' Cooperatives

Definition. As defined in the Law of the People's Republic of China on Farmers' Cooperatives, farmers' cooperatives are voluntary organizations of agricultural producers or service providers of the same type. Their production and management occur at two levels: rural cooperatives produce and operate at the unified level, while farming households engage in dispersed production. The credit demand of these organizations also has two levels:

⁷ Note by the authors: assume the demand for loans grow at 10% per annum at a compound rate. By the end of 5 years, the total demand should be between RMB241.6 and RMB362.4 billion. It is also inappropriate to assume that all the rural households in a cooperative will have the same level of demand for loans at the same time.

centralized (in the case of the cooperatives themselves) and dispersed (in the case of their farmer members).

Types of farmers' cooperatives. There are four main types of farmers' cooperatives. Cooperatives of the first type are formed by farmers who specialize in an industry or product and are drawn by the technology, management, capital, and commercial network advantages that membership offers. A considerable number of cooperatives organized by specialized farmers can be found in Zhejiang and Jiangsu provinces and other eastern coastal areas of the PRC (Zhang 2009).

The second type of cooperative is formed by enterprises, which use the advantages of enterprises to link production bases, farming households, and markets into integrated supply, production, and marketing systems. After the passage of the Law of the People's Republic of China on Farmers' Cooperatives, many dragon-head enterprises, especially the larger ones, began showing great interest in joining or leading cooperatives (Zhang 2009).

The third type of cooperative was established or led mainly by the Rural Buying and Sales Cooperatives (RBSCs) in PRC or by agricultural technical extension staff.⁸ The farmers' co-operatives led by RBSCs are expected to inherit the market experience and links of RBSCs, while the cooperatives led by agricultural extension staff have advantages in the application of agricultural technologies.

The fourth type is led by village-level organizations, which link farmers' production with government by making full use of the advantages of economic collectives and the intermediary role of village cadres, to promote production and marketing. This type of cooperative is prevalent in central and western PRC.

Role of farmers' cooperatives. With respect to financial services, farmers' cooperatives can provide credit guarantees for their members so as to improve their access to bank loans. Providing financial support to farmers and cooperatives mainly through dragon-head enterprises could foster dependence on dragon-head enterprises.

Financial Demand of Farmers' Cooperatives and the Risks They Face

Financial demand. The financial demand of farmers' cooperatives can be divided into three types, according to the entity involved:

Financial demand of the cooperatives themselves. The Law of the People's Republic of China on Farmers' Cooperatives empowers farmers' cooperatives to perform production and business activities independently, including fund raising, settlement, and other financial activities. Farmers' cooperatives, as independent lending entities, guarantee credit repayment with investment and accumulation of funds.

⁸ PRC's Rural Buying and Sale Cooperatives (RBSCs) were created in the 1950s during PRC's agricultural cooperative campaigns. The system has since lost its cooperative nature and has now become an agricultural marketing service provider. Many grassroots RBSCs ceased their operations after the rural economic reforms in the 1980s due to competition from private traders.

- **Financial demand of enterprises owned by cooperatives.** Many cooperatives set up production and processing enterprises. Plant and fixed assets such as machinery and equipment, as well as orders and inventories, can be used as collateral for credit.
- **Financial demand of cooperative members.** Cooperative members mostly need productive capital to purchase seeds, fertilizer, and pesticides, among other things. In general, the demand is strongly homogeneous and often centralized.

In PRC, many cooperatives would like to have access to longer-term loans with relatively low lending rates for capital investment.⁹ Farmers' cooperatives that are just starting out need long-term, large-scale capital to build storage facilities and other infrastructure and to purchase transport and processing equipment. According to Ma and Yang (2011), many cooperatives have the business plan to expand their operation scale well beyond their registered capital and need large amounts of longer-term loans. Short-term loans (maturing within a year) from formal sources obviously do not match such needs.

Cooperatives that process, purchase, and store agricultural products also need to take out more loans for working capital especially during the harvest season. The financial institutions should therefore simplify their loan application and approval procedures to meet their demand. This is even more so because agriculture is high-risk with relatively low returns. However, to compensate for the high risk, rural financial institutions in some cases have raised their lending rate, which tend to impact on the effective demand from the cooperatives for bank loans.

Risks. Through effective collaboration and integration of resources, farmers' cooperatives spread agricultural knowledge and quality control technology among farmers, and strengthen agricultural marketing and financial accounting to counter natural and market risks. Experience has shown that a stronger role for cooperatives is conducive to more stable production, better-quality products, and lower financial risk (Zeng 2009).

Farmers' cooperatives are still at an early development stage in PRC, with an imperfect governance structure, so their operation and performance have been shaped to a large extent by their managers. Some cooperatives are not well managed, especially on financial management. The risks they face, internal as well as external, are greater. The cooperatives must therefore exercise good risk management. Banks, for their part, should base their lending decisions on the characteristics and operations of the cooperatives and adopt suitable lending models and techniques to manage risks (Wang 2008).

Financing Channels of Farmers' Cooperatives

Farmers' cooperatives have internal and external sources of finance. Cooperatives should not rely solely on external sources of finance, including credit from financial institutions to meet their capital demand. The investment from members and fund support from the governments and others are equally important.

External financing. Farmers' cooperatives can be classified, according to legal entity, into enterprise entities (commercial firms), juridical associations, and mutual aid societies. Under the Company Law (rev. 2005) and the Farmers' Cooperative Law, only farmers' cooperatives registered as a commercial firm legal person can apply for loans from formal financial

⁹ Many farmers' cooperatives in PRC have little registered capital investment, due mainly to the problems with their governance structure. Cooperatives in other countries with sufficient capital investment may not need a large amount of long-term loans.

institutions (Zeng 2009). In practice, the external channels of cooperative financing (mainly through ABC and the RCCs) are of four types:

- **Microlending to household members from formal financial institutions, especially RCCs, facilitated by cooperatives.** Locally based farmers' cooperatives usually have good information about their members. They can play a significant role in credit screening, monitoring and contract enforcement.
- **Loan guarantees from financially stable farmers' cooperatives for members without collateral.** More robust cooperatives can set up rural credit guarantee companies, and deposit registered funds with RCCs as guarantee to enable access to loan amounts significantly higher than those that can be obtained with security deposits. A questionnaire survey of 33 RCCs in 2007 (Zheng 2008) showed that two of the cooperatives provided unified credit guarantees for members, and six others, voluntary joint guarantees.
- **On-lending by Cooperatives:** the well-established cooperatives may borrow from financial institutions to buy farm input and then allocate the purchased input to their members, or directly on-lend to their members.
- **Personal loans obtained from RCCs by the heads or core members of cooperatives** (the most common mode of external financing). According to Ma and Yang (2011), only 12% of the total number of loans (16 of the 130 loans) granted by financial institutions to pilot cooperatives in Gansu province in 2010 were in the name of the cooperatives, compared with 63% of loans in the name of cooperative leaders or core members.

Because of their organizational characteristics, farmers' cooperatives can provide their members with credit guarantee services based on internal credit mechanisms. Mutual cooperation between members can increase credit to farmers, and minimize (or at least reduce) natural and market risks and moral hazard problems in repayment. The solution to these problems lies in the fund accumulation system of the cooperatives. Internal funds flow and logistics relationships between members and the cooperatives, involving the unified purchase and marketing of production materials, technology dissemination, return of surplus, and capital settlement, among others, can also help in avoiding default risk. In the field survey, some financial institutions chose to have credit guarantees from farmers' cooperatives that were well organized and managed, thereby expanding the agribusiness operations of the financial institutions, besides solving the problem of fund shortage (Zheng 2008).

Internal financing. Internal financing of farmers' cooperatives involves setting up new rural financial institutions such as VTBs and rural fund cooperatives (RFCs).¹⁰ Some cooperatives have set up unregulated RFCs to mobilize funds from their members. There are few cases of cooperatives participating in the creation of VTBs or regulated RFCs.

RFCs can be divided into formal, quasi-formal, and informal types, according to the way in which they operate and are supervised.

Formal RFCs are regulated by the central government. By the end of 2008, the CBRC had approved the establishment of 10 formal RFCs under three categories: (i) new RFCs licensed by the CBRC to operate in townships and villages, registered with the State Administration for Industry and Commerce, and accepting savings deposits; (ii) RFCs based on the original farmers' cooperatives and having farmer and rural enterprise shareholders; and (iii) RFCs

¹⁰ VTBs are regulated financial institutions which have to be sponsored by a formal bank. There are regulated RFCs and unregulated RFCs. The former is discussed in Chapter 6.

based on the unregulated RFCs, registered with the State Administration for Industry and Commerce, having farmer members, and accepting savings deposits.

Quasiformal RFCs are not regulated by CBRC but are promoted and guided by other central or local government departments. Such cooperatives can be subdivided into two categories: those promoted by local government departments and those supported by the central government departments.

Informal RFCs, likewise established beyond central government regulation and management, are of various types. Some are set up independently, while others are formed on the basis of the original farmers' cooperatives. Some do not accept savings; others do, but surreptitiously. None of these hold a CBRC license to operate. Some cooperatives are not registered at all, while others register with the civil affairs department or with the business sector. The cooperatives normally operate in villages, but some have expanded their scope of operation.

Financing Difficulties of Cooperatives

Still focused on meeting the demand of rural enterprises and the self-employed, most RFI in the PRC do not treat farmers' cooperatives as independent entities and do not design credit products to suit their needs. As the surveys (e.g., Ma and Yang 2011; Liu 2010) show, few loans are made to farmers' cooperatives and these are mainly mortgage loans, guaranteed loans, and microcredit in the name of members of cooperatives. These loans are difficult to obtain and their total amount is small.

The Agricultural Bank of China and the RCCs are the major financial institutions that lend to cooperatives. The RCCs, diverging somewhat from their original objective of supporting agriculture, treat productive cooperatives as small rural enterprises in lending, and service cooperatives as farming households. Similarly, the vast majority regard the credit demand of farmers' cooperatives as microcredit. On the other hand, asset insufficiency and the lack of guarantees make it more difficult for cooperatives to secure loans.

According to several studies, the financing of cooperatives is constrained by factors related to the characteristics and operations of the cooperatives themselves, to the operations of financial institutions, and to the credit insurance mechanism.

Factors behind the Financing Difficulties of Cooperatives

Cooperatives' own inadequacies. Cooperatives have difficulty borrowing from banks because of their own inadequacies in the following aspects:

- **Legal inadequacies.** Farmers' cooperatives register with the State Administration for Industry and Commerce without having their registered capital verified by a third party. They therefore lack credibility with financial institutions. Moreover, the Law of the PRC on Farmers' Cooperatives withholds from the presidents of cooperatives the right to dispose of cooperative proceeds, which must be divided among the members, and requires all members to sign loan guarantees to obtain financial support.
- **Organization and management inadequacies.** Farmers' cooperatives are not rigorously or centrally organized, and are loosely managed. The Task Force of PBC Jingzhou Branch PBC (2009) noted that though 87% of the cooperatives in Jingzhou had councils and supervisory boards and held membership meetings, their performance depended mainly on their leaders, most of whom had limited capacity to coordinate, guide, and manage operations in a democratic way.

- **Credit rating inadequacies.** Home-based production and servicing holds back the development of cooperatives and keeps them from accumulating enough assets that they can use as loan collateral. A survey made by the Task Group of PBC Nanping Branch (2008) revealed that the property of farmers' cooperatives in Jian'ou city consisted of the collective property of villages (such as factories, offices, and equipment); property donated by governments and their various departments (such as computers, registered trademarks, and office decor); office equipment purchased; and property borrowed or rented from individuals (such as offices and sales outlets located in members' houses). The property generally did not meet banks' requirements for loan collateral.
- **Financial reporting inadequacies.** In a survey of 100 farmers' cooperatives in Jingzhou city, Hubei province, the Task Group of PBC Jingzhou Branch (2009) found out that 42 cooperatives in the sample had full-time accountants, 34 had part-time accountants, and 24 had no accountants who could provide complete financial statements. Without the financial statements, financial institutions would not understand the operations of the cooperatives and their need for financing.

Inadequate services from rural financial institutions. Rural financial institutions provide inadequate services to farmers' cooperatives. Their financial products are not innovative, and are normally in small amounts and for the short term. Currently, only the Agricultural Development Bank, ABC, Huishang Bank, the Postal Savings Bank, and RCCs serve agriculture. RCCs have the dominant role but are confined to traditional credit products, small in amount and short term, which hardly meet the capital demand of *chanyehua*. In addition, the mortgages which can be used for loan access have been limited mainly to real estates. Liu (2010) contends that Anhui RCC has repeatedly expanded the range of acceptable collateral to include trade orders, warehouse receipts, banker's acceptances, accounts receivable, and insurance policies. But at the grassroots level, real estate and other assets are still the required collateral because of risk considerations.

The credit system is not widely accessible and risk management costs are high. Farmers' cooperatives are not yet included in the credit management database of the People's Bank, for example. Moreover, approval procedures are complex and usually time consuming.

Inadequacies in risks mitigation measures for the provision of credit. Control over the risks in cooperative financing is weak. The guarantee system is incomplete. There are no specialized guarantee companies for rural cooperatives. In Fengtai county of Anhui province, for example, there are 166 specialized cooperatives but no government-led guarantee institutions, and the threshold rate of private guarantee agencies is too high for them to provide effective guarantees for farmers' cooperatives (Liu 2010).

In addition, insurance institutions do not have mechanisms for diversifying risk, and the compensation system is unsound. No credit risk guarantee fund has been established for agriculture, where the risks are high and the profits low.

Policy Recommendations for Improving Cooperative Financing

The following policy recommendations are proposed for dealing with the need to improve cooperative financing.

Innovations in rural financial products. Rural economic development and changes in rural financial demand require further innovations in rural financial products. New financial products with terms of up to 3 years should be developed, given the long production

cycles in agriculture. Also, expanding the range of allowable collateral to include chattel mortgages, insurance policies, warehouse receipts, and the right to use land, houses, and greenhouses would result in a better fit between the credit guarantee system and the characteristics of farmers' cooperatives (Zheng 2008). The government has taken notice of the problem of collateral shortage and the narrow range of financial services. According to Document 2009 No 1 issued by the Party's Central Committee, transferring land-use rights, without changing the collective ownership of land and the land use, would provide an institutional guarantee for financial innovation. Basing the loan amount on the number of assets owned hinders the development of rural finance. Farmers do not lack property, but financial institutions cannot determine which property is usable as collateral (Wang and Yuan 2009).

Financial institutions should use the pledge of rights as a breakthrough innovation in rural lending products, technology, and procedures, depending on the type of farmers' cooperative and its characteristics. The Task Force of PBC Jingzhou Branch PBC (2009) states that lending backed by the transfer of land-use rights is suitable for farmers' cooperatives with such rights. Fishpond and forest operating rights have been successfully used as loan guarantees by rural credit cooperatives in Gonggan county, Hubei province. For cooperatives headed by enterprises, lending backed by guarantees, trade orders, and warehouse receipts, according to the "enterprise + cooperative and members" credit model, is appropriate.

Innovations in lending technology. Innovations in lending technology for farmers' cooperatives require a thorough knowledge of their production and operations. Loan officers prepare financial statements and analyze the risk characteristics of cash-flow and credit projects on the basis of observation and interviews.

Better understanding of financial needs and improved credit management. Financial institutions should strengthen their investigation capabilities, understand better the financial needs of farmers' cooperatives, draw up detailed guidelines for their operations, and establish specific operating procedures and credit processing mechanisms. They should determine the capital needs of the cooperatives for production, processing, storage, transportation, and marketing, and implement management measures, including unified loan application and centralized lending, loan recovery, and loan balance control to strengthen financial support.

Trainings in financial management and banking products and services should be provided to cooperative members, managers and accountants to enable them to understand the operations of the cooperatives and banks. Such trainings could be provided by the government agencies, financial institutions donors or nonprofit organizations. Training should be also been provided to the government officials and bank regulators who are responsible for policy making on rural finance and financing cooperatives, as many government officials have inadequate knowledge of financial operations and credit policies (the Task Force of PBC Jingzhou Branch 2009 and He 2010).

Agricultural Value Chain Financing

Dragon-head enterprises, rural SMEs, large cooperatives, and other market players form transaction coordination mechanisms and engage in division of labor throughout *chanyehua* to increase benefits and reduce market risk and transaction cost. As already mentioned, the various entities along the agricultural value chain have created new financial demand that the rural financial supply system does not meet.

Chanyehua and intensive operation are the future of agriculture in the PRC. Therefore, the formal financial system must urgently strengthen and make innovations in financial support for leading industries and enterprises along the value chain. Field surveys indicate that agricultural value chain financing is a promising innovation that could address the problems of agricultural financing.

Background

Agricultural value chain financing can benefit from the experience of SME supply chain financing in the PRC and elsewhere. Supply chain financing is based on long-term trade cooperation between the upstream and downstream enterprises in the supply chain, mainly commercial banks or logistics companies, with financial institutions involved in coordination. Financial institutions investigate the status of SMEs in the supply chain and lend appropriate amounts of credit to SMEs to help solve information asymmetry and moral hazard problems (Chen and Chen 2008).

SME supply chain financing in the PRC has achieved great success in easing credit constraints for SMEs. Can supply chain financing creatively applied in agriculture have the same effect?

Various supply chain financing models for agriculture have emerged in recent years. Among these are the “farming households + government + banks + insurance” model introduced by Daqing Commercial Bank (DQCB); credit for farming households in the supply chain of the China Oil and Food Corporation (COFCO); and the model developed by PRC’s Northeast Forestry University, allowing the pledge of warehouse receipts.

At the March 2005 meeting of the National Committee of the Chinese People’s Political Consultative Conference, Yifu Lin proposed the innovative “dragon-head enterprises + guarantee companies + banks + farmers” model based on the primary “dragon-head enterprises + farming households” model of *chanyehua*. In a survey in Sichuan and Henan provinces, Lin (2005) found that, although eager to join dragon-head enterprises, many farmers lack capital to invest and join *chanyehua* organized by dragon-head enterprises, or to expand their scale of production after becoming members. Dragon-head enterprises gain familiarity with the production and operation of their members and with their core technology in the course of offering seeds, technical guidance, and pest control services, and controlling the cash flow of farming households by buying their products. With this valuable information and means of control at their disposal, dragon-head enterprises set up guarantee companies to underwrite loans for their members from RCCs or the ABC, substantially reducing the risk of default. This type of agricultural value chain financing not only makes full use of the advantages of dragon-head enterprises but also effectively solves problems with access to information (because of information asymmetry), loan recovery, and credit risk diversification.

Modern agricultural supply chain financing promotes the development of contract farmers, improves their borrowing conditions, and raises the level of rural financial services. A survey made by Zhu and Hu (2007) in Shandong province confirmed the impact of agricultural supply chain financing on the borrowing behavior of farmers in the PRC. Better access to credit from reputable formal institutions makes it easier for contract farmers to borrow, and technical guidance from contract enterprises boosts the sales of agricultural products and increases the capacity of farmers to repay their loans.

Many studies deal with the financing problem of farmers or agricultural enterprises that offer raw agricultural products. Liu (2011), among these, investigated the financing situation of enterprises in the agricultural supply chain. Liu has also designed supply chain finance solutions based on the characteristics of agricultural products and the capital demand of different segments of the supply chain, which are recognized by financial institutions.

Definition, Procedures, and Characteristics of Agricultural Value Chain Financing

Definition. The term “agricultural value chain” is not uniformly defined in the PRC. According to Ren (2009), it refers to a series of value activities or links from the production to the consumption of agricultural products, including the purchase of agricultural materials, agricultural production, agricultural marketing, storage, transportation, and processing. Suppliers and producers are among the participants in these activities. “Value chain financing” is the financing process for the various participants and the inflow of funds into the value chain.

Procedures and characteristics of agricultural value chain financing. The “dragon-head enterprises + farmers” model is the main *chanyehua* model. Accordingly, the two main entities in the agricultural value chain are the dragon-head enterprises and the farming households. The dragon-head enterprises guarantee loans to farmers. In the supply chain finance model, banks assign credit ratings to core enterprises in the agricultural supply chain on the basis of their trade, credit, and economic strength, instead of the size of the enterprises, financial indicators, and the value of collateral and guarantees (Liu 2011). Agricultural dragon-head enterprises become information exchange and logistics distribution centers. The leading agricultural enterprises in the PRC are those that process agricultural products.

Agricultural value chain financing normally operates as follows. Farmers sign contracts with dragon-head enterprises and form cooperative alliances. Dragon-head enterprises undertake to provide loan guarantee for farming households and apply to banks, and accept investigations. Farmers apply for loans from banks and accept bank investigations. Banks approve the loans and sign contracts with the dragon-head enterprises and the farming households. As required in the tripartite contracts, the dragon-head enterprises monitor the farmers’ use of loans, and are responsible for collecting the loan principal and interest.

Advantages of agricultural value chain financing. Agricultural value chain financing has several advantages over the traditional agricultural credit model:

- It can effectively address the information asymmetry between financial institutions and farming households. Dragon-head enterprises understand the operations and debt capacity of farmers better, and can supervise farming households more directly and effectively. And because dragon-head enterprises market agricultural products for farming households, the collection of loan principal and interest improves.
- By including chattel mortgage in the agricultural value chain, it can offset farmers’ lack of collateral.
- This new mode of cooperation with other trading entities in the value chain can effectively save screening and supervision costs, greatly ease the pressure on the credit staff, and save labor, time, and other credit costs, thus transforming the management of loans to farmers from “retail type” to “bulk type.”

Case Studies

In the agricultural value chain, the financing of a particular segment is an indispensable part of the whole value chain, and so is the financing plan. In short, agricultural value chain financing allows RFIs to understand more clearly the financing characteristics and needs of the agricultural value chain (Ren 2009), and to design credit products, supervise clients, and manage credit risk accordingly.

Studies indicate the existence of a wide range of models of agricultural value chain financing. For different agricultural products and operations, the models vary significantly in financial demand, mode of operation, and risk controls. Some regions and institutions choose a suitable model of agricultural value chain financing on the basis of a combination of the actual situation and favorable conditions for the development of local agriculture. Typical choices are discussed in the three case studies below—the model adopted by Wuli county in Heilongjiang province, the “six-party cooperation” model of Ziyang city in Sichuan province, and the “dragon-head enterprises + farmers + credit + policy” model of Xianan district in Hubei province—to illustrate the operation of *chanyehua* in relation to the financial institutions (commercial banks, agricultural development banks, and RCCs).

Agricultural value chain finance model of Wuliming town in Zhaodong city, Heilongjiang province. Wuliming town in Zhaodong city, Heilongjiang province, is an important grain producer. Since 2008, this town has been producing grains on a large scale with the support of technology, promoting specialized cooperation, and using land-use rights to invest in cooperative shares.

This intensive management has the following characteristics:

- It has the features of modern enterprises and operates according to the “1 + 5” model —“1” for the modern agricultural development corporation established in Wuliming, and “5” for the agricultural cooperative, the three corn-growing specialized cooperatives, and the rice industry cooperative. The agricultural development corporation has a board of directors and board of supervisors, the five cooperatives have councils and boards of supervisors, and a charter that clearly defines rights and responsibilities has been developed in accordance with the Company Law (rev. 2005) and the Law of the People’s Republic of China on Farmers’ Cooperatives (2006).
- Management functions are centralized, but the five cooperatives are independent legal entities. Centralization covers the strengthening of head-office functions; the supervision and control of cooperative development planning, investment, use of funds, personnel changes, production planning, and external coordination; and the implementation of unified land preparation, seed production and supply, farming, field management, harvesting, and marketing.

Benefits and risks are shared. The agricultural development corporation withdraws 5% of the profits of the five cooperatives for operation and management costs, each cooperative distributes 60% of the profits to its farmer members, and 35% of the profits are reserved for the Cooperative Development Fund. The cooperatives provide three types of benefits: (i) income security (members invest their land-use rights and have been guaranteed an annual income of RMB350 per mu of land [1 hectare=15 mu]); (ii) dividends (35% of the profits of the cooperatives go to the Cooperative Development Fund which is used for the following three funds: the retained profit for future investment, the welfare fund for training and member welfares, and the risk fund for dealing with natural disasters. Intensified

agriculture forms the value chain, which provides a platform for banks developing new products and new financing models. In 2009, Longjiang Bank designed the loan product “enterprises + cooperatives + farmers + banks + government + technology,” tailored to the large-scale capital needs of Wuliming town.

This loan product has the following framework. Farmers invest their land-use rights in cooperative shares, and transform the mode of production into intensive and scale management by farmers’ cooperatives. Banks sign contracts with the cooperatives, instead of enterprises and farming households. Banks sign agreements with Zhaodong COFCO, which assists the banks in deducting the principal and interest on cooperative credit from the grain payment to close the credit accounts. Banks and the Northeast Agricultural University provide technical guidance throughout the process of corn farming and harvesting, and regularly send out warnings of diseases, pests, and disasters. Rural cooperatives sign grain purchase and marketing contracts with Zhaodong COFCO, and distribute products in accordance with orders, to improve their agricultural production planning.

This agricultural supply chain financing model is compatible with the feature of modern agriculture that combines farmers’ operations with dragon-head enterprises, providing support for dealing with the “three rural” issues in the PRC (agriculture, the rural areas, and the peasantry) and the function of resource management.

“Six-party cooperation” financing model of Ziyang city, Sichuan province. Ziyang city in Sichuan province is traditionally proficient in pig producing and is a national pig production base. But from July to September 2005, an epidemic of *Streptococcus suis* in the city had a huge impact on farmers, meat processing enterprises, and the financial sector. The Ziyang city government began to explore the practice of integrated and standardized pig feeding and management, slaughter, processing, and marketing. In early 2006, the government implemented the “six-party cooperation” model, comprising financial institutions, guarantee companies, feed suppliers, pig farms, meat processors, and members of the pig-producers’ association. The model operates on the basis of government standards, enterprise leadership, farmer operations, support from financial institutions, industry regulation, contract constraints, and risk controls.

The basic model is as follows. The local government agency issues a feed reserve plan for feed processors and livestock breeders according to their scale of cooperation. The Agricultural Development Bank of China (ADBC) lends to feed processors and livestock breeders following the procedures for loan application and approval. Credit guarantee companies provide feed processors with credit guarantees so they can borrow from ADBC; feed processors provide high quality feeds to the members of the pig-producers’ association on credit (a kind of trade credit). Pig breeders provide piglets to the association members. Members of the pig-producers’ association raise pigs according to the requirements of standardized and pollution-free livestock techniques and sell their pigs to the meat processors. Meat processors purchase pigs from the association members and deduct the principal and interest owed by the members on behalf of the feed processors. The six-party cooperation model has a risk-sharing mechanism with the following components:

- Agricultural credit guarantee companies providing loan guarantees.
- A risk fund established and financed by jointly by the local budget, meat processors, feed processors and livestock breeders. In practice, feed processors pay RMB2 to the risk fund for feed per pig unit sold on trade credit to association members; meat processors pay RMB2 for each of the pig purchased from association members, livestock breeders and farmer members pay RMB1 for each pig sold, and the local

budget contributes RMB1 to the Risk Fund for each pig purchased by the meat processors from the association members (shared equally [50-50] between the city and the county budget). The Risk Fund is intended to cover serious losses due to natural disasters and epidemics, credit losses, and substantial decline in pig prices.

- The government encourages farmers to participate in pig-breeding insurance, a requirement for pigs included in the scope of the six-party cooperation. The premium is RMB10 per head; of this amount, the government subsidizes RMB2 (the city and county financial sectors each bear RMB1), risk capital covers RMB2, and farmers in the pig-producing association pay RMB6. The Ziyang branch of the People's Property Insurance and the China United Property Insurance have introduced different insurance rates for different policy standards, and farmers can choose among these rates. Each RMB2.5 can insure the amount of \$100, and the financial sector subsidizes 40% of the premium; hence the great enthusiasm among farmers for this form of protection against the natural risks of pig producing.

The risk control mechanism has played a key role in the development of the six-party cooperation model. The operation of the integrated value chain guarantees the recovery of loans, thus mitigating the credit risk of financial institutions.

“Dragon-head enterprises + farm households + credit + policy” model of Xianning city, Hubei Province. In April 2005, the government of Xianning city of Hubei Province attracted investment from Wen's Group from Guangdong Province, and Hesheng Wen's Livestock Company was subsequently established. The city government adopted the “dragon-head enterprises + farmers” model and began the vigorous development of the broiler-raising industry. The promotion of the model boosted the demand for loans, but the high collateral threshold made it difficult for farmers to borrow and for RCCs to lend. The “dragon-head enterprises + farm households + credit + policy” model adopted by RCCs in Xian'an district of Xianning city strengthened support for the “dragon-head enterprises + farmers” model and achieved mutually beneficial and satisfactory results.

The “dragon-head enterprises + farm households + credit + policy” model involves the local government, Wen's Group, chicken-producing farmers, insurance companies, and RCCs. It operates as follows.

The government of Xian'an district, after introducing the “Opinions on Xian'an District Striving for Poultry Producing” in 2008, has subsidized the acquisition of new chicken coops by poultry farmers, according to a range of criteria. The government also takes part in determining the credit demand of poultry farmers.

Wen's Group supplies feed, chicks, epidemic prevention measures, medicines, and free technical support, to chicken producers. It signs purchasing contracts with chicken-farming households and shares the risks and benefits. Wen's Group bears the market risk and chicken-farmers bear the production risk, to keep the profit per chicken above RMB1.5. Meanwhile, the group opens accounts with RCCs, and transfers payments to farmers. When the chicken farmers apply for loans from RCCs, they have to provide purchase and sales contracts and proof of authenticity, and use receivables or insurance policies as credit guarantees. In addition, poultry farmers purchase property casualty insurance from insurance companies through Wen's Group. In case of natural disasters or accidents, Wen's Group claims the settlements on behalf of the farmers.

Rural credit cooperatives in Xian'an district have adopted the “credit support for dragon-head enterprises + farmers + credit + policy” model to standardize lending. It operates as follows.

Poultry farmers apply for a loan; rural credit from local lenders is approved; the parties sign the loan contract; the loan amounts are transferred to the personal settlement accounts of the poultry farmers with the RCCs; the poultry farmers use the capital as stipulated in the contract; the poultry farmers sell broilers to Wen's Group; Wen's Group pays the poultry farmers; and the rural credit cooperatives recover the loans in accordance with the terms of the contract.

In this “dragon-head enterprises + farm households + credit + insurance policy” model, corporate order receipts and agricultural insurance policies are used as collateral, widening the range of rural financial products, increasing the credit line, and addressing the financing problem of farmers. At the same time, the “dragon-head enterprises + farmers + credit + insurance policy” model promoted by RCCs provides an alternative collateral mechanism and closed-end credit management process, as well as fund investment channels of high quality. The most valuable innovations under this latter model are in two aspects. *First*, risk carriers are defined separately, and market risk is borne by dragon-head enterprises, chicken-producing risk by farmers, credit risk by RCCs, and the risk of accidental loss by the insurance company. *Second*, the closed-end credit management process—farmers sell the broilers to dragon-head enterprises, which pay the farmer members of RCCs—to facilitate the recovery of loans by the RCCs.

To sum up, the implications of the three models discussed above are as follows:

- Through risk-sharing innovations, agricultural value chain finance can deal with the problem of high risk of agricultural production in a variety of ways. In the first model, part of the profit of cooperatives serves as a risk fund to compensate for loss. In the second model, dragon-head enterprises provide credit guarantees, and the financial sector, meat processors, feed processors, and livestock breeders subsidize the risk of loss of funds for pig-breeding insurance. The third model, as mentioned earlier, clearly defines the carriers of risk.
- The three models explore solutions to the financing difficulties in the agricultural value chain. One solution is to make available credit guarantees by enterprises or farmers, or by guarantee companies. The other solution is to allow farmers to use receivables or insurance policies as guarantees.
- Making use of the characteristics of agricultural value chain transactions, the three models implement closed-end credit management. In the first model, Zhaodong COFCO assists banks in deducting the principal and interest on cooperative credit from the grain payment to close the credit accounts. In the second model, meat processors deduct the principal and interest on behalf of the feed processors. In the third model, after selling the broilers produced by the farmers, dragon-head enterprises transfer the money to the farmers' personal settlement accounts with the RCCs.

All these models capture the characteristics of agricultural value chain finance, and find ways to mitigate the high risks of agricultural production loans.

Problems for Further Study

The above three cases illustrate that agricultural value chain finance is an effective way of enhancing financing services for agricultural entities, in particular specialized farming households. For financial institutions, credit services carried out around dragon-head enterprises and farmers' cooperatives in the agricultural value chain help reduce the cost

of financial services. In addition, including the transaction relationships of the target in the scope of credit investigation and supervision can effectively reduce the risk of lending.

However, agricultural value chain financing in the PRC is in its early stages. Research has not provided a satisfactory answer to the internal mechanisms of agricultural value chain finance model as well as its applicability (Chen 2011). Moreover, domestic agricultural supply chain financing models are mostly intended to solve the financing difficulties of farmers or primary agricultural enterprises, with few financial products designed for upstream and downstream entities of the agricultural supply chain (Liu 2011).

Although agricultural value chain financing uses the links between core organizations and the market for agricultural products to lower and manage risk, researchers should further analyze the feasibility and the scope of application of trade-related receivables, orders, commercial acceptance, and letters of credit as collateral. Meanwhile, ways of improving the circulation of inventory, such as semifinished and finished products, and land-related rights, must be considered, to further expand the scope of collateral.

It is necessary to further analyze the characteristics and financial needs of sub-regions, sub-industries, and sub-products of the agricultural value chain and, on this basis, to seek a comprehensive plan for strengthening the overall credit risk management of *chanyehua*. Agricultural value chain finance can better deal with the natural risk and market risk of agricultural operation, but does not give enough attention to operational risk. The impact of cooperation among dragon-head enterprises, farming households, and cooperatives on the agricultural value chain and on its financing requires extensive research.

From the perspective of modern finance, it is necessary to normalize, standardize, and streamline management. However, for newly specialized farmers and cooperative organizations, it is difficult to meet the requirements of financial institutions, with respect to financial systems, financial statements, and credit history and business procedures. Therefore, the realistic option is to start from basic work and help farmers' cooperatives and specialized farmers to meet the requirements and provide them with appropriate financial services. In this regard, how to spread financial knowledge throughout the agricultural value chain requires further attention.

NGO Microfinance: The Case of CFPA Microfinance

This chapter is based on a field study of the head office and two branches of CFPA Microfinance Management Company. The researchers visited the Zuoquan county branch in Shanxi province in April 2011 and the Mianzhu city branch in Sichuan province in May 2011. The Zuoquan branch, which opened in November 2001, offers rural group and individual loans, as well as consumption loans. The branch has a staff of 18, including 5 back-office personnel (the branch manager, an accountant, a supervisor, and a cashier), 12 loan officers, and a driver. The microcredit program of the Zuoquan branch has been operating for more than 12 years. The program covers all 10 rural townships and the county seat. The Mianzhu branch, on the other hand, disbursed its first loan on 16 January 2009 and now offers only individual loans, mostly in the rural market; loans to urban borrowers account for less than 10% of its county loan portfolio. The Zuoquan branch typifies a well-performing county branch, and the Mianzhu branch, a new branch offering only individual loans. But the performance of these two branches may not be representative of the overall performance of CFPA Microfinance.

NGO MFIs in the PRC has exhibited a U curve of development, started from scratch in the early 1990s, peaked at over 300 in the late 1990s and plummeted to around 30 in the last decade. According to the PRC Microfinance Industry Report 2013, the development of microfinance in the PRC started with NGO MFIs in the early and middle 1990s. The number of NGO MFIs peaked at more than 300 MFIs and had shrunk to about 100 by October 2013. A recent report shows that by the end of June 2014, there were 8,394 MCCs in the PRC, with a total loan portfolio of RMB881.1 billion (around US\$144.4 billion). In contrast, the number of active NGO MFIs had plummeted from over 300 in the 1990s to about 30 in the PRC (<http://www.cfpamf.org.cn/?c=news&m=view&id=2042>). A study by the author indicate that by the end of 2008, there were more than 55 active NGO MFIs providing microloans to over 80,000 clients, with a total loan portfolio of over RMB280 million (around US\$45.9 million) in the PRC. Most NGO MFIs registered in the late 1990s and from 2000 to 2003. The development of NGO MFIs in the PRC has been constrained by financial regulation, problems with corporate governance, local government intervention and a lack of supply of the wholesale funds for microfinance.

This case study starts with a summary of the development of CFPA Microfinance, then goes on to describe the governance structure and management of the company, analyze its loan products and lending procedures, and discuss the recruitment and management of its loan officers. It closes with a preliminary analysis of the microcredit operations of CFPA Microfinance and some recommended courses of action.

Development of CFPA Microfinance

CFPA Microfinance Management Co. grew out of the China Foundation for Poverty Alleviation (CFPA) and is still owned by CFPA. It used to be the microfinance department of CFPA. Now, CFPA is its biggest investor and main fund raiser.

Founded in 1989, CFPA is a not-for-profit organization dedicated to national development and poverty reduction. It has been awarded class 5A status NGO by the Ministry of Civil Affairs and is regulated by the LGOP (Class 5A NGO is the highest rating for NGOs in PRC). CFPA is the largest NGO working in poverty reduction in the PRC. Its objectives are to dispense charity, promote social harmony, and provide developmental assistance to the poor and help them become more self-reliant and capable of self-development.

CFPA is a government sponsored NGO, registered with the Ministry of Civil Affairs and supervised by the LGOP. Most of its funds are from the donations. According to the CFPA Auditor's report (2012), as at the end of 2012, the total assets, liabilities and net worth of CFPA amounted to RMB1.5 billion, 1.092 billion and 475.5 million respectively. The total CFPA income of RMB302.9 million in 2012 consisted of incomes from donations (90.1%), investment incomes (7.33%) and other incomes 2.54%, with no more incomes from the governments (www.cfpa.org.cn).

CFPA's microfinance program started in 1996 as a pilot microcredit program under a World Bank-funded antipoverty project in the Qingba mountainous area. The program developed in three main stages: (i) pilot stage (1996–2004); (ii) innovation stage (2005–2009); and (iii) transformation stage (after 2009). At the end of 2008, CFPA's microfinance department split from CFPA and the CFPA Microfinance Management Co. was born. The microfinance program had become sustainable.

During the pilot stage, CFPA cooperated with the county MFIs. CFPA contributed funding, and technical and management services. But as the county MFIs were controlled by the county governments, CFPA found it difficult to manage and supervise the program efficiently, and to standardize the microcredit products of the county MFIs. Loan quality declined in some counties, and financial problems resulted. In 2005, CFPA launched an overall reform of its microcredit program. A single line of command was established between the CFPA headquarters and the county MFIs (hereafter referred to as "county branches"), thereby giving the program unambiguous property rights and clear responsibilities, and allowing more efficient management. The program expanded its geographic scope from four counties in 2005 to seventeen by the end of 2008 and was institutionalized following the creation of the CFPA Microfinance Management Co. With investment funds from the International Finance Corporation (IFC) and other investors, CFPA Microfinance became a joint-venture company in January 2011, its future development gaining a solid foundation through the establishment of the limited liability company.

For the county branches, 2005 marked an important year of reform. Besides clarifying property rights and responsibilities, the reform measures increased loan funds from the head office to the service branches, improved wages and benefits, and raised loan interest rates. In the Zuoquan county branch, for example, employee salaries more than doubled, from RMB700–RMB800 monthly before the reform to RMB4,000–RMB5,000 by 2008. The branch, like the other service branches, has also been providing its staff with endowment, medical, unemployment, employment injury, and maternity insurance, and Housing Provident Fund benefits, since 2006. The annual loan portfolio of the Zuoquan branch grew from RMB7.33 million in 2005 to RMB10.73 million in 2006, and to RMB26.30 million in 2007. The reform measures likewise strengthened branch operating rules and regulations, as well as the information technology systems at the head office. Moreover, whereas CFPA Microfinance served only poor towns and villages before 2005 because of limited funds, it has since expanded its services to other towns and villages in the various counties.

By the end of August 2011, CFPA Microfinance had 52 branches across 13 provinces, serving 22 million clients in 13,726 villages. It had disbursed over 330,000 loans totaling RMB20 billion—RMB6,590 per household and RMB8,222 per loan on average—and had RMB6.8 billion in loans outstanding. Statistics show that 89% of CFPA Microfinance clients were previously unable to borrow from traditional financial institutions; among these, more than 90% are females.

CFPA Microfinance is by far the largest not-for-profit microfinance institution in the PRC. It provides microcredit services to vulnerable populations in underdeveloped areas. The growth of CFPA Microfinance suggests that, with proper management and support from government and society, not-for-profit microcredit still has huge room to grow.

Management of CFPA Microfinance

Governance and Organization Structure

CFPA Microfinance is a registered social enterprise dedicated to providing microcredit services to poor and low-income groups. It undertakes commercial operations to promote the efficient use of funds and serve its clients better.

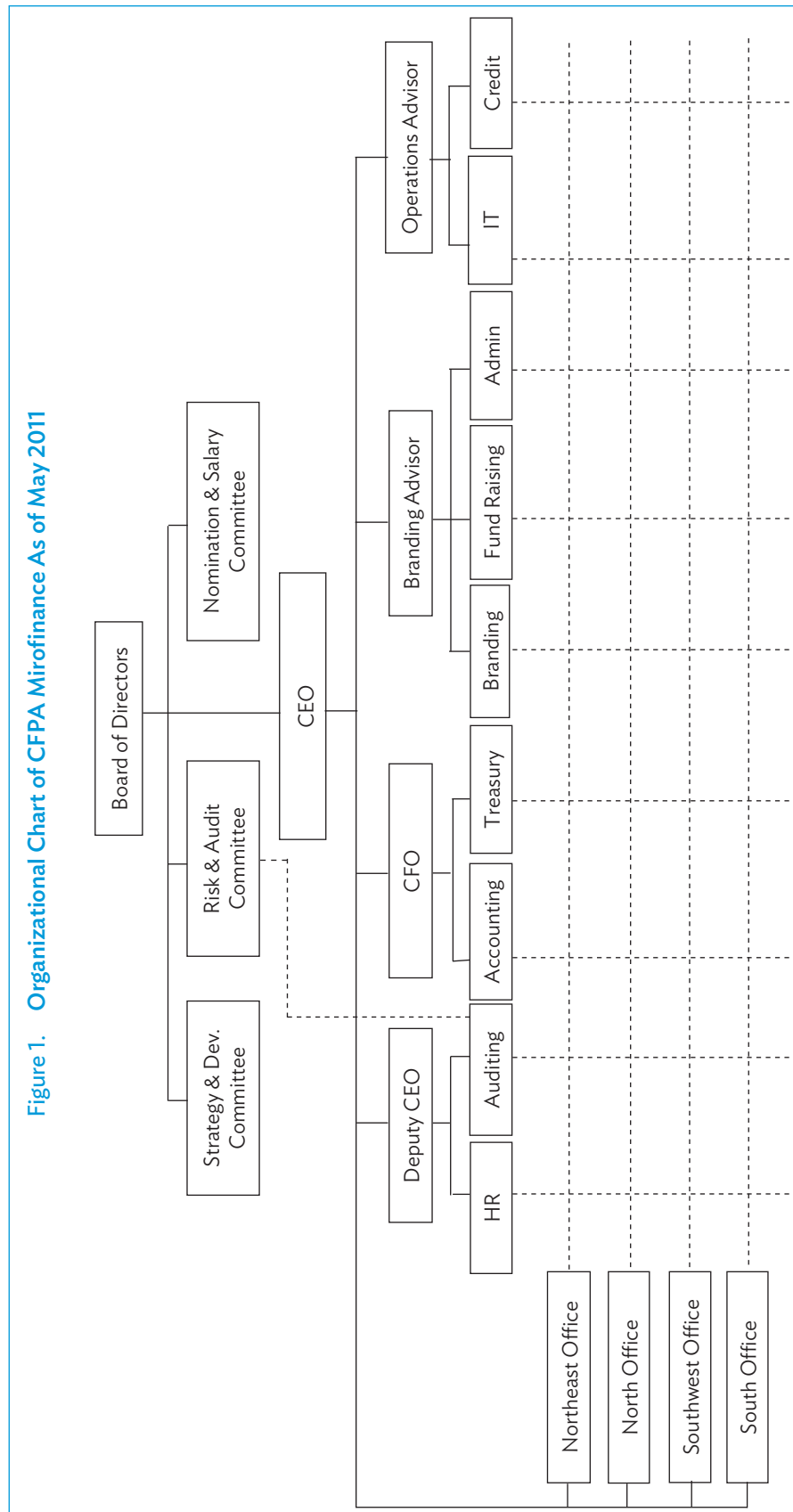
The company follows a management responsibility system under the supervision of its board of directors. The board has seven members—four from CFPA, one from the IFC, and two representing other investors. The chair and legal representative is CFPA Executive Vice President Daofeng He. Dongwen Liu, the general manager, is also the legal representative of all the county branches that are registered as civil society organizations. The company draws up 3-year development plans, updates each plan at the end of the year to reflect actual experience and prospects, and implements the updated plan after it is approved by the board of directors.

General Manager Dongwen Liu runs the company and directly manages its regional offices (see Figure 1); Vice Manager Peiyu Su is in charge of human resources and internal audit, and the southern regional office; Chief Financial Officer Zhen Li manages the finance and investment departments; Director of Brand Operations Jingyan Wang is in charge of marketing, public affairs, and fund raising; and Operations Adviser Song Fanghui is responsible for credit management and information technology, and the southwest regional office.

To gear up for rapid development, CFPA Microfinance plans to reorganize the head office into four main groups: business operations, support services, risk management, and internal audit. There are also plans to have 10 departments at the head office, as follows: credit management, human resources, public affairs, marketing, internal audit, information technology, resource and development, investment, risk management, and finance. These departments will be managed by five deputy managers. In addition, there will be four regional offices, managed by deputy operations managers.

CFPA Microfinance has 52 county branches, consisting of 4 subsidiaries and 48 NGOs registered by CFPA and managed by CFPA Microfinance. Three of the four subsidiaries are in Sichuan province, and the fourth is in Mentougou district, Beijing. Branch managers mostly come from, and are recommended by, local governments and evaluated by CFPA Microfinance. The manager of the Kangping branch in Liaoning province, for instance, used to manage a local bank. But the recruitment of managers for the four subsidiaries is open

Figure 1. Organizational Chart of CFPA Mirofinance As of May 2011



to the public. The county branch managers each get a base salary of RMB800 monthly and performance-based pay (usually depending on loan size, installment amounts, and loan quality). The annual salary of an experienced county branch manager could reach RMB150,000.

CFPA Microfinance has registered capital of RMB143.75 million, 66% of this from CFPA. At the time of the field research, CFPA Microfinance also shouldered CFPA debt of about RMB330 million, including the wholesale loans to CFPA from the CDB, Standard Chartered Bank, and other financial institutions. For these wholesale loans, CFPA Microfinance pays interest to CFPA according to the actual borrowing costs (including the credit guarantee fees). For the nonbank loans, CFPA Microfinance pays interest according to the benchmark rate set by the PBC (around 5%). The loans cost roughly 5% per year in 2010, and 6% in 2011, following the infusion of funds from the IFC and other investors.

CFPA's financial transactions with CFPA Microfinance are closely related to the history of CFPA's microfinance program and the business model adopted. Under the model, for microfinance projects across the country, CFPA first signs a cooperative agreement with a provincial or county-level poverty reduction office; then CFPA raises funds from donors or antipoverty funds as principal borrower. Major commercial banks such as CDB and the Agricultural Bank also provide wholesale funds to CFPA. CFPA then registers a county NGO (the county association for farmer capacity building) for microfinance operations. CFPA Microfinance is authorized by CFPA and the local county to manage and supervise the county NGO, which also becomes a county branch of CFPA Microfinance. CFPA Microfinance, under this model, could therefore be regarded as CFPA's professional and institutional tool for managing microfinance programs for poverty reduction.

CFPA Microfinance plans to develop 60 county branches by the end of 2013, to reach a target of 9% return on equity. By the end of 2011, the equity from the existing shareholders was set to increase to RMB260 million.

Relationship between the Head Office and the Branches

After the reforms in 2005, the head office became responsible for product development, fund use planning and allocation, credit management, and the recruitment, technical training, and supervision and monitoring of staff. The branches, on the other hand, disburse and collect loans according to rules issued by the head office.

Fund use planning and allocation. Every year the head office prepares a fund use plan. Branches pay the head office an annual fee for using the funds, which is equivalent to the interest paid by CFPA Microfinance on its wholesale loans from commercial banks. Fee amounts in excess of the actual financial costs of CFPA Microfinance are used to cover some of the operating costs of the head office. Branches are also required to pay the head office a risk monitoring fee each month, as part of their contribution to the head office. The fund use fee and monitoring fee total each year amounts to around 9% of the loan funds on average—6% to 6.5% for the fund use fee and 2.5% for the monitoring fee. Lower fees are collected when there is a reduction in the loan fund allocation to the branches.

Until January 2011, CFPA Microfinance profits appeared in its branch accounts (with the computed branch profits tax) and not in head-office accounts. But with the entry of the IFC and other investors, CFPA Microfinance became a joint-venture company and since then profits have been reflected in the accounts of the head office. Annual profits from each branch are usually turned into loan funds, for which the branch does not need to pay

any fund use fee. The monthly loan fund disbursements of the branch are recorded, and loan funds obtained from the head office in excess of branch needs must be remitted to the head office monthly to be excluded from the computation of the fund use fee. The branch applies for more funds when the demand for loans exceeds the loan funds available in the branch.

Credit management. The head office mostly provides credit management training, develops procedures and manuals for credit management (including the management of individual loans and group loans), and audits loans. It does not intervene in specific loan operations. Branches approve and collect loans, and deal with bad debts. This lending model has been adopted for two main reasons: (i) the loan amounts are small (usually below RMB10,000), the risk of a single loan is not high, and most problems occur during loan processing and implementation; and (ii) the model is a carryover from the time when some CFPA loan funds came from the provincial or county poverty reduction office, and county institutions were responsible for the use of funds. Other financial institutions set a loan approval limit; a single loan beyond that limit must be approved by upper management. CFPA Microfinance could set a similar limit.

From 2005 to 2010, CFPA Microfinance used a credit information system. But this stand-alone system did not allow immediate access to information. In 2010, the head office independently developed an online credit tracking system. Loan officers are required to enter loan applications, approvals, disbursements, and collections into the system in real time. CFPA Microfinance also uses financial software developed by the Kingdee International Software Group (HK), which enables the head office to check the real-time financial status of the branches and their reported data. In 2010, CFPA Microfinance integrated its credit and financial systems, and linked its credit system with that of the PBC.

Human resource management. Unlike other NGOs in the PRC, whose county branches or institutions recruit loan officers and other staff, CFPA Microfinance, through its head office, takes a direct hand in recruitment, to ensure good-quality hires.

The head office also selects and oversees the performance of branch managers. Many of the present county branch managers are former government officials, who have retired from government service. Those selected for the position are good at coordination and familiar with the local situation and government operations. They are generally older and relatively less well educated but have a great deal of local experience and organizational skills, and communicate well with local officials. Such managers are invaluable to the rural lending operations of CFPA Microfinance.

CFPA Microfinance signs contracts with the county branch managers, who then sign contracts with their staff at the branch and assume management responsibilities.

Every year, the head office sets loan disbursement, profit, cost, and revenue targets for all the branches. And at the start of each year, the head office signs contracts with the branch managers, with specified incentives. The head office strictly limits branch expenses. In 2011, the Zuoquan county branch had a loan disbursement goal of RMB38.5 million, a cost limit of RMB308,000 (including representation expenses, rent, gasoline, car repair, and part of travel expenses), and a profit target of RMB1.08 million. Branch profits become part of the loan funds of the branch.

The head office conducts on-site monitoring of county branches at least twice a year.

CFPA Microfinance has also established four offices for the northeast, north, southwest, and south regions. These regional offices are responsible for coordination, monitoring, and training, but are not authorized to approve loans.

Loan Products and Processing

CFPA Microfinance has three standard loan products: (i) group (joint liability) loans, below RMB12,000; (ii) individual loans, below RMB50,000; and (iii) microenterprise loans, from RMB50,000 to RMB200,000. Among the three, group loans are the most important product, and individual loans, the next most important. But individual loans hold the most promise of growth. In August 2011, CFPA Microfinance launched a pilot project involving individual loans in 15 county branches, which accounted for 40% of all its branches.

Group Loans

CFPA Microfinance's group (joint liability) loans are targeted at farmers in agriculture and industry. The loans, capped at RMB12,000, are used mainly for operations, like rural microcredit loans in other developing countries. The loan period ranges from 6 months to 1 year. One-year loans, with a 2-month grace period and repaid in 10 monthly installments, are most common. No collateral and no other guarantors, apart from the loan group, are needed. Before 2010, the nominal interest rate on the loans was 12%, and the actual rate was around 18%. Now the interest rate is 13.5% nominal, and the actual rate (or effective rate), around 20%. Once the last installment is paid, clients may apply for another loan after a week. Some old clients qualify for a new loan after 3 days.

Group loans are generally made as follows. Every quarter, the branches launch a promotional campaign, during which loan officers crisscross the towns and villages, spreading information about the loans. Four or five people from the same village form a group, whose members undertake to guarantee one another's loans, supervise loans to group members, and repay loans in arrears on behalf of group members. Once the groups are formed, loan officers make home visits to all the members, a CFPA Microfinance requirement, to check for potential risks, repayment ability (how the business of the potential borrower is developing and whether it can sustain the loan repayment), the training needs of group members, and the presence of immediate relatives in the same group. Branches conduct random checks, by phone and in person, to verify the applicant's ability to pay and to make sure that no direct relatives are in the same group and that the loan is not in exchange for favors received. Loan officers take part in the checking and cross-checking. At the Zuoquan county branch, the random checking by phone could cover all the members, while the checking done in person could reach 30%–40% of the members; other county branches are less thorough. If the process yields satisfactory results, the branch finally disburses the loan. The disbursement is usually made in cash in the borrower's village, 3–7 days after application.

After the loan is disbursed, the loan officer is responsible for monitoring its use through regular visits. Loan officers are required to visit the clients at home 3 months and 9 months after disbursement, and to remind clients of loan repayment 7 days before the due date. Therefore, they visit every borrowing household at least three times during the loan period. Loan collection is centralized at the branch, which sends the loan officer and another member of its staff to collect the loan, in cash. For group loans the loan collection dates are usually fixed, to reduce costs.

Group loan amounts have been increasing with rising farmer incomes. The increase in loan amount also depends on the repayment performance of group members. If they repay their loans on time, then the group may get an upgrade in loan amount. No such upgrade is possible if there are late payments from one or more group members, but other members can still borrow.

The branches pointed out that the increase in loan amount has been accompanied by a decrease in phantom clients. As legal awareness grows and as loan amounts go up, farmers become less inclined to take out loans for others and to assume their risk. For CFPA Microfinance, however, phantom clients still pose a major risk where group loans are concerned.

Now the major challenge facing group loans is the difficulty of forming groups. Rural–urban migration is narrowing the potential client base. Besides, with the rise in farming quotas, farmers differ widely in their borrowing needs: some are looking to borrow only RMB3,000, while others need RMB12,000. Among the 4,000 active clients of CFPA Microfinance in Zuoquan county, 70% have borrowed at least twice, and 10% of these have been clients for more than 10 years, crowding out new clients. One of the main risks of group loans is disbursement and collection in cash, an inducement to theft and dishonesty. The continued existence of phantom clients also makes lending more risky.

Individual Loans

Mianzhu city branch. The Mianzhu city branch of CFPA Microfinance serves vulnerable groups that generally have neither the collateral nor the credit record to qualify for loans from traditional sources. Compared with RCCs and the PSBC, the branch has the following advantages: (i) low lending threshold; (ii) no collateral requirement; (iii) no limits on who can be a guarantor, as long as the individual has been living in the area long enough and has a proper job and no bad habits; (iv) no fees other than interest; (v) fixed interest rate within the loan period; and (vi) nonfinancial services to clients. Its disadvantages are: (i) uniform loan product; and (ii) inability to offer interest discounts to clients who pay on time, unlike the PSBC, which gives a discount of 1 month's interest to clients who pay at least six installments without delay.

The loan products of the Mianzhu branch are listed in Table 14. The actual interest rate, with installments taken into account, is around 24%.

As summarized in Table 15, the loan procedure is as follows. The loan officer prepares a simple balance sheet and income statement after the client investigation, and examines and gathers information about the guarantor. Then the loan officer sends electronic files with the client's information to members of the loan approval committee. The files include the application form, the loan approval form, and the client's balance sheet and income statement. The branch staff conducts phone interviews with the client and the guarantor. With this information in hand, the branch holds a loan approval meeting. At the meeting, the loan officer states the purpose of the loan, and the committee members discuss the loan application and the results of the investigation, and decide whether or not to approve the loan. If the loan is approved, the loan officer sets a suitable time and place for disbursement with the borrower, the other members of the loan group, and the guarantor, and asks them to ready their identification cards, both the original and a copy. The loan officer and back-office staff arrive at the agreed location on the appointed date, to disburse the loan.

**Table 14. Mianzhu Branch Loan Products
(Business Loan and Housing Loan)**

| | | |
|--------------------------|---------------------------|---|
| Postdisaster Loan | Loan Usage | Postdisaster production and operation, cash flow, expand production |
| | Loan Amount | RMB1,000–RMB50,000 per household |
| | Loan Term | 6 months, 12 months, 18 months, 24 months |
| | Interest Rate | 14.8%, 13.4%, 13.4%, 13.4%; nominal |
| Business Loan | Loan Outstanding | RMB 17,379,887 |
| | Number of Loans Disbursed | 1,324 |
| | Average Loan amount | RMB21,800 |
| | Average Loan Term | 18 months |
| | Client Type | Mostly rural residents |
| | Loan Usage Type | Housing, transportation, farming, trade and processing |

The field research showed the Mianzhu branch manager and staff to be diligent and willing to work hard in pursuit of the company's goals. Loan officers receive salaries ranging from RMB1,600 to RMB9,000. The well-designed wage and incentive mechanism contrasts with the weak incentives in some other MFIs, where it makes little difference whether the employees work hard or not. However, the following problems were noted in the Mianzhu branch:

- Branch lending is not sufficiently well controlled. Many borrowers were allowed to borrow despite being incapable of repaying their loans. In addition, the proportion of consumption loans (postdisaster housing loans) is high and could cause repayment problems. Housing and entrepreneurial loans accounted for 70%–80% of all loans from November 2008 to 2011. Both repayment capability and loan use must be considered in the lending decision. The high proportion of business loans is also problematic. Currently, the main target clients of the PRC's MFIs are individual entrepreneurs, on account of their faster cash flow, higher profit, and lower risk compared with the farming sector. Because individual loans are much larger than group loans, it is important to look into the use of every single loan.
- Loan approval meetings last too long, about 2–3 hours, perhaps because committee members lack the necessary skills to examine and appraise the loans. If there were clear approval guidelines and the committee members had the required appraisal skills, the meetings would not take much longer than half an hour, and could even be over in 15 minutes if the preparatory work has been thorough and the decisions are unambiguous. Loans below RMB50,000, in particular, should not take long to approve.
- Compared with the microfinance staff of CCBs and RCBs, the loan officers and other staff of CFPA Microfinance are relatively older. In the Mianzhu city branch, the average age is 36.9 years.
- The application rejection rate of 60%–70% at the Mianzhu branch is relatively high, considering the fact that the branch has been operating for only 2–3 years. On the other hand, the approval rate of 90% is also too high.¹¹

¹¹ The rejection rate refers to the rate of rejection for initial inquiries and consultation from the potential application. The approval rate refers to the rate of loan approval for all of those who lodged a formal loan application form.

Table 15. Individual Loan Approval and Disbursement Processes

| Loan Processes | | Work Content | Credit System Involved | Relevant Paperwork |
|-----------------------------|---------------------------------|--|------------------------|---|
| Loan Sales | Sales | Door-to-door sales, branch promotion, outdoor sales campaigns, media marketing, public relations | – | Product Manual, etc. |
| Loan Application | Initial inquiry consultation | Staff take inquiries; branches take inquiries | – | Client Information Form |
| | Processing | Staff collect applications at clients' homes; clients come to branch offices to apply | – | Loan Application Form |
| Loan Investigations | Pre-inspection | Indirectly obtain information; collect relevant industry information | – | – |
| | Field Inspection | Staff conduct loan inspection | – | – |
| | Prepare reports | Staff prepares clients reports according to field inspections | – | Balance Sheet, Profit and Loss statements |
| | Upload loan forms | Staff input application form into the system, and upload balance sheet and income statement to the credit system | Yes | – |
| Loan Approval | Loan Approval | Loan approval committee approves | – | Loan Approval Form |
| | Loan Processing | Loan approval committee members approve the loan through credit information system | Yes | – |
| Loan Disbursement | Back-office staff receives cash | Back-office staff receives cash from cashier | – | – |
| | Loan disbursement on the spot | Back-office staff disburse loans | – | Loan Agreement, Loan Certificate |
| | Cash settlement | Back-office staff return to branch with loan disbursement certificate and settle with cashier | – | – |
| | Record loan disbursement | Back-office staff enter the loan documents into the system for record | Yes | – |
| Postdisbursement Management | Prepare Loan Collection Forms | | – | – |
| | Prepare collection Invoices | Staff fills out collection forms in advance, and leave collection date and amount blank | – | – |
| | Loan collection | Staff collects repayment on-site or clients come to the branch to repay | – | – |
| | Hand out collection invoices | Staff hands out collection invoices to the clients | – | Collection Certificate |
| | Collection Reporting | Staff deposit cash received into the bank account of the branch, and report to the branch on the payment received and deposited into the bank, to be verified by the back-office staff | – | – |
| | Enter collection information | Enter the collection information into the credit information system on the same day of loan collection | Yes | – |
| | Hand over collection invoices | Staff hands over collection invoices to back-officers | – | – |
| | Review collection information | Back-officers review collection information in the credit information system | Yes | – |

- Some loan officers often prejudice loan applicants. They tend to scrape together numbers to fill tables instead of making full use of the data they receive from potential clients, uncertain about how the data are to be evaluated and cross-checked.
- Because their salaries depend on loan collection performance, loan officers are reluctant to bring in new clients with the attendant risks. And when their salaries reach RMB9,000, there is little incentive to develop new clients. At the same time, they ward off attempts by others to develop new clients in their area. There is not enough effective marketing.

The interest rate for individual loans, at 24%, is higher than that charged by CCBs, RCBs, and the PSBC. But since local market rates are less competitive, clients settle for the higher rate. In comparison with the PSBC, the branch offers too few and too narrow a range of loan products. But while PSBC loan amounts are generally bigger, around RMB50,000–RMB200,000, collateral is a requirement, and so is the formation of a joint liability group of at least three persons.

Zuoquan county branch. The Zuoquan county branch processes individual loans differently from the Mianzhu branch, and faces different problems in the course of processing and loan management. This suggests inconsistency in CFPA Microfinance procedures for individual loans.

According to the field research, the Zuoquan branch applied in 2007 for the authority to issue individual loans, and started lending in August of that year. Two loan officers at the branch were in charge of individual loans. In 2007, they disbursed RMB2.26 million in loans to 97 clients; in 2008, RMB9.093 million to 423 clients; and in 2010, RMB6.71 million to 225 clients. The branch offers the following individual loan products: trade loans, business loans, and consumption loans (education, medical, car, and housing loans). The limit set by the headquarters for individual loans is RMB50,000, but the branch disburses only up to RMB30,000.

The Zuoquan branch chose to go into individual lending in the rural and urban areas mainly because the rural group loan market is close to saturation point. Zuoquan is a typical small mountain county, with a population of 160,000 and a limited market size. And the market is getting smaller. Rural residents, including group loan clients of the various branches of CFPA Microfinance, are migrating to the towns and cities. In addition, with inflation on the rise, group loans are no longer adequate. Some old clients whose businesses have prospered enough have left the lending program because they considered the loan amounts too small. The lack of new clients is making it difficult to form joint liability groups in the rural areas. Meanwhile, competition from other financial as well as nonfinancial institutions is intensifying. The biggest competitor is the PSBC, which lends up to RMB100,000 per loan; RCCs, with their simplified credit processing, are among the other competitors. Although CFPA Microfinance lends relatively small amounts, its loans—for trade and for consumption (the purchase of cars and houses)—are still attractive in poor counties like Zuoquan, where most needs are centered in the town. Those who have borrowed under the lending program did so because the amounts they needed were too small for banks or too hard to obtain on account of the more stringent requirements of those institutions. The individual loan business also helps to decrease the phantom clients that afflict group lending.

At the start, rural immigrants and laid-off workers in towns were the main targets of the individual loans. Loan amounts ranged from RMB10,000 to RMB30,000. The procedures for the home visits to investigate the loan risk and the loan repayment capability were even simpler than those for group loans. Loan officers only had to check the income and assets

of clients and their inventories, and to determine whether the loans would be guaranteed by an official guarantor from government. Only two individual loan clients were unable to repay their loans; their official guarantors made the repayment on their behalf. Experience showed that if clients had previously borrowed under a group loan, and the loans were not too large, the loan officers could handle the risk of individual loans.

In September 2009, individual loans began to be disbursed according to a new model. In application forms and basic procedures, the model was similar to the IPC microfinance model adopted by CDB. The loan officers visited the loan applicants at home and checked their inventories, and the guarantors also came to evaluate the applicants' repayment capability. The loan officers filled out forms after the inspection and sent these to the county branch, which then interviewed the applicants by phone for verification. Once the loans were approved by the loan approval committee, the amounts were either transferred directly into the clients' bank (RCC) accounts or disbursed at the county branch office. Loan payments were made at the office or deposited into the bank account of the branch.

Individual loans in the county are now the responsibility of 3.5 loan officers at the Zuoquan branch. The loan officers do not have specific area assignments. The loans are marketed on TV and through flyers. Home visits usually take about 1 hour, and guarantor inspections, not much longer. The loan approval meeting is usually attended by three persons: individual loan manager Yunpin Wang, group loan manager Qinzeng Zhang, and the loan officer in charge. The process, from application to loan disbursement, takes 3–6 days. There is no grace period for individual loans, and the cash flow is quick. The rejection rate after application is around 10%; some clients are rejected before application.

The individual loan business presents several challenges to the Zuoquan county branch. First of all, the loan officers, who were recruited to handle rural group loans, may not be suitable for individual lending. Specifically:

- Loan officers are under more pressure when handling individual loans. Since the loan amounts involved are large, even one loan portfolio at risk (PAR) is a significant event. Also, individual loans are more risky; therefore, a high proportion of individual loans would increase the credit risk of the branch.
- In general, the loan officers now at the branch have not gone beyond middle school or high school, are older and married (and, so the branch believes, more responsible and accountable), and are insufficiently skilled at using computers to check inventories, cross-check financial data, and calculate profits and losses.
- The loan officers are unfamiliar with the industries in the county. They have little knowledge of how microenterprises operate, how cash flow is generated, and how the various industries earn income and profits. Understandably, therefore, they struggle to analyze and determine their clients' ability and incentive to repay loans.
- Loan approval meetings are often less than consequential.

Another problem is the inability of clients to get used to the idea that, unlike group loans, individual loans have no grace period and the first payment must be made after a month. Branch managers must also strike a proper balance between individual loans and group loans, as individual loans could adversely affect group (joint liability) loans. They worry about the possibility that introducing individual loans into the rural areas would further diminish the group loan market. On the other hand, despite the more complex home-visit and approval requirements of individual loans, loan officers find them easier to manage than group loans. Because individual loans are centered in the city and the borrowers live near one another, loan officers spend less time and effort in loan supervision and collection. In contrast, group loan borrowers generally live far from one another, and all require home visits.

Management of Loan Officers

Zuoquan County Branch

As already mentioned, the county staff is recruited by the head office. If the branch needs a new loan officer, it requests the regional manager for one, and if the request is approved the head office recruits the loan officer through a written examination and home visit. The examination gauges the candidates' mathematics and professional skills (e.g., computer aptitude), besides their proficiency in Chinese. The minimum educational requirement used to be above middle school; now it is junior college. Once hired, the loan officer must pay a risk guarantee fee of RMB20,000 (originally RMB10,000).

Male loan officers were preferred over females at first. But female officers have shown their ability to work just as hard, or even harder. In fact, the loan officers with the highest loan disbursement amounts in the branch are females. Loan officers are generally married and have children, because of the greater sense of responsibility implicit in the status, and are all reputable citizens from local villages (such as former government officials or members of powerful families in those areas).

At the start of the year, branch staff members sign responsibility contracts with the branch manager, stating their goals and incentives. During the probation period, the base salary of a loan official is RMB800; after the period the salary is mainly performance-based (1.8% of the monthly loan collection). And there is a wage deduction in the event of loan arrears. The monthly average salary of loan officials in Zuoquan is around RMB4,000, and ranges from RMB3,000 to RMB6,000. The year-end bonus for the loan officials is around RMB4,000 to RMB5,000. This is a decent salary for the area, since county government officials are paid only around RMB3,000 per month.

The county branch reports a problematic relationship between back-office staff and loan officers under the existing structure, since hiring more loan officers for the branch is perceived to reduce the payment of back-office staff.

Mianzhu City Branch

The Mianzhu city branch has 10 loan officers. The average age is 37. Most are married and nearly all are females. All except one have gone no further than high school. Before joining the company, they were employed elsewhere, ran their own businesses, or worked for the local government. On average, each loan officer is in charge of 121 active clients, with loan amounts ranging from RMB53,000 to RMB307,000. The average amount of loans outstanding is RMB1.7 million.

Staff Training

Every new loan officer goes through 2 days of intensive training on the culture and operation of CFPA Microfinance and the rules of microfinance and receives practical advice from experienced loan officers. The twice-monthly regular meetings at the branches also have a training component, including the training on loan products, updated loan policies and procedures and the MIS system.

The branches provide staff training and shoulder all related expenses except room and board, which the head office pays for. The branches would like the head office to provide funds for staff training, in step with institutional development.

Analysis and Conclusions

Success Factors

The rapid growth of CFPA Microfinance as a poverty reduction microfinance institution, at a time when similar institutions have difficulty developing, may be due to the following factors:

- While further strengthening the head office, CFPA Microfinance transformed county institutions into branches and directly hired branch managers. The head office could thus gain more direct control over the branches, manage funds uniformly, contain costs, and implement consistent standards and regulations.
- The staff management structure, especially branch management and loan officer management, is in place. A common problem of nonprofit MFIs is low salaries, which are unrelated to performance. But operating costs are not necessarily low. After the reform, CFPA Microfinance was able to pay the county staff higher salaries while keeping operating costs low, on the strength of rising interest rates and more efficient microfinance operations. CFPA Microfinance should also (i) link branch managers' salaries with loan officers' income and performance; (ii) further strengthen staff management; and (iii) maintain strict cost control.
- In microfinance, the company successfully improved rural group (joint liability) loans as its main product, efficiently controlling credit risk. At the same time, it went into individual lending to meet market demand. Now individual loans account for 25% of loan disbursements and 10% of all loans issued by the company, and have boosted its profitability and business sustainability.
- Outside financing has helped the company grow and enabled it to expand its operations.
- CFPA Microfinance lays emphasis on the establishment of a stable and conducive company culture. The staff is hardworking and dedicated.

These other success factors are external to the company:

- Wholesale financing. CFPA Microfinance have accessed wholesale loans from a number of Chinese and foreign banks, including CDB, ABC and Standard Chartered bank.
- Legal status and tax payments. As an unregulated microfinance institution, CFPA has a semi legal status to undertake microfinance operation in PRC, with a permit for microfinance pilot programs from the State Council's Leading Group Office for Poverty Reduction (LGOP) and PBC.
- Entry into the credit bureau system. CFPA Microfinance has access to the credit bureau service of the PBC.
- Support from local governments and poverty reduction offices. CFPA Microfinance is under the umbrella of the LGOP in PRC and it has the support from the LGOP system throughout PRC.

Product and Market Analysis

In setting up and implementing its rural group loan products and procedures, and managing incentive mechanisms, CFPA Microfinance has the main advantage of local recruitment (loan officers from the same village as potential clients), giving it access to local "soft" data and a better understanding of how to handle the relationship with local government to prevent risks and improve efficiency.

On the other hand, product and market diversification presents a number of problems for the company:

- **Unclearly communicated limits and processing requirements of loan products.** The difference between individual loans and group loans is based on average local income and single loan limit. But in the regions, the distinction is far from clear. The following questions are often asked, even in the branch offices: What is the loan size limit of an individual loan? What is the loan size limit of a group loan? Should individual loans be processed the same way in all cities, towns, and villages, or should there be differences in loan inspection and appraisal? Can loan officers handle both individual and group loans, or are the requirements for loan officers different? Will individual loans have a negative impact on group loans?
- **Undifferentiated marketing of individual loans.** CFPA Microfinance provides individual loans for business and trade, industry operations, agriculture, and consumption, although the imported microcredit technology it uses is designed for business and trade. Different loan purposes call for different loan products and procedures.
- **No real agricultural loan product.** Loans for agricultural industry chains will be increasingly in demand as the large-scale industrialization of agriculture in the PRC proceeds. Yet CFPA Microfinance has no loan product specifically for agriculture.
- **Need for individual lending expertise.** Generally speaking, CFPA Microfinance understands group loans better than individual loans. It should therefore concentrate its efforts on improving its lending methods for individual loans through appropriate technology and training.

CFPA Microfinance charges slightly higher interest (for group and individual loans) than formal financial institutions. According to a survey, when branch funds are controlled by the head office, annual capital cost is around 8%–9% and interest rates are around 20% for group loans and 23%–24% for individual loans. With the competition among county MFIs getting fiercer, the service branches cannot charge rates that are too high. There are two problems in this regard. If CFPA Microfinance does not provide better services than formal financial institutions and credit companies, or differentiate its product, it will lose its market share. At the same time, CFPA Microfinance cannot compete by taking measures that other financial institutions usually take, such as temporarily lowering interest rates to attract clients and push other institutions out of the county credit market. A more serious problem, given the high cost of credit funds and its fully staffed operation, is its limited ability to lower interest rates by increasing efficiency and still be profitable.

Management and Training of Loan Officers

CFPA Microfinance now recruits county loan officers mainly for rural group loans and on the basis of their ability to acquire soft data. Apart from their familiarity with local conditions, the loan officers, as mentioned, are generally older, less well educated, unfamiliar with computers, and slow to learn new skills. If individual loans and agricultural loans continue to increase their share of the business while rural group loans decrease, loan officers must meet the new requirements. They will also need intensive training. Some loan officers may have to be laid off.

CFPA Microfinance still has not established an adequate training system for its branch managers, loan officers, and back-office staff. And there are not enough funds for training.

Risk Management

CFPA Microfinance faces three major challenges: (i) its geographically dispersed branches—52 of them in 52 counties across 13 provinces—complicating the design and implementation of a uniform product and procedures, and monitoring by the head office; (ii) the need to protect the cash it disburses and collects, against fraud and dishonesty; and (iii) the relatively short turnaround time of individual loans. Inadequate training is also potentially risky.

Recommendations

The operating performance of CFPA Microfinance indicates that the company should focus on its individual loan technology and procedures, agricultural loan methods, training, and risk management. Other recommendations are given below.

Market Positioning

The rural financial market can be segmented according to the different categories of farmers—small-scale farmers, large-scale farmers, migrant workers starting microbusinesses in urban areas—or according to loan products and services. For CFPA Microfinance, the market can be divided into: rural group loan market, rural and urban individual loan market, and the large-scale agricultural loan market.

The main competitors of CFPA Microfinance are the county RCCs that have successfully undergone reform, the PSBC, and some CCBs. CCBs disburse loans below RMB200,000 to (i) train loan officers; (ii) prepare for future competition in the banking industry; and (iii) develop future clients, as well as funding and financial opportunities, through microcredit clients. But for most CCBs and cross-region RCCs, microenterprise loans above RMB200,000 are more attractive. The PSBC, on the other hand, is constrained by deficiencies in loan officer quality and management in acquiring information about clients. Its main target clients are in the cities or towns, where information is more easily obtained. Therefore, small-scale cross-operation RCCs, after reform, could be the major competitor of CFPA Microfinance.

The market strategy of CFPA Microfinance should be different from that of CCBs, RCCs, the PSBC, and RCCs. First of all, it should continue expanding its rural group (joint liability) loan market because it has few competitors in that market and has the added advantage of fully developed credit methods. To achieve commercial sustainability and prepare for future changes, CFPA Microfinance should also develop the individual loan market. This market can have two parts: one in the cities and towns, and another in the rural areas, where the interest on loans is higher. If interest rates are high enough, rural counties and bigger towns can be major markets for individual loans. CFPA Microfinance can position itself in the RMB10,000–RMB100,000 individual loan market. In view of the country's rural development goals and the rapid development of agriculture, CFPA Microfinance should likewise develop an agricultural loan product and prepare itself for lending to agricultural value chains.

In the individual loan market, CFPA Microfinance loans are now capped at around RMB50,000 because of the company's relative inexperience. The size of the loans, and their proportion in total loans, could gradually increase as CFPA Microfinance gains more capability.

Market positioning will determine the relative share of group loans and individual loans in the different branches, and the decision whether or not to introduce agricultural loans. Market research and business planning, including cost–benefit analysis, will be needed. CFPA Microfinance must consider the benefits of training for this purpose.

Individual Loans

Challenges. People-based management and local resources, including poverty reduction offices in the provinces and counties, local branch managers, and local loan officers, most of them from local villages and towns, helped the company grow. Now CFPA Microfinance must deal with the following challenges to develop its individual loan business:

- The move from rural group loans to urban microfinance requires a corresponding change in systems and mind-set.
- Loan officers have been recruited mostly for rural group lending and have been working mostly with group loans. If they are transferred to the individual loan business, they will be hard put to meet the requirements and will require a great deal of training. If new loan officers are recruited for individual loans, other work will have to be found for the present loan officers in areas with a shrinking market for group loans. Moreover, because individual loans are more efficient and yield profits more quickly, ways must be found to keep the salaries of individual and group loan officers, as well as their status in the company, in proper balance.
- Hard data, and their collection and analysis, are more important than soft data. And loan officers and credit managers must meet higher standards in obtaining them.
- The switch made by some rural clients to new industries in the urban areas, such as trade or processing, has significantly increased risk, and calls for different risk assessment standards.
- Loan purpose and loan repayment are more closely linked in urban microfinance than in rural group lending. CFPA Microfinance should set heavy penalties for loan misuse.

Recommendations. CFPA Microfinance could consider the following recommendations:

- Selecting loan officers from the present staff who are relatively young and well educated, and have aptitude for learning, and then recruiting some new loan officers. Changes should be made in the recruitment, training, and remuneration of loan officers.
- Focusing on credit assessment and evaluation skills and on education level when recruiting loan officers, as these qualities are important in expanding the market. Loan officers for individual loans, unlike those for group loans, do not have to be from the local area or to have ready access to local information. Some loan officers are reluctant to analyze client information or have difficulty doing so, and would rather approve loans on the basis of previous experience. CFPA Microfinance should also consider loan aging and curing problems in the rural areas.
- Retaining the present pay structure for loan officers, in which performance carries greater weight. But instead of basing its evaluation of performance on the loan disbursement amount, CFPA Microfinance could base the evaluation on the number of loans disbursed and new loans assessed; otherwise loan officers, especially those already earning high salaries, would have little incentive to develop new loans. Also, when performing the evaluation, CFPA Microfinance should assess not only individual officers but also groups of loan officers and team spirit. So far, CFPA Microfinance has considered rewards only for individual officers.

- Creating systematic training and retraining systems, developing different levels of loan officers, developing training for credit managers, accelerating training for trainers, and addressing issues such as the lack of funds for training. Loan officers should pass a qualifying examination. Incentives should also be established for apprenticeship.
- Establishing platforms for the exchange of information about individual loans, and encouraging or requiring loan officers to submit internal reports on the various sectors, including profitability and cash flow.
- Maintaining a database on individual loans with the following details: (i) loan use and loan size; (ii) loan processing time (it takes some loan officers 10 days to process a loan; others can process a loan in 3–5 days) and date of loan approval; (iii) loan application rejection rate (generally around 50% at first, before decreasing); (iv) quick ratio (monthly receivables turnover, monthly inventory turnover); (v) breakeven point; and (vi) loan officers' monthly loan disbursements versus the amounts they can potentially manage.
- Increasing the proportion of collateral loans; reconsidering the zero risk tolerance at the head office.
- Using a standard credit evaluation system for clients instead of informal evaluation based on personal relationships. As different industries have different loan demand at different times, taking into account the demand for capital assets and working capital loans, CFPA Microfinance should maintain a loan requirement table for different industries to improve marketing efficiency, make sure loans are used for their stated purpose, and mitigate credit risk. Restaurants usually do not need much working capital loans but may need to borrow to expand operations and renovate facilities. Trade entrepreneurs may need loans for consumption. Funds are sometimes unavailable for government projects. The company should separate its loans for capital investment from its working capital loans and its trade and business loans. For credit groups, the group leader should first be examined to save time during the loan approval meeting.
- Setting loan approval limits as soon as possible for different loan officers, credit managers, branches, and the head office.
- Identifying potential credit risks. For example, the structure of receivables and their sources, as well as receipts and financial statements, should be analyzed, and turnover and bank statements examined. A database should be set up, and case studies undertaken.

Agricultural Loans

CFPA Microfinance should start by collecting the basic data needed for agricultural lending, including the input, prices, profit margins and risks for different rural industries and their potential demand for loans.

Rural Group Loans

CFPA Microfinance could consider using more standard rating technology to improve the efficiency of loan approval, and to expand the scale of the loans.

Village Development Mutual Aid Funds: The Case of Sichuan

Introduction

Village mutual aid funds in the PRC are variously referred to in the country as village mutual funds (World Bank Expert Group 2007; Teng and He 2009), community funds (Peng 2001), and community development funds (He 2007; Teng and He 2009). This report uses the term “village development mutual aid funds” (VDMAFs). Farmers contribute capital to the VDMAFs, which allocate funds to poverty-stricken villages. Villagers can borrow such funds for productive purposes (LGOP and MOF 2006). Unlike poverty reduction projects in the past, however, VDMAFs are endogenous and integrated with the new concepts of participatory development, empowerment, and community-driven development.

VDMAFs have at least three characteristics in common. They (i) encourage the participation of their members, (ii) emphasize self-management, and (iii) are demand-driven and more responsive to farmers’ needs. VDMAFs are regarded as a new approach to poverty reduction that is based on international nongovernment models but operates with public funds (World Bank Expert Group 2007).

VDMAFs have grown rapidly in the PRC. In 2007, the LGOP and the MOF launched pilot mutual aid fund projects to reduce poverty in 100 villages across 14 provinces, and expanded the coverage later in the year to 274 villages across 27 provinces (Wu 2008). By the end of 2008, 28 provinces (autonomous regions and municipalities) had established VDMAFs totaling RMB660 million in 4,122 villages and distributed 86,000 loans amounting to RMB310 million (Wang 2008).

An important question can be raised at this point: Why does the central government favor the VDMAF approach? According to the World Bank Expert Group (2007), besides giving new life to the concept of public funding for poverty reduction, VDMAFs mitigate to some extent the lack of rural financial services in poverty-stricken areas. Moreover, particularly because of the effective and sustainable progress made in targeting and helping the poor, the approach is considered innovative.

VDMAFs mostly derive their principal from state poverty reduction funds. Poverty reduction is therefore their main goal. There are two opposing viewpoints in this regard in the academic world. One side contends that, compared with poverty reduction loans, mutual aid funds can better target rural areas and the poor (Wu 2008). The other side argues that loans of mutual aid funds are not specifically aimed at poor farmers, who generally find them difficult to obtain (Lin and Yang 2009). These two opposing viewpoints show the need to study in depth the key issue of whether VDMAFs can and do indeed achieve their twin objectives of poverty reduction and sustainable rural development.

To answer this question, a field survey of VDMAFs in Xiaojin county, Sichuan province, was carried out from 4 to 12 May 2010. The staff of the Shuguang Development Center¹² in the province was also commissioned to conduct a second, supplementary, survey in August 2010. Most of the data in this chapter are taken from the two surveys (Lin and Yang 2009; World Bank Expert Group 2007; 2009).

Other important issues relating to the use of VDMAFs—including the unequal distribution of poverty reduction funds, the lack of demand in poverty-stricken areas for credit for productive purposes, and control by rural elites—are discussed extensively in other research studies.

Xiaojin county was chosen for this study for two reasons. Xiaojin, a key county in the national poverty reduction program, has typical poverty features. Moreover, the VDMAF project in the county, which is funded by the Xiaojin poverty reduction office, benefits from the technical support of the Shuguang advisory service center of Sichuan province and from the considerable experience of the center in rural community work. Problems of staff incapacity are therefore less likely to hinder project implementation. The Xiaojin VDMAF gets its principal from local disease prevention and treatment funds and not directly from the VDMAF project of the LGOP and MOF, but is consistent with that project in its philosophy, goals, and operation, as discussed below.

The conclusions of this study will have important policy implications: they will help decide whether the VDMAF project needs to be modified. The fiscal funds must effectively target the poor to avoid fund misuse, corruption, and other problems and meet their poverty-reduction objective. They must also promote sustainable development to help ensure a better life for both the present and future generations. The effectiveness and fairness of fund use is a greater concern in the VDMAF project than under the traditional “Three Rural” concept.¹³ This chapter uses case studies on four villages in Xiaojin county to explore the conditions in which VDMAFs target the poor and sustainable development within the economic and social framework, and the obstacles in their way.

The research methods employed were: (i) focused discussions conducive to understanding the motivations and purposes of the main parties in the VDMAFs; and (ii) microcredit analysis together with an examination of democratic participation at the village level, since VDMAFs are both a social and an economic activity.

This chapter is structured as follows. Starting with a presentation of the core issues, it describes the context of the surveys and the specific implementation of the Xiaojin VDMAFs, the poverty-targeting results of the VDMAFs from the supply and demand standpoints, and the sustainability of development with VDMAF support. The final part contains the conclusions and policy recommendations of the study.

Issues Investigated

Objectives of poverty reduction. Poverty targeting and sustainable development are the basic objectives of all poverty reduction policies and projects of the PRC, and the standards against which the success of those policies and projects is gauged. Development experience has shown the importance of institutionalized poverty reduction programs and sustainable

¹² Shuguang Development Center is a poverty NGO registered in Sichuan province.

¹³ A reference to agriculture, the rural areas, and the peasantry—three issues that were given emphasis at the 2006 National People’s Congress of the People’s Republic of China.

development to effective poverty reduction, which requires continuity of benefits to the poor and constant attention to their vulnerability.

This chapter discusses and evaluates poverty targeting and sustainable development in the PRC through its development-oriented poverty reduction programs, poverty reduction loans, and nongovernment microfinance, against the historical background of the government's antipoverty activities, to bring out the need for VDMAFs, compare them with other poverty reduction programs, and determine the differences.

Development-oriented poverty reduction. The PRC's antipoverty strategy is basically development-oriented poverty reduction (Luo 2001; Fang and Zhang 2007). Although extensive in scope, development-oriented poverty reduction programs in the PRC, at least in concept, emphasize assistance to farmers and rural enterprises in investing in production and infrastructure building. Poverty reduction funds are channeled mainly into (i) poverty reduction loans for productive projects, (ii) infrastructure construction and other improvements in productive conditions, and (iii) social services. According to Luo (2001), from 1986 to 1999, the central government allocated RMB131.3 billion for poverty reduction. Fifty-five percent of this went to loans for productive purposes (mostly to township enterprises) and nearly 28% to infrastructure building. Farmers from poverty-stricken areas did not directly benefit (Luo 2001). Moreover, the government's recent poverty reduction work has consisted mainly of village economic development, poverty reduction through industrial growth, and labor transfers—funding priorities that do not serve the immediate needs of farmers.

Poverty reduction programs can easily deviate from their objective. Studies have shown that in the PRC such programs cover only 16% of poor communities, but 51% of medium-income and 33% of relatively wealthy households. Even key projects are not fundamentally different (Li 2006). In villages where economic development is promoted, wealthy families are the primary beneficiaries (China Development Research Foundation 2007). In short, poverty targeting is a leading problem in development-oriented poverty reduction programs, where the poor do not benefit equally from investments (Wang 2008).

Two poverty reduction programs comparable to the VDMAFs that have existed throughout the history of poverty reduction in the PRC are poverty reduction loans and nongovernment microfinance.

Poverty reduction loans. Discount loans for poverty reduction have always been an important funding channel for the central government. Co-managed by the poverty reduction offices and the ABC, they are designed to help solve the problem of fund shortage in underdeveloped areas. However, because bank loans are commercially managed, they are nearly inaccessible to poor farmers who wish to borrow for productive purposes. In 2003 and 2004, only 15.3% of poverty reduction loans went to poor farm households; in 2005, the proportion was only marginally better, at 17% (China Development Research Foundation 2007). In addition, households earning nonlabor income receive preference over relatively more impoverished farmers in the distribution of household loans (Yue 2007).

The deficiencies of traditional poverty reduction loans in poverty targeting have been confirmed by academics. A study by Braverman and Guash (1986), for instance, showed that formal credit was accessible to only about 5% of rural households in Africa, and 15% in Asia and Latin America. The study mentioned a low-interest lending project where 5% of borrowers obtained 80% of the loans. In addition, the repayment rate of poverty reduction loans is very low (Wu 1997). According to statistics from the Agricultural Development Bank

of China, poverty reduction loans and poverty reduction discount loans had a loan recovery rate of 32.9% and 48.7%, respectively, in 1996, lower by 45% and 65%, respectively, than the 74.6% for regular loans (Huang, Ma and Luo 1998). Discount loans are clearly not a sustainable approach to solving the problem of capital shortage among the poor.

Nongovernment microfinance. To counter the deficiencies of discount loans for poverty reduction, such as difficulty in targeting the impoverished and the low repayment rate, the Academy of Social Sciences introduced the Bangladesh Grameen Bank model in the early 1990s. This model relies on a direct mechanism for determining household eligibility for credit, and indirect mechanisms including sustainable interest rates, small loans, installments, group guarantees, center meetings, and loans for women. Experience has proven that the Grameen Bank approach can automatically target poor communities with demand for credit while avoiding competition for resources from wealthy farmers. However, nongovernment microfinance has gradually lost the confidence of the central government because projects have deviated from their objective and are unsustainable. Using survey data from Yi county in Hebei province and Nanzhao county in Henan province, Sun (2006) reported that microfinance mainly serves middle- and upper-middle-income farmers. Another survey based on the three largest nongovernment microfinance projects (Liu et al, 2007) showed that such projects favor wealthy clients. Besides, of a total of about 300 microfinance institutions and projects, only a handful have demonstrated their capacity to achieve operational sustainability (Cheng and Xu 2007).

Antipoverty programs in the PRC in general. The fact that poverty reduction loans and nongovernment microfinance projects can neither target the poor nor develop sustainably has led the government and donors to question the value and efficiency of endogenous poverty reduction projects. The midterm results of the implementation of the rural poverty reduction plan, China Rural Poverty Alleviation and Development (2001–2010), showed that “anti-poverty interventions tend to be top-down; participation of the poor is simply passively investing labor and capital; their indigenous knowledge system, initiatives and decision-making power [have] not obtained enough attention; poverty alleviation work [has] become bilateral government acts; [and] the adaptability and effectiveness of poverty alleviation projects are undermined” (Liu 2007). The demand for credit among farmers, especially the poor, cannot be effectively expressed and their participation in the distribution of funds is ignored. Therefore, the problem of poverty targeting is not a moral hazard but a systemic defect.

Village development mutual aid funds. The VDMAF pilot projects, in contrast, encompass the concepts of decentralization, participation, and community-driven development and ownership. The participation and suggestions of the poor communities assist the government and external agencies in understanding their needs and in serving those needs effectively. On the other hand, the empowerment of poor farmers helps improve their income-generating capacity and sense of ownership, and stimulates their initiative and creativity. Current antipoverty programs worldwide, as well as international development assistance agencies, view decentralization and wider participation not only as a policy goal but also as a regulatory requirement, for policy formulation (China Development Research Foundation 2007).

In the field surveys for this study, the parties involved (the county government, the Shuguang community, the townships, and villages) all professed to see a bright future for VDMAFs. Local officials expressed support for decentralization and community participation. Primary staff shared the belief that as long as resources and decision-making are decentralized to the community, the community will operate.

Problem of elite capture. But although government funding for VDMAFs that are run well and are community driven are mainly allocated and used according to democratic decisions, with the communities having considerable power, democratic lending procedures could end up benefiting the majority while ignoring the interests of the poorest minority. Moreover, relatively affluent groups, because of their greater influence and capabilities, could easily corner the VDMAF benefits—the often-discussed issue of “elite capture.”

There is no consensus on elite capture in academic circles. On the one hand, according to Galasso and Ravallion (2005), village-dominated decentralization is more favorable to the poor than government-dominated decentralization in the allocation of subsidies. Pradhan and Rawlings (2002) showed that a large number of social investment funds help to target the poor. On the other hand, in a study by Platteau (2004), local elites in West Africa were observed to control the allocation of social funds. Rao and Ibañez (2005) also observed that, although most villagers expressed satisfaction with the operation of social funds, the funds did not match the needs of local residents, especially the poor communities.

Field Surveys and the Implementation of the Village Development Mutual Aid Fund Pilot Projects

Geographic coverage of the surveys. Xiaojin county in the Aba Tibetan autonomous prefecture, Sichuan province, is an underdeveloped county in unfortunate natural and economic circumstances. It was listed as a national poverty county in 1989, and as a national key poverty reduction county in 2002. Currently, the rural poor population numbers 2.7 million, 45% of the rural population; 70% of them live mainly in mountain areas more than 2,400 meters above sea level. In recent years, the population impoverished by illness or disaster has rapidly increased, making the work of poverty reduction even more difficult.

The surveys covered the four villages of Meinuo, Dasuo, Chengshui, and Daping, the last two of which had already been allocated VDMAF loans, to enable analysis of the organization of VDMAFs in conjunction with the growth of a community's economy. Table 16 summarizes the basic conditions in the four villages.

Survey method. In each village, members of the VDMAF committee (chairman of the board, supervisors, etc.), village cadres, and borrowing and guarantor households were interviewed. The number of persons interviewed in each village is shown in Table 17.

Focused interviews were used during the survey. Staff of the Shuguang community and village cadres gathered together prospective respondents after patiently explaining to them the purpose of the survey to ease their concerns, and thus help ensure the accuracy of the survey.

Specific topics covered. The interviews were all about the VDMAFs but differed in emphasis. Village cadres were interviewed about the basic situation in the village; council members, about the operation of the VDMAF; members of the board of supervisors, about the relationship between the supervisory board and the council; and borrowing and guarantor households, about the participation of villagers in the VDMAF.

Xiaojin VDMAFs are jointly operated by the Xiaojin poverty reduction office and the Shuguang Development Center. The office is responsible for the capital and projects, while the center takes charge of “soft” services, that is, technical support for poverty

Table 16. Basic Data on the Four Villages Surveyed

| Item | | Meinuo (Meiwo) | Chengshuia (Xinge) | Daping (Bajiao) | Dasuo (Shuangbai) |
|---------------------------------|---|--|---|--|---|
| Population | No. of households | 168 | 55 | 89 | 132 |
| | No. of household groups (no. of households per group) | 4 groups (30 households in the 1st group, 62 in 2nd, 36 in 3rd, 42 in 4th) | 3 groups (22 households in the 1st group, 18 in 2nd, 15 in 3rd) | 2 groups (33 households in the 1st group, 56 in 2nd) | 3 groups (34 households in the 1st group, 56 in 2nd, 42 in 3rd) |
| | No. of people | 687 | 264 | 365 | 505 |
| Arable land per capita (acres) | | 1.5 | 2.6 | 3.9 | 2.0 |
| Distance from nearest city (km) | | 28 | 32 | 26 | 14 |
| Distance from county seat (km) | | 22.0 | 10.0 | 2.5 | 3.0 |
| Economic status | | Middle | Lower-middle | Upper | Lower-middle |
| Main source of income | | Yak, sheep, herbs | Potato, herbs, services | Grapes, apples, services | Bacteria culture, potato, services |

km = kilometer

Note: 1 acre = 0.405 hectares.

^a Arable land per capita varies for the different groups in Chengshui village: 1.7 acres for the first group, 2.96 acres for the second, and 3.18 acres for the third.

Source: Field survey.

Table 17. Number of Persons Interviewed in the Four Villages

| Category | Meinuo | Chengshui | Daping | Dasuo |
|-------------------------------------|--------|-----------|--------|-------|
| Village cadres | 0 | 2 | 1 | 1 |
| Members of the village council | 1 | 3 | 1 | 1 |
| Members of the board of supervisors | 1 | 2 | 2 | 1 |
| Borrower households | 0 | 1 | 2 | 0 |
| Guarantor households | 0 | 1 | 1 | 0 |

Note: Village cadres in Meinuo village showed their reluctance to be interviewed. Also, at the time of the survey, Meinuo and Dasuo villages had not yet started issuing loans.

Source: Field survey

reduction projects, including awareness and motivational campaigns, training, guidance, and post-inspection. This arrangement can be summed up as “government funding, NGO providing services, [and] community implementing” (Han and Du 2009). Xiaojin county now has 27 villages; 13 have joined the VDMAF project and the 14 others were set to join the project in 2010.¹⁴ VDMAF projects were launched in the four villages in 2009. The four were part of the first batch of 13 villages. The county invested RMB3.84 million in that first batch of villages, including RMB320,000 each in 11 of the 13.

The Xiaojin VDMAFs are established in the following four steps: (i) propaganda drives and mobilization, (ii) training, (iii) village meetings, and (iv) community organization.

¹⁴ According to plans at the time the surveys were conducted.

Propaganda drives and mobilization. With the assistance of the Shuguang Community Development Center, Xiaojin county held frequent meetings among village cadres and village representatives, visited farmers, and conducted participatory survey and propaganda work.

Community information collected by Shuguang staff pertained to local basic social and economic conditions, agricultural production, infrastructure, organization and the work of the local “two committees,”¹⁵ local clans, farmers and their trust in village-level organizations, and difficulties and needs of local farmers. Besides gathering information, the staff also visited farmers, answered their questions and concerns, and encouraged them to participate in the VDMAF project. Most of the farmers visited had some influence in the community.

Training. Following the propaganda drives and mobilization, the county poverty reduction office and the Shuguang Development Center conducted training for county coordinators. The training (i) presented the organizational structure of village-level farmers’ cooperatives and explained the relationship between the VDMAFs and the county and township (town) government and “two committees” of the village; (ii) explained the basic principles, main functions, and benefits of VDMAFs; and (iii) explained the basic operating procedures of VDMAFs. All four villages surveyed have participated in this training.

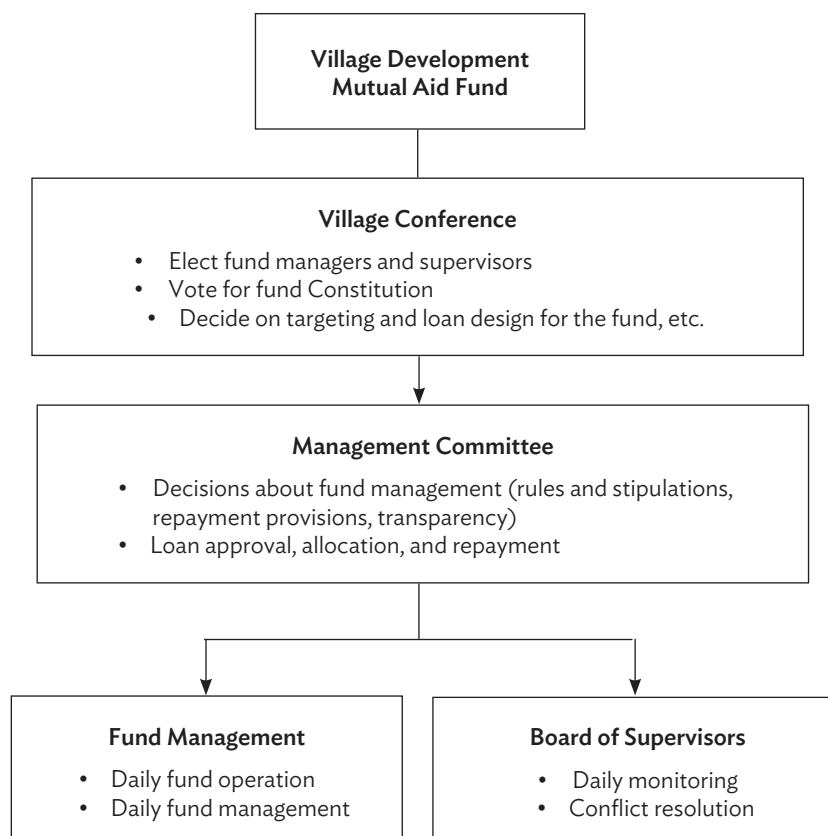
The persons responsible for training in the four villages are: (i) in Meinuo village, the deputy mayor in charge of poverty reduction and the village secretary; (ii) in Chengshui village, the director and the chairman; (iii) in Daping village, the director and the chairman; and (iv) in Dasuo village, the fund accountant and the village secretary. The village staff confirmed the utility of the training in understanding and operating the VDMAFs. The poor communities in poverty-stricken areas still cannot develop their own capacity without help from the outside world.

Village meetings. VDMAFs are managed chiefly through village meetings and by the management committee, made up of the council and the board of supervisors, who implement the funds owned, managed, used, and shared by the villagers, to achieve turnover as well as sustainable development. According to the implementing rules of the county for development funds, the village meeting is the top decision-making body, taking charge of significant affairs (including personnel management, benefit distribution, and loan design), and the management committee organizes villagers for decisions about the management of the funds (including management rules and borrower conditions, repayment term and method, and publicity announcements) and approves, allocates, and recycles loans according to the rules. Specifically, the council is responsible for the daily operation and management of the funds, and the board of supervisors monitors operations. In short, the village meetings, the council, and the board of supervisors are in a commission relationship. Figure 2 is a graphic representation of the mutual relationship.

The “Notice on Establishing the [VDMAF] Pilots” of 2006 requires the pilot villages to “hold village meetings and elect villagers with justice,” and “responsible villagers” to serve on the VDMAF management committee. Table 18 summarizes the purposes for which village meetings have been held in the four villages since the start of VDMAF operations.

The surveys revealed particular attention paid by the villagers to the election of members of the VDMAF management committee (Table 19). Members of the council are elected through village meetings in all four villages; the board of supervisors is elected through village meetings in Meinuo and Daping, and appointed by the village cadres in the other two villages.

¹⁵ Two committees refer to the Communist Party’s committee and the village committee in a village.

Figure 2. Authority Structure of the Village Development Mutual Aid Fund

Source: Field Survey.

Table 18. Details of Village Meetings in the Four Villages Surveyed

| Item | Meinuo | Chengshui | Daping | Dasuo |
|-----------------------------|---|---|---|---|
| No. of meetings held so far | 2 | 3 | 4 | 2 |
| Purpose of first meeting | Program launch and publicity | Election of members of the council and the board of supervisors | Program launch and publicity | Election of members of the council and the board of supervisors |
| Purpose of second meeting | Election of members of the council and the board of supervisors | Presentation of management charter | Election of members of the council and the board of supervisors | Publicity |
| Purpose of third meeting | | Loan disbursement | Presentation of management charter | |
| Purpose of fourth meeting | | | Loan issuance | |

Source: Field survey

Table 19. Management Committee Structure in the Four Villages Surveyed

| Item | | Meinuo | Chengshui | Daping | Dasuo |
|--------------------------|------------|---|---|--|---|
| The methods of selection | | Both the council and the board of supervisors publicly elected | Council publicly elected; board of supervisors designated | Both the council and the board of supervisors publicly elected | Council publicly elected; board of supervisors designated |
| Village Fund Council | Chairman | Mr. Daiming Zeng | Mr. Yin Hai Zhao | Mr. Guiqiang Zhang | Mr. Denggui Xiao |
| | Accountant | Mr. Kangbing Jiang | Mr. Dengming Li | Mr. Yunfei Liu (2nd-group leader)* | Mr. Jiahua Chen |
| | Cashier | Mr. Rongzhu Yang | Mr. Denghui Li | Mr. Gao Bing, (1st-group leader)* | Mr. Qishun Miu |
| Board of Supervisors | Chairman | Mr. Huaqing Ma | Mr. Quanmin Yang (Village Party's secretary) | Mr. Tianfeng Jing | Ms. Peng Kaihui (Village Party's secretary)** |
| | Members | Mr. Jiabing Su (1st-group leader)* Ms. Zizeng Zhao (2nd-group leader)* | Mr. Deyun Ke (Village Party's secretary)** | Ms. Yihui Jiang (Village Women Federation chairperson) | Dengming Wan |

* The titles in brackets are the official position of the person in the village. In the survey areas, a village is sub-divided into groups, such as Group 1, 2 and 3 and each group has an official leader.

** The Party's secretary here refers to the secretary of the Communist Party's branch in the village. The Party's secretary is usually the top official in a village.

Source: Field survey.

The election process in Meinuo village is as follows. Following nominations of more than 40 candidates from the 100 or so households, competitive elections are held to choose the six council members and the six members of the board of supervisors.

In Daping village, candidates are nominated mainly on the basis of educational attainment (the chairman in particular must have completed at least junior high school). Top management committee members—the chairman of the council, the chairman of the board of supervisors, the accountant, and the cashier—are appointed from among those who get the most votes.

Elections bring out management committee members who care about the community and practice fairness in their dealings. During the surveys, members of the management committee were asked why they thought they had been selected to serve on the committee. The response of a council member in Meinuo village was typical. The villagers trusted them he said.

As can be seen from Table 19, the members of the council are separate from those of the board of supervisors. In the four villages surveyed, none of the council members are in the board of supervisors, and vice versa.

Besides electing the management committee members, another important item on the village meeting agenda is discussing and defining the management charter of the VDMAFs. In Daping village, for example, the villagers' suggestions are noted by the chairman of the council and discussed during the village meeting, and the results of the discussion shape the charter. Table 20 summarizes the main content of the VDMAF charter in the four villages.

Table 20. Provisions of Management Charters of the Four Villages Surveyed

| Item | | Meinuo | Chengshui | Daping | Dasuo |
|--|---|--|---|---|---|
| Borrowing principle | Qualified borrowers | Residents of the village, with residence and land certificates | Residents of the village or farmers working on village land | Residents of the village and members of the community development funds committee | Residents of the village, with residence certificates |
| | Ratio of borrowing households to total village households | A member is entitled to borrow once within a period of 3 years | More than 50% | Less than 50% | Less than 50% of qualified households |
| | Reserve capital for emergencies | RMB40,000 | RMB1,800 | RMB120,000 | RMB40,000 |
| Loan contract | Loan amount | RMB3,000–RMB5,000 | RMB8,000 | Household farming, RMB5,000–RMB8,000; Large-scale farming, RMB8,000–RMB12,000 | RMB5,000 |
| | Loan purpose | Farm production | Planting, livestock raising, processing industries | Productivity and industry growth | Productivity and emergency use |
| | Loan cycle | 3 mos–1 yr | Less than 1 yr | 1 mo–1 yr | Less than 1 yr |
| | Interest rate for fund use ¹ | 5.5% | 5% | 5% | 5% |
| | Guarantee method | Joint guarantee by 5 families | Joint guarantee by 2 families | Joint guarantee by 2 families | Joint guarantee by 5 families |
| Provisions against nonpayment of loans | | Borrower cannot borrow again | 80% of liability assumed by guarantors; borrower and guarantors cannot borrow again | Late fees charged and borrower's credit record affected, leading to a reduction in the amount of future loans | National subsidies to village reduced; borrower pays a fine of RMB5 per day for each day of nonpayment beyond the due date and, together with guarantors, cannot borrow again |

Notes: 1. The rate is per thousand per month, 5% per month = 6% per annum.

Source: Field survey.

The gradual improvements made in the management charter are noteworthy. For example, Chengshui village, in its second village meeting, modified the original provisions defining qualified borrowers to include “villagers who relocate to other villages.” Villagers in the three other villages decided to make the same change, after discussing the matter in their village meetings.

Community organization. The next step in the establishment of the VDMAFs involves registering with the bureau of civil affairs, opening accounts with the RCCs, and attending to other administrative matters, among them, obtaining an engraving stamp from the public security bureau, an organizational code from the bureau of finance to open a bank account with RCC, and obtain a permit for fund transfers from the county LGOP, the related office, and the bureau of finance.

Table 21. Status of Village Development Mutual Aid Funds in the Four Villages Surveyed

| Item | Meinuo | Chengshui | Daping | Dasuo |
|-------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Year started | 2009 | 2009 | 2009 | 2009 |
| Cash flow | RMB320,000 | RMB320,000 | RMB320,000 | RMB320,000 |
| Status of start-up procedures | Completed | Completed | Completed | Completed |
| Funding status | Funds credited to account | Funds credited to account | Funds credited to account | Funds credited to account |
| Lending operations | No loans issued yet | Has started issuing loans | Has started issuing loans | No loans issued yet |

Note: The loan management systems of Meinuo and Dasuo villages are still being discussed.
Source: Field survey.

The engraving stamp costs RMB660–RMB848 and the handling institution code RMB108, and other expenses (such as travel) amount to RMB200–RMB500, for a total operating cost of about RMB900–RMB1,400.

These community organization matters are handled mainly by the village council chairman. The survey respondents mentioned two problems that hamper community organization: too complicated procedures and individually paid start-up costs. How the communities can be helped in accelerating start-up, improving operating procedures, and solving the problem of cost advances must be considered.

At the time of the survey, Chengshui and Daping villages had already issued loans, while Meinuo and Dasuo villages were making relatively slow progress and still discussing the related management systems. Table 21 summarizes the status of VDMAF operations in the four villages.

Poverty Targeting

The surveys showed that the four VDMAFs have not targeted the poorest communities. As mentioned earlier, the VDMAFs in the four villages differ in their progress. For that reason, the questions asked during the surveys varied with the status of implementation in the village. In Meinuo and Dasuo villages, where loans have not been issued, the council chairmen were asked to estimate the number of households that would apply for loans in the village and to state which of five income groups—high-, upper-middle-, middle-, lower-middle-, and low-income households—they thought would have the most applicants. In Chengshui and Daping villages, on the other hand, the council chairmen were asked how many farmers were in the first batch of borrowers in the village and which of the same five income groups had the most borrowers.

Table 22 lists the answers of the council chairmen in the four villages to these questions. Since Xiaojin county and the villages surveyed belong to the poorest regions of the country, most farmers in these villages are identified in this chapter as poor (lower-middle- and low-income) farmers. By this standard, the VDMAFs in the villages have not targeted the poorest groups, as confirmed by the information in Table 22. Fewer than 6 (less than 5%) of the 96 households that have applied for loans in Meinuo and Dasuo villages, and

Table 22. Loan Applications and Approvals in the Four Villages Surveyed

| Item | | Loan Applications | | Loan Approvals | |
|-------------------------------|---------------------|-------------------|-------|----------------|--------|
| | | Meinuo | Dasuo | Chengshui | Daping |
| No. of households | | 70 | 26 | 18 | 20 |
| Economic status of households | High-income | 0 | 5 | 10 | 15 |
| | Upper-middle-income | 21 | 10 | 5 | 0 |
| | Middle-income | 49 | 5 | 2 | 5 |
| | Lower-middle-income | 0 | 5 | 1 | 0 |
| | Low-income | 0 | 1 | 0 | 0 |

Source: Field survey

only 1 of the 39 households that have obtained loans in Daping and Chengshui villages, were lower-middle- or low-income households. In the course of the survey, all four council chairmen categorically stated that the loan applicants and borrowers were all relatively wealthy.

For the VDMAFs to target the poor, there must first be demand from the poor for VDMAF loans and the villages must be willing to meet this demand by lending to the poor according to their management charter. In other words, the failure of VDMAFs to target the poor is due to one of only two possible reasons: poor communities lack demand for the loans or the village council is reluctant to lend to poor communities. This survey therefore set out to analyze poverty targeting by the VDMAFs from the standpoint of both demand and supply.

From the demand standpoint (villagers), the participation of the poor in the VDMAFs can be examined at two levels: their demand for loans for productive purposes, and their demand for funds specifically from the VDMAFs. From the supply standpoint (VDMAFs), participation has to do with repayment guarantees and the factors that dictate loan approval by the village council.

Since no VDMAF loans have been applied for, or issued in, Meinuo and Dasuo villages, the participation of the two villages cannot be examined here from the supply standpoint. At any rate, the supply side does not seem to present much of a problem, judging only from the experience of Chengshui and Daping villages. The problem may lie more on the demand side. Only 17 of the 19 households that applied for loans in Chengshui village, and only 20 of 23 in Daping village, finally obtained loans. In the case of Chengshui, the two households that failed to obtain loans either could not find a suitable project or had no suitable guarantor, according to the chairman of the village council. The following analysis is therefore mainly from the demand standpoint.

Demand for loans. Both the Xiaojin county implementing rules for development funds and the management charter of the four villages clearly stipulate the use of the VDMAFs for productive purposes, income generation, industry (crop growing, livestock raising, processing, etc.) support, or emergency spending, but not for nonproductive consumption.

According to the county treasurer's office, annual net income per capita in Xiaojin county is RMB2,850, 30% of this from crop growing and livestock raising, 30% from services, and 40% from revenue transfers. Crop growing, livestock raising, and services are therefore the

main sources of income. As services do not require a large investment, capital is needed mainly for the first two activities. Table 23 summarizes the income and expenditure data for the cultivation of major crops in the four villages. The table shows that the crops consist mainly of potato, green peas, and corn. Daping village also plants grapes and other economic crops. Households in the four villages each invest roughly the same amount each year, about RMB2,000, but their income varies with terrain, land quality, and other factors. Arable land is about 8 acres per household (Table 16), or 2 acres per person at an average of four people per household.

Table 24 gives income and expenditure data for livestock-raising in the four villages. Pig-raising is not included because, according to the secretary of the Dasuo village council, local farmers raise pigs (about two each year on average) only for their own consumption and, as the village fund accountant pointed out, the pigs are fed with plants grown on the farmers' own land. Farmers invest no more than RMB1,000 per year in the raising of livestock, mostly yak and sheep.

Table 23. Cropping Input and Output in the Four Villages Surveyed

| Crop (Per Acre) | Meinuo | | Dasuo | | Chengshui | | Dapinga | |
|--------------------|-------------------|----------|-------------------|-------------|-------------------|-------------|---------|----------|
| | Input | Output | Input | Output | Input | Output | Input | Output |
| Potato | RMB200– RMB300 | RMB1,000 | RMB200– RMB300 | Pig-raising | RMB200– RMB300 | Pig-raising | – | – |
| Green peas | RMB200– RMB300 | RMB800 | – | – | RMB200– RMB300 | RMB700 | – | – |
| Apples | – | – | – | – | – | – | RMB200 | RMB1,000 |
| Grapes | – | – | – | – | – | – | RMB250 | RMB2,000 |
| Corn | – | – | RMB400 | RMB1,200 | – | – | – | – |

Note: 1 acre = 0.405 hectare.

^a According to the secretary of Daping village, there are 280 acres of grapes and 100 acres of apples.

Source: Field survey.

Table 24. Livestock-Raising Input and Output in the Four Villages Surveyed

| Livestock | | Meinuo | | Dasuo | | Chengshui | | Daping | |
|-----------|-----------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
| Type | No. of Heads | Input per Head | Output per Head | Input per Head | Output per Head | Input per Head | Output per Head | Input per Head | Output per Head |
| Yak | 1,000 | RMB500 | RMB2,500 | | | | | | |
| Sheep | 2,000 | | | RMB200– RMB300 | RMB600 | | | | |
| | 500 | | | | | RMB200– RMB300 | RMB700 | | |
| | 260 | | | | | | | RMB200– RMB300 | RMB600 |
| | 200 | RMB200– RMB300 | RMB700 | | | | | | |

Note: It takes about 7 years for yaks, and about 3 years for sheep, to reach adulthood.

Source: Field survey.

Taken together, therefore, crop-growing and livestock-raising activities require each farm household to invest no more than RMB3,000 each year. Farmers in poor areas have traditionally met their funding needs for productive purposes by accumulating capital—chiefly the wages they earn through their labor, and profit from lending to other households through private channels. But the possibility that farmers, especially poor farmers, will borrow to fund their crop-growing and livestock-raising business cannot be excluded.

If the poor need to borrow, what contracts can the VDMAFs offer? According to Table 20, the VDMAF loan contracts in the four villages cover loan amounts of between RMB5,000 and RMB8,000, and to RMB12,000 in Daping for large-scale farming, at 5% interest, for a term of no more than 1 year, and require loan guarantees from two to five households. Since the poor are mainly engaged in crop growing, livestock raising, and services, their annual investment needs amount to only about RMB3,000. Moreover, they generally have difficulty finding guarantors. These contracts are therefore not suitable for them and will only discourage them from borrowing from the VDMAFs.

So why do the village meetings produce such loan contracts? Elite control of the VDMAFs is a likely explanation. From the list of the members of the council and the board of supervisors in Table 19, it can be seen that the local elites—including village cadres and village group leaders, the village secretary, the director of women, and a professional accountant, among others—far outnumber the nonelites. While VDMAF operations call for the active participation of local elite groups, their superiority in numbers may account for the obvious bias toward the wealthy in the conditions of the loan contracts. This bias is unfortunate, considering that the VDMAF loans, with their higher threshold and lower interest rates compared with loans under the PRC's three major nongovernment microcredit loan contracts (Table 25), were designed precisely as a lower-cost borrowing alternative for poor farmers.

Even in villages with transparent and symmetrical information, it would seem, endogenous lenders can still ration loans to poor farmers because the management charters of those villages (especially their loan conditions) cater to the credit demand of the wealthy. If the VDMAF loan contracts were not biased against the poor, the latter could self-ration and not apply for the loans. But as it is, the poor have largely refrained from participating in the VDMAFs, despite their need for funds, because they are unsatisfied with the credit contracts.

Table 25. Three Major Nongovernment Microcredit Programs in the PRC

| Type | Institution | Credit Limit | Interest Rate ^a |
|---|--|--------------|----------------------------|
| UNDP project | Chifeng Zhaowuda Women's Sustainable Development Association | RMB3,000 | 8% |
| Poverty reduction project of Chinese Academy of Social Sciences | Funding the Poor Cooperative in Nanzhao County | RMB2,000 | 8% |
| China Foundation for Poverty Alleviation project | Zuoquan Farmers' Self-Reliant Community | RMB30,000 | 7% |

Notes: PRC = People's Republic of China, UNDP = United Nations Development Programme.

^a Interest rate here is nominal. The effective rate of interest is around 16–17% p.a., with monthly or bi-weekly loan repayments in installments.

Source: Cheng and Xu (2007).

To expand on a statement made earlier, the VDMAFs in the four villages fail to target the poor either because the poor, by virtue of market, geographic, or skill limitations, lack demand for credit or because the poor who need credit are offered unsuitable loan contracts and, hence, do not borrow from the VDMAFs. This analysis was confirmed by the council members of Chengshui village, who also ascribed the low number of VDMAF loan applications from poor farmers to (i) lack of awareness of the loans and their favorable terms, (ii) fund mismanagement, and (iii) concerns about repayment. In addition, the low interest rates set under the Xiaojin project, compared with those for nongovernment microfinance and loans from RCCs, to attract poor farmers, also make poverty targeting less profitable.

Obviously, the policy implications will vary depending on the reason for the inadequate poverty targeting. If the poor community lacks demand for credit, local market opportunities and the policy infrastructure must be improved. If the poor groups merely lack demand for VDMAF loans, it will be necessary to improve the lending system. But no matter which factor has the dominant role in poverty targeting, further research will have to be done.

The survey also found that farmers seek to borrow mainly for nonproductive purposes, such as sending their children to school or having an illness treated. This finding was confirmed by the council chairman of Meinuo village, who said that, lower-middle-income farmers borrow mainly for their daily activities. According to information gathered for this study, formal credit institutions do not meet farmers' demand for credit, whether for productive purposes or for consumption. Farmers in the region satisfy their demand for consumption loans mainly through zero-interest borrowing from relatives and friends. Therefore, in the long term, how to meet farmers' demand for loans for nonproductive purposes is the real problem facing poverty reduction programs in the PRC.

Sustainability

The VDMAF project has only just begun in Xiaojin county. Loans have been disbursed in only a few villages. It is still too early for a comprehensive and systematic investigation of sustainability. So, for now, what follows is a preliminary analysis of the factors that affect the sustainable development of the funds. Sustainable operation refers to the elimination of subsidies, interest, and other income to compensate for operating costs, bad debts, loss, and subsidized cost of capital (Cheng and Xu 2006). Simply put, the VDMAFs will be sustainable if their revenue is greater than their expenditure.

For the four survey villages, village development revenue is interest income from the VDMAFs. Expenditures consist of running costs (funding for the management and operation of community development funds, the village council, and the board of supervisors, as well as workers' subsidy); contributions to the Community Chest, which funds community projects; and transfers to principal after operating costs and Community Chest-related costs are deducted.

Interest income. As previously shown in Table 15, the monthly interest rate is 5.55% in Meinuo village, and 5% in Chengshui, Daping, and Dasuo villages. According to the plan for the four villages, loans are issued only once, from a cautious perspective. Loans issued total RMB132,000 in Chengshui village and RMB160,000 in Daping village, and the corresponding interest income is RMB6,600 and RMB8,000, respectively, with no allowance for doubtful debts. The rest of the funds are deposited with local RCCs and earn some interest income. There are also loans for emergency use, at interest rates equal to those for loans for

productive purposes. Overall, because of the low interest rate and the limited supply of loans, the interest income level is not sound.

Expenditure. The allocation of the fund use fee (interest), which is held in common by the fund members, is discussed in village meetings. The allocation principle is normally determined first, and then the proportion of allocation. Interest income is allocated as follows in the four villages:

- In Meinuo village, 10% goes to the public welfare funds, 30% adds to the loan principal fund, and 60% used to cover management costs. If all the funds available were lent out, the management staff would receive RMB6,000 in subsidies yearly.
- In Chengshui village, the interest income is used first to cover the salaries of members of the council (RMB1,200 per year for three council members and RMB400 per person per annum), as well as their transport expenses (RMB14 per person per year) and accommodation (RMB10 per person per year), and the stationary (RMB200 per year). The remaining interest incomes go to the public welfare funds and the use of the fund is decided by the villagers.
- In Daping Village, 20% of the interest incomes used for the wages of the fund management staff (around RMB 1200 per annum), to be shared equally among 5 management staff in the village.
- In Dasuo village, the interest income funds the operating expenses of the management team (office supplies, transport, meals, etc.) and management salaries (still being discussed). The remaining amount is rolled into the loan principal.

As can be seen, operating costs account for the bulk of spending. At the same time, according to the survey respondents, the low management salaries, compared with the wages of unskilled laborers (RMB100 per day) and specialized workers (RMB200 per day), are not conducive to the sustainable development of mutual funds and stable fund management. Staff nonetheless expressed their willingness to continue to do good work and live up to everyone's expectations. Managers, despite their low pay, said that working for the funds is a decent job. The World Bank Expert Group (2007) confirmed the low management salaries and the fact that 30%–40% of the interest income goes to staff salaries. Moreover, because of the small amount of the funds and the low interest rate, interest income can hardly cover normal operating expenses.

Credit risk control. Credit risk is another important factor that affects the sustainability of the VDMAFs. Despite the low interest rates and the low staff salaries, the VDMAFs can sustainably develop, provided there are repayment guarantees. Although the Xiaojin project has no reserve fund against repayment risk, the four villages have set aside funds for the emergency needs of the villagers. Some villages also allow for the unexpected. Article 7 of the management charter of Dasuo village, for instance, provides for the possibility of extending repayment terms, with management approval, if households cannot repay their loans on time because of natural disasters.

Therefore, the Xiaojin project can develop sustainably, and institutional arrangements have been made and management systems designed to help secure the repayment of loans and reduce credit risk. Accountability mechanisms have gradually developed as the villagers have become much more familiar with the workings of the VDMAFs, largely through the efforts of Shuguang Development Center staff, and have gained a greater sense of ownership. For example, the villagers require the management committee to publish its work regularly, playing a significant role in supervising the work of the council and the members of the board of supervisors.

Hoff and Stiglitz (1990) proposed screening, supervision, and contract implementation for credit risk control. After loans are issued, it is necessary to oversee their use and adopt effective means of ensuring that the contracts are implemented and the loans are paid. A fourth innovation is fund rotation, to solve the issue of fairness in the use of funds.

- **Screening.** The four villages screen loan applicants in two ways: through the loan-use requirement and through the joint-guarantee mechanism. According to the provisions of the management charters of the villages surveyed (Table 15), the four villages compel borrowers to use the VDMAF loans for productive purposes. All four villages have also adopted a joint-guarantee mechanism, with Meinuo and Dasuo villages asking for a guarantee from five households, and Daping and Chengshui villages, a guarantee from two households. Since information is symmetric and transparent in rural society, applicants with profitable projects can be identified and high-risk farmers can be screened out with the help of the joint-guarantee mechanism, effectively overcoming the adverse selection effects in the credit market.
- **Supervision and contract implementation.** The four villages bundle joint guarantees, loan limits, future borrowing opportunities, and other subsidies. All four clearly define the repayment responsibilities of borrowers and guarantors in their management charters. For example, Dasuo village cancels the membership of both borrower and guarantor if the loan is not repaid by the due date. Chengshui village has penalized guarantors who violate their commitments by stopping a 2-year loan and forcing the guarantors to fulfill their obligations through the courts. The pilot villages, particularly Daping village, also link joint-guarantee mechanisms with future borrowing opportunities, although this arrangement is not strictly implemented in some places. If a household does not repay its loan, both the household and the guarantor can no longer borrow in the future. Thus, two borrowing opportunities are lost. The repayment obligations are also heavier for the guarantors.
- **Bundling repayment and subsidies from the national government,** an effective institutional arrangement, Dasuo village blacklists late-paying borrowers after a grace period and recommends deductions in their national subsidies. All four villages make good use of local organizational resources, such as the village committee.
- **Fund rotation.** This approach has been proven to reduce the high transaction costs generated from internal distribution. Article 22 of the management charter of Chengshui village keeps the proportion of borrowing households at no more than 50% of total households (Dasuo and Meinuo villages have a similar requirement), stipulates the rotation of the funds two or three times a week, and gives all farmers at least one borrowing opportunity. Article 8, para. 6, of the management charter of Meinuo village calls for compliance by fund members with the principle of batch borrowing. Dasuo village allows one in every five joint-guaranteed households to borrow in each round; as there are 132 households in the village, 26 households can borrow in each round. The survey respondents all considered this borrowing arrangement to be the fairest means of distribution.

This preliminary analysis of interest rates, fees, and credit risk control does not warrant concern about the sustainability of the VDMAFs at this time, like that shown by other researchers (such as the World Bank Expert Group 2007). But it should be noted that, besides the features that lower credit risk, the institutional arrangements also have elements that augment credit risk, such as the relatively large loan amounts (about RMB8,000 for a single loan). In theory, the larger the size of a single loan, the greater the credit risk.

Conclusions and Recommendations

This chapter is particularly concerned with poverty targeting and the sustainability of VDMAFs. It discusses the reasons and gives evidence to show why existing poverty reduction loan projects (poverty discount loans and nongovernment microfinance) fail to target poverty and to develop sustainably, and it analyzes the possibility that endogenous rural financial organizations can realize poverty targeting and sustainable development. Then it introduces the economic and social situation in Xiaojin county, as well as the operation of VDMAFs in four villages in the county, and on that basis emphasizes poverty targeting and the sustainable development of the funds. The chapter presents the poverty targeting problem mainly from the perspective of demand for credit, and then proceeds to discuss the system innovations that have been introduced to control credit risk and help ensure the sustainability of the VDMAFs. In short, the purpose of this study is to explore the conditions and obstacles of VDMAFs to achieve poverty targeting and sustainable development within the economic and social framework of the PRC's poverty-stricken areas.

Conclusions. VDMAFs do not target local poor groups for two reasons: (i) the poor groups are constrained by the local market and by geography, as well as by their skill limitations and their lack of demand for loans for productive purposes; and (ii) even if there is demand for productive capital, farmers are not satisfied with the contracts offered by VDMAFs because of a certain degree of elite control, an argument supported by the background of members of the council and the board of supervisors, and by contractual arrangements that serve the interests and preferences of more affluent groups. Unlike existing nongovernment microfinance projects with their indirect targeting mechanisms (such as differential interest rates and loan sizes), the Xiaojin county project does not have a separate institutional arrangement for the rich, who thus have relatively easy access to the funds. This indicates that even if VDMAFs are managed in a democratic way, there can be no assurance that VDMAF policies or projects are pro-poor. The experience of the four sample villages shows that, to target the poor, it is necessary to include them in the project and reflect their preferences and interests in the design of the management charter and loan contracts.

Low interest rates and low compensation for management personnel are two factors that directly hinder the sustainable development of VDMAFs, and the large size of the loans increases credit risk. But institutional innovations made in VDMAF operations, such as the joint-guarantee mechanism, borrowing limits, and links between loan repayment and future borrowing opportunities and national subsidies, greatly reduce credit risk and thus forestall the negative effects of adverse selection, moral hazard, and high cost of implementation. With repayment guarantees, VDMAFs may still develop sustainably. An important implication is this: Xiaojin VDMAFs are well embedded in the local economic, political, and social structure, and they reduce the running cost and risk of the entire project. Most obviously, they take advantage of formal organizational resources—the two committees. In this regard, unlike other research (such as World Bank Expert Group 2007), this study does not consider the involvement of the two committees unreasonable; in fact, the Xiaojin project confirms the importance of the two committees in the sustainable development of the VDMAFs.

Their lower operating costs make the sustainability of the VDMAFs an unnecessary concern for now. But the real challenge lies in extending the services downward so that more poor groups can benefit from the project. Therefore, on the one hand, the VDMAFs must connect with the industrial economy to cultivate the productive credit demand of poor groups; on the other hand, proper and democratized farmers' organizations are necessary, to protect the interests of the poor groups. If these activities require additional expenditures, government should pay the bill. While no conclusive evidence of elite capture was found, the government

needs to pay to motivate the elite to be more socially responsible instead of benefiting from the project to the detriment of the poor.

Generally, VDMAFs have not succeeded in targeting the poor. Decentralization and community autonomy have reduced running costs and strengthened sustainability, but have left the poor at a virtual disadvantage. Therefore, experience shows that it is necessary to achieve balance between poverty targeting and sustainable development. Perhaps the concept of community-oriented development is more suitable for fiscal poverty reduction projects than credit poverty reduction projects. It should be noted that the conclusions of this chapter apply only to poverty-stricken areas like Xiaojin county. Further study is needed to extend the conclusions to other areas.

Recommendations. Given the above findings, the following policy recommendations are put forward:

- **Credit demand.** Since poverty-stricken areas lack credit demand for productive purposes, the government should consider strengthening other (noncredit) policies, such as education and health care. It is also necessary to develop the income-generating capacity of the poor in other areas besides finance.
- **Elite control.** The management rules of the VDMAFs in many cases favor elite groups in the community instead of the poor, thus deviating from the fund objective. The government needs to protect vulnerable groups through policy and institutional arrangements.
- **Sustainable development.** Sustainability should be a clear goal of VDMAF operations. The sustainable development of the funds does not receive enough emphasis in the four villages surveyed and is not specifically stipulated in their management charter. Furthermore, the future development of the funds demands attention to the key issues of fund use rates and staff compensation, which affect the sustainable development of VDMAFs. In this regard, it is suggested here that the government adopt certain incentives to motivate the VDMAF staff, within the framework of community-driven development, to keep them from compensating themselves with the fund benefits (World Bank Expert Group 2007).

The case study in this chapter provides only preliminary findings for the analysis and discussion of VDMAFs and the deficiencies of credit poverty reduction programs in the PRC. Further research on VDMAFs is needed. Future research directions are as follows: (i) on the theoretical side, there is a need to build a heterogeneous participation model to illustrate the differences in participation between elite and nonelite groups, and to explain the conditions under which endogenous credit organizations can target the poor; (ii) experience research should focus mainly on the processes of democratic participation and credit participation; and (iii) improving, amending, and supplementing the data should be a top priority, to allow verification of some of the conclusions of this study.

Lessons and Future Directions

Summary

Financial regulations. Regulatory standards—minimum registered capital, required reserves, and capital adequacy ratio—have been lowered for RFLs to give farmers and rural institutions better access to formal credit. But regulatory focus and RCC supervision must improve. Current regulations are concerned more with entry and compliance, and less with operating risks; cooperative financing, including the concentration risk of RCCs, is not specifically regulated. Since the reform of 2003, RCCs have been managed and regulated by the CBRC, RCC provincial federations, and local governments, with ill-defined jurisdictional boundaries between them. In addition, inadequate oversight of banking supervisors has led to instances of collusion between the supervisors and those supervised.

Micro and small enterprise financing. As in some other countries, risk concerns and inappropriate lending methods hampered access by MSEs to formal finance in the PRC. Innovations in relationship lending, the use of soft data, and inventory and accounts receivable financing have helped to reduce the credit constraint on MSEs, and innovations in agricultural chain credit have relieved credit rationing for agricultural lending. The successful application of IPC and other models of MSE lending in the PRC indicates that, even within the current banking structure and regulatory framework, small and medium-size banks in the PRC can expand their lending services to MSEs in a commercially viable way. Using cash flow analysis and soft data, city and rural commercial banks have become major providers of credit services to urban MSEs.

Agricultural value chain financing. The case study shows that financial institutions in the PRC can reduce the risks and costs of agricultural lending through agricultural value chain financing and agricultural loans provided through dragon-head enterprises and rural cooperatives. However, at this early stage of development of agricultural value chain financing, its risk control mechanisms remain unclear to many financial service providers. Moreover, such financing in the PRC is designed mainly for farm producers and not for upstream and downstream entities in the agricultural supply value chain.

Nongovernment microfinance institutions. Begun in the early and middle part of the 1990s, most NGO MFIs in the PRC have not been sustainable financially and as institutions. Many small-scale MFIs in the PRC shoulder rising nonperforming loans, financial losses, and capital avoidance because of their limited scale of operations, poor corporate governance, and the frequent intervention of local governments. CFPA Microfinance, however, has grown substantially since 2005 as a result of the following innovations: (i) a two-layer management structure, with county branches under the direct control of the head office in Beijing, which appoints and manages key branch staff and controls the use of credit funds; (ii) a computerized management information system for monitoring loan and accounting operations in the counties; and (iii) loan products and services tailored to clients' needs. Large-scale, specialized farming and increased rural-urban migration present new challenges for the products and services of CFPA Microfinance.

Village development mutual aid funds. VDMAFs in the PRC, sponsored by the LGOP and the MOF, are exogenous CDFs targeted at rural poor households. The case study found two reasons why VDMAFs have not reached their target. One is the fact that many of the rural poor are constrained more by income-generating opportunities related to the supply of family labor, available land, and technology than by the inaccessibility of credit. The other reason is elite capture: the contract terms in many villages, particularly the low rates of interest, and the relatively large amounts of the loans favor more affluent groups. Most of the funds are not sustainable, given the low interest charged, the small scale of lending, and the higher running costs and credit risks associated with the relatively large, low-interest loans. But in some places VDMAFs may have served some purpose, such as promoting community participation or developing agricultural cooperatives.

Major challenges in the PRC's rural and microfinance markets. The PRC's rural and MSE lending markets face specific challenges different from those confronting the rural financial markets in other less-developed countries. One is the lack of physical collateral for rural lending, as farmland is owned by collectives and farm families are not allowed to use land and farmhouses as loan collateral. Another is the fundamental change taking place in the PRC's rural financial markets brought about by rural out-migration and accelerated urbanization. The market for mixed micro loans for rural households is shrinking. Most migrant workers, on the other hand, do not have formal residence in the urban areas and therefore have little or no access to social security and other urban social services. A third challenge is posed by the newness of agricultural insurance against credit risks, which covers only a few cropping and animal products, determined largely by the changing subsidies from the government. These specific challenges have contributed to more general challenges to the rural financial system in the PRC, as discussed below.

Policy Recommendations for Further Reforms

Principles

The reforms since 2005 have laid the groundwork for future reforms in rural finance in the PRC. The reforms in the next stage will have a clear direction and a feasible road map. Improving outreach to low-income earners and farmers while maintaining the financial sustainability of RFIs and safeguarding the soundness of the financial system should be the goal. A number of principles should be upheld to achieve that goal.

First, innovations made since 2005 in rural financial institutions, products, and procedures should continue. Government support for financial innovations and their replication should increase.

Second, future reforms should follow the market-oriented approach to reform since 2005, to create a diversified and efficient rural finance and microfinance system. The liberalization of RFMs should continue and deepen, and should include reforms in lending and deposit interest rates, the gradual lifting of restrictions on the entry of qualified rural finance and microfinance institutions, the removal of geographic and other restrictions, and the encouragement of competition in the rural finance and microfinance markets.

Third, the development of RFMs should keep pace with overall rural economic reforms, especially emerging economic opportunities, and meet the new demand for financial services. As incomes grow and the economy undergoes structural adjustment, more farmers in the PRC will migrate from rural to urban areas, more land will be consolidated, farms will

grow larger, and more agricultural cooperatives will emerge. During this process, the demand for loans from dragon-head enterprises and from new agricultural cooperatives will tend to increase, and so will the use of loan proceeds for agricultural technology, agricultural product development, irrigation, agricultural processes, and marketing. In view of the close links between the financial and real sectors, the development of new rural organizations, such as agricultural producers and marketing cooperatives, and the new contracting arrangements between producers, processors, and traders will fuel rural financial innovations to a large extent. Interlinked market transactions, including agricultural chain lending, will be an important part of the innovations.

Fourth, risk awareness and risk mitigation and prevention, in relation to RFIs and the overall financial system, will be the key to the success of innovations in rural financial institutions and products. The government should take precautionary measures when making changes in market entry and exit regulations, along with other relevant legislation. Starting with pilot projects and gradual replication is the right approach to rural financial reform. For the pilot projects, the government should ensure effective consumer protection and provide better credit bureau coverage.

Finally, to create a more enabling environment for innovations in rural finance and MSE lending, the lending rate ceiling of RCCs on rural household lending, currently capped at 2.3 times the base lending rate, should be removed. Pilot programs with land-use rights as collateral for loans could be undertaken before farmers are granted land title, as that is expected to have a profound impact on agricultural value chain financing and more specialized, large-scale farming. Land registration for individual households should be improved, and a market for land-use rights developed to facilitate financial transactions. Financial supervision at the county level, currently a weak link, needs to be strengthened immediately, with more trained staff. Investments must also be made in supervision facilities and modern networks. Agricultural insurance schemes should be promoted to reduce the agricultural risks associated with weather and diseases. Weather-indexed insurance and agricultural credit schemes could be pilot-tested in the PRC as well. Finally, market entry permits should be issued to qualified private capital and social capital to strengthen competition in rural financial markets and thereby improve market efficiency. After a deposit insurance facility is created in the PRC, RFIs with a high percentage of nonperforming loans and chronic financial losses should be allowed to exit the market.

Recommendations

Encourage market entry to increase competition. Private capital should be treated the same way as state capital and its entry into the rural finance and microfinance markets should be encouraged. Private banks, including RFIs or microfinance banks set up with private capital, should be allowed to operate in the PRC. Inter-enterprise lending should be allowed as well. The entry of private banks has important macroeconomic implications. Private funds can be channeled into the service sector, for industrial upgrading and economic adjustments. Competition in the PRC's financial and rural financial markets will increase as a result, and an alternative to real estate investment will be made available, to help in rebalancing.

The MCC pilot project, which has been operating for over 5 years, can be regarded as an experiment and a first step toward private banking in the country. It has attracted a large amount of private capital into microfinance and SME lending. The pilot project can be improved in the following ways:

- Territorial restrictions on MCC operations should be gradually relaxed. In some provinces, such as Inner Mongolia, well-performing MCCs have been granted a larger operational area. In a step-by-step approach, MCCs would be allowed to operate first within a prefecture.
- The borrowing limit for MCCs can be raised. In other countries, the leverage for lending-only institutions is between 3% and 4%. In the case of the PRC, the leverage could be raised to 100%–200%. The actual leverage for many MCCs in the PRC is below 50%, on average. They borrow from banks up to around 10% of their equity capital—far below the borrowing limit for similar institutions in other countries. Both the bank regulator and commercial banks are concerned about the risks of lending to MCCs.
- Changes in territorial restriction and leverage can be linked to the financial soundness of individual MCCs and their outreach to microentrepreneurs in both rural and urban areas. Well-performing MCCs can eventually be transformed into formal microfinance banks.
- Nonprudential regulation and supervision should improve. MCCs are currently regulated and supervised mainly by the provincial governments, and the regulation varies between provinces. The provincial governments are short of staff for this job, and many of those on the job are insufficiently trained. More training is needed for supervision.
- As the South African experience shows, disclosure and enforcement, with heavy penalties (criminal charges) for explicit or implicit deposit taking, are the key to the healthy development of lending-only institutions, especially where supervising capacity is weak.

The CBRC, for its part, plans to set up 1,000 or more VTBs in the PRC over the next 2–3 years, after the VTB pilot project. More efforts should be made for VTBs to serve microentrepreneurs in the rural and urban areas. Innovative lending products and procedures and an improved management and incentive mechanism for loan officers and other lending staff are needed to extend the services to small enterprises and low-income groups. Attention should also be given to the potential risks associated with VTBs, especially in cases where one small or medium-size bank sponsors more than 10 VTBs. Regional banks having difficulty obtaining a license for new branches should not use VTBs mainly to widen their geographic reach.

Improve existing and traditional institutions. The establishment of an efficient rural financial market in the PRC rests on the further reform of RCCs. Their ownership should be clarified and corporate governance should improve. Share distribution should be more concentrated, and major strategic and management decisions should be made by the board and the shareholders, rather than by provincial government departments. The management of the county RCC union (RCCU) should also be decided by the shareholders and the board. Provincial RCC federations should be transformed into service providers, offering training, information technology, payment, and networking services to the county RCCUs.

However, a number of difficulties hamper the further reform of RCCs, given their complex origins and the major changes introduced in the last round of RCC reforms. *First*, the ownership of the county RCCUs must first be clarified and internal control of these unions must be established before management responsibilities are transferred from the provincial RCC federation to the shareholders or members of the RCCUs. RCCs that have been transformed into RCBs and RCOBs could become independent operators while the remaining RCCUs improve their corporate governance and strengthen their internal controls. Once these RCCUs also become independent operators, the provincial federation could be turned into a service center. *Second*, it is virtually impossible for the current RCCUs

to become real cooperatives because of their history and size; instead, most RCCs should be turned into small rural banks to serve the local communities and farmers. *Third*, the close relationship between the RCCs and local governments suggests that, in a future reform of RCCs, local governments could become a minority shareholder of some RCCUs, through a government-controlled corporation. The transformation of urban credit unions into urban commercial banks provides a good example. *Finally*, the consolidation of all the RCCUs in a province into a single rural bank is not recommended, in view of the implications for the flow of funds and for RCC outreach.

In addition to RCC reform, the government should also encourage the efforts made by ABC in recent years to expand its lending operation into the rural areas through innovations in its financial products and services, as well as the microcredit operations of PSBC, a strong competitor of RCCs and urban commercial banks in the urban and rural microfinance markets.

Develop community-based rural cooperative finance and policy finance to improve competition and market efficiency. From an institutional perspective, the reform of formal and lending-only institutions alone can hardly create a competitive rural financial market to meet the demand from a spectrum of rural clients in the PRC. Community-based rural cooperative finance and policy finance will be needed to serve the very poor and more remote communities in the PRC.

There are two possible avenues for the development of rural cooperative finance in the PRC: village-based CDFs and agricultural cooperatives. For CDFs pilot-tested by the LGOP and the MOF, more funds should be mobilized from the local community to expand their sources of funds and to reduce the moral hazard problems caused by exogenous funds. The pilot project in Yilong county of Sichuan province provided lessons regarding membership shares, which should be examined in more detail for possible replication. Credit experiments have also been undertaken among members of agricultural cooperatives. These pilot projects should continue, and lessons should be learned from them.

Policy finance could be developed first for long-term loans in rural PRC, mainly for irrigation, rural roads, agricultural machinery, etc., while commercial banks, constrained by their sources of funds, issue mainly short-term loans. The Agricultural Development Bank is moving in this direction.

Traditional and new institutions can be pushed toward the lower-end market in several ways, from an institutional perspective. *First*, small and medium-size banks and financial companies in the local areas are more likely to serve small enterprises and microentrepreneurs in those areas. For this reason, government policies and regulators should assist in their development. *Second*, as more institutions enter the rural financial markets, competition will tend to drive some of them into the lower-end market. *Lastly*, financial institutions should achieve scale in operations to reduce the costs of microloans. Therefore, the government should not encourage the consolidation of all MCCs in a province into a single bank. Well-performing MCCs should be allowed to expand their territory into a prefecture for microfinance operations. But there is little need for giant national MCCs across provinces.

For an efficient rural financial market, poor-performing RFI, including MCCs with negative equity, should be liquidated and withdrawn from the market. It must be understood that the failure of a few RFIs does not mean that the MCC and VTB pilot projects have failed. Deposit insurance should be established in the PRC as soon as possible. The strict territorial restrictions on MCCs and VTBs should be lifted as well, so market competition can occur among them. Mergers among RFIs should be encouraged. Regulators can offer limited

services to new RFIs, then expand service approvals and regulatory requirements once the institutions are ready. As the RFIs grow, both their services and their accountability to regulators and the public will also grow.

Encourage innovations in outreach products and processes. Institutional innovations and market reforms are necessary but may not be sufficient for RFIs to reach poor and small farmers. Innovations in loan products and procedures can facilitate the outreach of RFIs.

Loan support for poor households in the poor and remote regions of the PRC has important implications for overall rural financial reforms in the PRC. The lack of access of poor households to formal loans has often been used as an excuse for the delayed implementation of market-oriented rural financial reforms. Poor farmers have also been unfairly blamed for the nonperforming loans and financial losses of some RFIs.

To create the conditions for rural financial reforms, market segregation is important. The markets for rural finance and microfinance in the PRC can be divided into the following: (i) loans to poor rural households in the poor regions of the PRC; (ii) rural and urban microloans, including loans to small enterprises, microenterprises, and rural households with diversified sources of income; (iii) agricultural loans, mainly for farm production; and (iv) rural consumption and housing loans. The lending methods adapted from international microfinance models that are now being used by CCBs and the PSBC mainly for loans to urban and rural small traders and processors can be put to use in providing financial sustenance to urban and rural microentrepreneurs engaged in nonfarm operations.

Lending problems in poor rural regions of the PRC can be solved through (i) village community fund loans to villagers, including poor villagers, and separate agricultural technical training and support; (ii) subsidized poverty reduction loans, which are essentially blended loans and grants for those who are still significantly poor (living below the poverty line) but have the capacity to work and pull themselves out of poverty; and (iii) commercial microfinance, to give access to loans to better-off households and microenterprises in these regions. Both village community fund loans and subsidized poverty reduction loans are financed partly by the central government and implemented mainly by the LGOP. These loans should continue to receive help from the government. As RFIs are not forced to lend to poor farmers, these institutions should not use their loans to rural or poor households as an excuse for poor performance or for an increase in state subsidies.

More support should be given to migrant workers and their families. Remittance-based borrowing should be developed by RFIs, especially the PSBC, which channels the bulk of the domestic remittances of migrant workers. Bank restrictions on borrowing by migrant workers with no formal residence should be removed.

Microfinancing methods designed for nonfarm operations should not be applied directly to agricultural lending. Farms in many areas of the PRC are extremely small in size, agricultural profitability is relatively low partly because of low labor productivity, and agricultural income is unstable because of weather and market pricing risks. In such market conditions, high-interest agricultural loans may lead to problems of adverse selection, moral hazard, and lack of incentive to repay the loans. The key here is reducing the transaction costs of agricultural lending by RFIs. The success of agricultural loan programs depends largely on the efforts of the government and RFIs, as well as public-private partnerships, to improve the market conditions for agricultural products. To enable farmers to obtain loans for agricultural production in the PRC, the following should be developed:

- Agricultural insurance, to reduce the risks associated with weather conditions. Commercial service providers will need initial subsidies from the central government or local governments to develop the market. The insurance will eventually cover a wide range of agricultural and animal products and be extended to more areas.
- The futures market, to mitigate risks related to market prices.
- New farmers' organizations, to help increase farmers' incomes, reduce their risks through bulk procurement and sales and cooperation in production, and reduce RFI lending costs.
- Innovations in RFI loan products and procedures, including agricultural value chain lending, lending through cooperatives, changes in collateral and guarantees, and loans to or through dragon-head enterprises.

Efforts should also be made to increase the demand for loans from poor and low-income farmers. Lacking investment opportunities or human capital, many poor farmers have little demand for income generation loans. Because of the policy bias against rural areas, many rural areas lack infrastructure and market fundamentals for sustainable economic development, and therefore also lack effective demand from households and microenterprises for financial assistance. In a dual economy, formal RFIs understandably prefer to provide services in urban areas. To break that vicious cycle, the government, within the framework of integrated urban and rural development, should strengthen fiscal support for rural and underdeveloped regions, improve fiscal support for RFIs, and reinforce the planning, coordination, and monitoring of agricultural subsidies. Agriculture and the farmers would be better served if they were to increase their capacity to manage risks through public health services and health insurance, and crop and livestock insurance. Government support could also be given to education, agricultural extension, and agricultural cooperatives. Conditional cash transfers and other direct fiscal grants would help solve problems related to the high cost of health and education.

The application of new RFI technologies—including branchless banking in the form of mobile and electronic banking—should be encouraged, to reduce the costs of scale operations in microlending services to rural households and microentrepreneurs.

Set up specialized wholesale funds. Specialized wholesale funds, if run and managed properly, can facilitate the development of MFIs and RFIs by sustaining low-risk institutions that have high repayment capacity and help them increase their outreach to microentrepreneurs. The experience of other countries has shown that wholesale microfinance funds can be set up by domestic private or institutional investors, overseas investors, or joint ventures, which should bear the risk of the funds. Wholesale microfinance funds should be allowed to provide wholesale loans to MCCs or to invest in MCCs, as well as to provide wholesale loans and investments to registered MFI NGOs and to village development funds. Similar funds can also be set up for MFI NGOs.

Make the credit bureau system available to microcredit companies and nongovernment organizations engaged in microfinance. The credit bureau system under the PBOC should also be made available to MCCs and microfinance NGOs, to reduce poverty and support the development of small enterprises and microenterprises.

Encourage links between banks and microfinance institutions. Such links are important for credit services to rural households and microenterprises. MFIs that operate mainly at the county level and below usually have better information about rural households and microentrepreneurs, but lack funds to expand their services. Large commercial banks, on the other hand, have more funds but less information and knowledge about microentrepreneurs.

Strategic relationships between the large commercial banks and local MFIs would therefore be useful to both parties in serving the credit needs of microenterprises and small enterprises.

Provide fiscal support for credit service outreach. Tax concessions available to commercial banks in the small-lending business, including VTBs and RCCs, should be extended to MCCs and MFI NGOs.

Promote microinsurance services. Given the low awareness of microinsurance services among low-income earners in the PRC and the high operating costs of commercial insurance providers serving rural households and microentrepreneurs, the government could promote the development of microinsurance through initial subsidies and policy support.

Strengthen training and capacity building. There are not enough qualified managers and loan officers to cope with the rapid development of MFIs in the PRC. Training and capacity building for microfinance and rural finance need to be strengthened. Government bank regulators and PBOC staff should undergo more training so that they gain a better understanding of the operation of rural finance and microfinance. RFI and MCC supervisors at both the central and local levels need to be trained as well.

The practice of using different lending rates for different institutions should also be changed or refined. The ceiling on RCC lending rates for households should be removed so that RCCs can lend up to four times the base rate. With their higher operating costs, MFIs should be allowed to charge a slightly higher rate for their microloans.

To support the development of rural households and microenterprises, the disbursement of RFI loans to rural households and microenterprises should be exempt from direct controls by bank regulators so that loans to these sectors are affected less by macroeconomic measures.

Different regulatory and supervisory measures should be applied to microloans. In general, RFIs should simplify microloan application and approval. The regulator should encourage microlending by RFIs by setting a lower threshold for loan application and approval, reducing the costs for these institutions, and lowering the collateral and guarantee requirements for loan access.

Lessons

This study on rural financial innovations in the PRC has yielded valuable lessons with important implications for further reforms in rural finance in the PRC, and in the less developed countries of Asia and the world.

Innovations in rural finance require the removal of the interest rate ceiling. The PRC began liberalizing interest rates in 1996. The lending rate ceiling was not removed until the early 21st century. Currently a de facto lending rate ceiling, at four times the base rate, remains for lending in the PRC. The gradual lifting of the lending rate ceiling, given the higher risk and high transaction costs of microlending, has enabled city and rural commercial banks to penetrate the MSE lending markets in the urban and rural areas.

Market competition is important in pushing formal financial institutions to provide financial services to MSEs. Commercial banks are unlikely to move into MSE finance unless they come under increasing pressure from market competition. In the PRC, the relatively

small city and rural commercial banks have moved into MSE financial services as competition from larger banks has grown. The high funding costs of small banks have also been an adverse factor in their MSE lending.

The development of poverty-oriented microfinance NGOs needs scale and continuous support. Microfinance NGOs for poverty reduction have waxed and waned in the PRC in the last 2 decades. The rapid growth of CFPA Microfinance amid a declining microfinance NGO sector indicates that its two-tiered governance structure, expanding scale of operations, and continuous fund support from donors, national governments, and financial institutions are important for the sustainability of poverty-oriented microfinance NGOs. County-level, small-scale MFI NGOs cannot survive on their own.

MFI NGOs that helped introduce the Grameen model of microfinance into the PRC should receive more support. Wholesale funds from banks and specialized funds should be made available to well-performing MFI NGOs as these institutions provide competition in poor rural areas. Poor and low-income farmers in the PRC can benefit from their services.

Exogenously imposed CDFs, which suffer from elite control, are hardly viable. VDMAFs in the PRC have expanded rapidly, with funding and technical support from donors and national governments. However, many exogenously imposed CDFs have suffered from elite control in the villages, leading to low rates of interest charged, high operating costs, and poor targeting. It is difficult for these CDFs to survive beyond a project period of 3–5 years. Endogenous community funds, derived from farmer cooperation in farm production and marketing, should be promoted, with government support in the form of registration cost and tax concessions.

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Chapter 3

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Access to Finance

Microfinance Innovations in the People's Republic of China

The People's Republic of China (PRC) has adopted a more market-oriented approach by promoting rural microfinance, pursuing bottom-up innovations such as group lending, various forms of guarantees, new financial products based on purchase orders and insurance policies, and better incentives for agriculture funding from financial institutions. In 2009, the PRC sought the assistance of the Asian Development Bank to study how to optimize policy choices in rural finance using both top-down and bottom-up approaches. This report presents the findings of that rural microfinance study, including valuable lessons learned from several pilot microlending programs conducted in selected provinces in the PRC. It then analyzes outstanding issues in the country's rural and microfinance markets that need to be addressed more vigorously.

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ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to approximately two-thirds of the world's poor: 1.6 billion people who live on less than \$2 a day, with 733 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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ASIAN DEVELOPMENT BANK

6 ADB Avenue, Mandaluyong City

1550 Metro Manila, Philippines

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