China in the Global Economy



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CHINA IN THE GLOBAL ECONOMY

Rural Finance and Credit Infrastructure in China

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FOREWORD

China's rural financial system has changed dramatically over the last twenty five years, but rural financial reforms were lagging behind changes in the real economy and required further economic transition. As in other countries moving towards a market economy, the reform of banking systems and the creation of efficient financial markets in China continues to be among the most difficult reform issues. Poorly functioning official financial markets push rural population to rely on informal institutions. This set of circumstances encouraged the Chinese Ministry of Agriculture to request the OECD to organise the *Workshop on Rural Finance and Credit Infrastructure in China* to discuss the ways of establishing a comprehensive and efficient rural credit system providing finance for both the commercial (agricultural and non-agricultural) sector of the rural economy and small-scale farming in China.

The Workshop was held at OECD headquarters in Paris on 13-14 October 2003. It brought together over 60 participants, including a high-level Chinese delegation representing various government and research institutions dealing with rural finance. The World Bank, Food and Agriculture Organisation, European Bank for Reconstruction and Development, Asian Development Bank, PlaNet Finance (NGO on finance issues) and 13 OECD member countries also participated. The meeting was prepared by the Division for Agricultural Policies in Non-Member Economies of the Directorate for Food, Agriculture and Fisheries in close co-operation with the Outreach Unit for Financial Sector Reform of the Directorate for Financial and Enterprise Affairs and the Chinese Ministry of Agriculture. The Workshop benefited from a financial contribution from the Japanese Ministry of Finance.

While the Workshop was prepared within the OECD programme of co-operation with China, it also provides an extension to a long-standing policy dialogue between OECD members and countries moving from centrally planned to market-oriented economies on issues of rural finance and credit. This dialogue began in Paris (1997), moved to Moscow (1999) and was continued in Portorož (2001).

These proceedings present a summary of the discussions, together with the papers presented by Chinese and international experts. Each of the nineteen papers and the five additional background papers is preceded by an abstract to orient the reader. As the present volume demonstrates, the Workshop provided a unique venue for an overview of rural finance reforms by Chinese policy makers; the latest results of research and surveys undertaken by Chinese and international experts; and the results of reforms in other emerging and transition countries relevant to China.

These proceedings are produced under the auspices of the Centre for Co-operation with Non-Members of the OECD as part of its programme of co-operation with China. This work is published under the responsibility of the Secretary-General of the OECD.

Stefan Tangermann
Director
Directorate for Food, Agriculture and Fisheries

William Witherell
Director
Directorate for Financial and Enterprise Affairs

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TABLE OF CONTENTS

FOREWORD	3
EXECUTIVE SUMMARY	7
OPENING STATEMENTS	13
Kiyo Akasaka, Deputy Secretary-General, OECD	17
SESSION I: SETTING THE FRAMEWORK: WHY IS RURAL FINANCE AN ISSUE IN CHINA?	21
The creation of a favourable environment for investment in rural China: current situation and future prospects – Jun Han	23
Institutional issues and prerequisites for efficient savings mobilization and allocation in rural and lesser developed regions in China – David Scott and Kathleen Druschel	
The system of Chinese rural financial organisations: achievements, shortcomings and institutional renewal – Hongyu Zhang	51
Financial system and financial regulatory policies in China and their impact on rural finance reform – John Thompson	67
SESSION II: PRIVATE AND CO-OPERATIVE BANKING FOR CHINA'S RURAL AREAS	85
The difficulties and policy reform in China's rural finance – Xiaohe Ma	87
Development of sustainable credit co-operatives in China – Gerard van Empel and Lissy	Smit 97
Rural banking in emerging Asian markets: lessons for China – Paul Dickie	111
The regulatory framework for rural credit co-operatives: the role of Chinese supervisor authorities – Wenjun Wang	
From old to new roles of government in establishing sound rural financial institutions – Jacob Yaron	
SESSION III: COMPLEMENTARY COMMERCIAL CREDIT SCHEMES AND INSTITUTIONS IN RURAL AREAS	153
Economic and financial transformation of rural China and diversification of rural financial institutions – Guangwen He	155
Challenges in government facilitated crop insurance – Jerry Skees and Barry Barnett	172

Pre-conditions for successful contract farming and other trade/credit arrangements between agribusiness and farmers — Anthon Slangen	. 188
Innovations in micro-finance in South-East Asia – Gilberto Llanto and Ryu Fukui	. 201
Vertical contracting and farm finance: lessons from transition countries – Johan Swinnen and Liesbeth Dries	. 218
SESSION IV: MICRO-CREDIT INSTITUTIONS AND ARRANGEMENTS FOR RURAL AREAS	. 235
Active informal financing in rural China: a case study of Rotating Savings and Credit Associations in a Chinese village – Biliang Hu	. 237
Micro-finance, poverty alleviation, and financial reform in China — Albert Park, Changqing Ren and Sangui Wang	. 256
Attempts to implement micro-finance in rural China – Xiaoshan Du	. 271
Rural finance and micro-finance development in transition countries in South-East and East Asia – Ryu Fukui and Gilberto Llanto	. 285
Funding small businesses in Chinese Taipei: from informal micro-finance institutions to formal banking institutions – Thierry Pairault	. 302
ANNEX	. 321
Analysis of the supply and demand for credit funds for peasant households – Fan Chen	. 323
Practical experience with rural commercial banks: a case study of the reform of rural credit co-operatives in China's Jiangsu province – Liangbiao Chen	. 340
The challenges and contradictions currently faced by agricultural insurance in China and some solutions – Na Li	. 345
Rural financial services: the supply and demand situation, issues and strategies – Ming Luo	. 354
The liberalisation of interest rates and increasing farmers' income in China – Haihong Ouyang	. 361
Agenda	. 373
List of Participants	. 379

EXECUTIVE SUMMARY

Background

The rural financial sector in China lags behind the development of the real sector, remains structurally weak, and slows down rural development. This is partly due to the slow process of reform in rural finance institutions, but it can also be attributed to more general problems in the country such as the continued channelling of financial resources to state owned enterprises (SOEs), as well as the growing financial fragility and management challenges facing Chinese banks.

Since the reforms started at the end of the 1970s, consolidated data on rural savings and loans indicate a net transfer of financial resources from agriculture to industry. While it is difficult to determine the extent to which this reflects the response of rational investors moving funds from low to high return sectors or results from institutional deficiencies in the financial and fiscal system, it is clear that both agriculture and rural industries face important credit constraints.

Access to credit is particularly difficult for small-scale farmers. According to a recent national survey of rural families, only 16% of farmers have recourse to formal or informal credit. This is partly due to the lack of collateral (the land belongs to collectives) and the high transaction costs involved in obtaining formal credit, but also to the closing of many local branches of financial institutions and the failure of new ones to emerge. As a result, more than 70% of loans are obtained through informal channels while less than 30% are from financial institutions.

The main objective of the *Workshop on Rural Finance and Credit Infrastructure in China* held in Paris on 13-14 October 2003 was to identify problems and to suggest policies and approaches to develop a well-functioning and sustainable agricultural and rural finance system which would address the diverse needs of the rural and agriculture sectors. Suggestions were made for the development of alternative financial institutions. Various mechanisms and forms of contractual arrangements were discussed. The role of government policy in establishing such a system as well as the advantages and disadvantages of various credit schemes and credit guarantees were addressed. In this context, the experience of OECD countries was found relevant, as were those of Asian and transition countries in rebuilding their rural finance systems.

Main messages of the Workshop

- It is essential to create a network of financial institutions that is able to provide loans to dynamic parts of the rural economy (non-agricultural activities and competitive parts of Chinese agriculture) which will be the main source for growth, employment creation and sustained increase in income for the rural population.
- The rural financial sector remains part of the overall financial system and its reforms need to be embedded in overall financial reform.

- Restrictive policies such as interest rate controls, monopolisation of credit services at the local level, and routing money by state authorities to state enterprises need to be removed before considering new programmes.
- Privatisation of SOEs and financial market reforms should limit the level of funds channelled on preferential terms to the state-owned sector.
- Outflows of finance from rural to urban areas that stem from rational investor decisions will not be solved through financial reforms alone.
- Policy makers need to clearly identify specific objectives, target populations and socio-economic constraints before considering the best policy approach. It is important to establish the appropriate sequencing and pace of reforms.
- The main role for government should be to create a favourable environment; to facilitate savings and investment by efficient investors; to minimise uncertainty and reduce transaction costs on financial and credit markets; and to establish an effective supervision to protect depositors.
- Competition on financial markets is a precondition for inducing innovation and stimulation of efficiency on these markets.
- The government needs to establish an adequate legal framework as well as law enforcement mechanisms. As soon as this is accomplished, the government needs to follow consistent policies and avoid discretionary actions.
- If state interventions affecting credit allocation and its cost are undertaken, they should be targeted and limited in scope and time. Credit programmes supported by the government (e.g. guarantees, subsidies) are just one option and not necessarily the most effective policy instrument for achieving economic growth and/or reducing rural poverty.
- Rural Credit Co-operatives (RCCs) should be self-sustainable institutions, capable of constant innovation to withstand competition of commercial banks. The process of clarification of ownership rights within RCCs needs to be completed.
- While full-fledged private land ownership rights are not likely in China in the near future, farmers should be able to use long-term land use rights as collateral.
- In many transition economies, non-bank loans such as processor and trade credit have proven to be a successful means for extending the frontier of credit available to rural households. The challenge for public policy is to secure transparency of such transactions and to prevent the danger of monopolisation.
- Micro-finance institutions can be a practical instrument for addressing the needs of low-income
 rural borrowers. While subsidies might be needed to reduce the transaction costs of setting-up
 such institutions, once established they should function on a commercial basis and should be
 integrated as much as necessary into the overall financial system and supervision.
- The emergence of informal/illegal lending is of growing importance for small-scale farmers and small businesses in rural areas that lack collateral and are virtually excluded from the formal financial sector. Their rapid development highlights the need for reforms in the formal sector.

 A flexible legal framework and deregulated interest rates for lending and deposits should allow informal institutions to operate legally and to gradually evolve into formal institutions.

Highlights of papers

The opening statement by OECD's Deputy Secretary-General **Akasaka** stresses the successful co-operation between the Chinese Ministry of Agriculture and the OECD in the past years and briefly reviews the joint workshops on various policy themes related to China. He emphasises the necessity of reforms in the financial system for the creation of employment and for the increase in rural incomes and rural development. **Zhang** summarises the reform achievements of rural finance in China in the past decades, admitting that although China has made progress in this area, there are still problems in meeting the increasing demand for capital and loans in the countryside. **Sato** stresses the role of a sound financial system in promoting robust and sustainable economic growth and explains that this is why the Japanese government provides support for financial sector reforms in non-OECD member countries.

In Session I, Setting the Framework: why is rural finance an issue in China? Han provides a comprehensive overview of the sources and use of rural investment in China. He stresses that the total amount of government budget allocated to agriculture and rural areas is low, the amount of support for rural credit insufficient, and the credit structure by rural financial institutions unbalanced. Consequently, farmers have difficulties in obtaining loans. The author emphasises that there is a large room for an increase in government's support for agriculture as China is not applying a wide range of "Green Box" policy measures permitted by the WTO and as the utilisation of "Amber Box" policies is far below the levels allowed through WTO negotiations.

Scott and **Druschel** analyse the institutional fundamentals needed to achieve a commercially sustainable rural financial services in China. They emphasise that such an industry should be built around a core of commercially-oriented financial institutions operating with sound corporate governance structures and the autonomy to develop and price the appropriate products for targeted clientele. They notice that improved prudential regulations and supervisory capacity could promote overall banking sector soundness. Finally, the authors evaluate the actions required to achieve such a vision. They advocate for the implementation of a comprehensive pilot project to provide broadly applicable lessons.

Zhang summarises the reform achievements in rural finance in China over the past two decades, concluding that diversified rural financial and non-financial institutions have been basically formed and various finance instruments have been created. In particular, micro-finance arrangements facilitate small farmers' access to loans. However, no substantial progress with regard to a rural finance management system and the clarification of property rights in rural financial institutions has been achieved. The author discusses several proposals for further reforms, such as a clear distinction between government policy and commercial finance, the transfer of all government policy measures to one bank fully responsible for the implementation of government-supported loans for agriculture and rural areas, the reorganisation and integration of all financial institutions within county areas, and the continued liberalisation of interest rates.

Thompson examines the main problems facing the financial system in China. He suggests that the effectiveness of the reform largely depends on how well it performs three basic tasks: mobilising national savings, allocating credit in an efficient way and encouraging efficient resource utilisation. China has done very well with respect to the first task. But the reform has been less effective in allocating credit in an efficient way. More than 90% of funds go to SOEs while dynamic sectors such as agriculture, small and medium enterprises and the private sector have been on hold. Likewise, the

reform has not encouraged efficient resource utilisation in the real economy. The author identifies main problems of credit misallocation and weak balance sheets in the banking system. He also highlights specific measures that need to be taken to improve the operation of banks as effective market-based credit intermediaries.

Session II explores *Private and co-operative banking for China's rural areas*. Ma analyses constraints in the supply of and demand for rural finance in China. The author observes that supply constraints are much more important and that they mainly result from an insufficient network of official financial institutions. Constraints on the demand side are of secondary importance and are determined by the low degree of commercialisation of economic activities in rural China. The author suggests that if complex financial constraints are to be removed, it is necessary to proceed from both the demand and the supply side.

Van Empel and Smit discuss the preconditions for the development of an effective rural banking system in China, concluding that RCCs are the backbone of Chinese rural finance and that there is no real alternative solution for providing broad access to financial services in rural China, than to restructure RCCs into viable, sustainable rural banks. The authors realise that lessons learned from the European co-operative banking experience are not all applicable to the same degree in China, but with some adaptations they can be applied in the development of long-term strategy for RCCs. In particular, the authors suggest that to develop RCCs into full-fledged sustainable, private rural banks, economies of scales must be realised by further consolidating the fragmented and small-scale institutions into network organisations.

Dickie reviews the microfinance techniques applied in emerging Asian markets, in particular in Bangladesh, which allow meeting the credit needs of poor clientele in cost efficient ways. He suggests that, at the first stage, three types of actions are needed in China to transform informal microfinance arrangements to financially sustainable microfinance institutions: establish a flexible legal framework so that informal institutions and collective organisations can operate legally; deregulate interest rates for lending and deposits; and establish staff training programmes and operational support programmes. At the second stage, a growing number of microfinance institutions would need to gradually evolve into banks to create a new dynamic segment of sustainable rural banks.

Wang examines the basic regulatory framework for RCCs and the shortcomings present in the regulations. In order to promote the healthy development of RCCs while strictly controlling their increasing operational risks, the author emphasises that Chinese supervisory authorities should establish a new regulatory framework. To this end, the author discusses how to deepen reforms of the property rights of RCCs, how to strengthen and improve the supervisory system, and how to clarify the relationship between supervisory authorities and RCCs.

Yaron discusses the new roles of government in promoting rural financial markets and institutions. He presents the Indonesian experience with the transformation of an extremely poor-performing, directed and heavily subsidised credit programme into a self-sustainable rural micro-finance industry providing efficient financial intermediation services to rural borrowers and savers while obtaining a very high return on assets with no subsidy. He concludes that behind this success is a framework shift from narrowly directed, subsidised agricultural credit to financing all income-generating rural activities at a price intended to fully cover financial, administrative and risk costs, thus eliminating the need for subsidies.

Complementary commercial credit schemes and institutions in rural areas are examined in Session III. He highlights the importance of diversified rural finance institutions to meet the demands of various economic agents in rural China brought into operation by the economic transformation of

Chinese agriculture and the rural economy. However, since the early 1980s when reform of the Chinese finance system began, there has been no substantial improvement in this respect. The author suggests ways on how to build a diversified structure, but warns that it is not a panacea for resolving all of the problems concerning the provision of funds for rural areas.

Skees and **Barnett** discuss the crop insurance issue and observe that without considerable government subsidies it is very difficult to insure farm-level crop yields from losses caused by natural risks. They present an alternative form of insurance that makes payments based not on measures of individual farm yields, but on either area yields or some weather events. This form of insurance is referred to as "index" insurance, since payments are triggered by realizations of a pre-specified index measure rather than by realised farm yields. According to the authors, the index insurance provides an effective market-based risk-sharing alternative for agriculture.

Slangen analyses the main features and pre-conditions for successful contract farming and outlines other inter-linked trade/credit arrangements between agribusiness and farmers. He observes that major changes in consumption habits together with the appearance of fast-food outlets and supermarkets provide a main impetus for the rapid expansion of contract farming. The author notes that in many countries state-administered support services have mostly failed and small farmers are facing an environment that is increasingly dominated by private enterprises and international competition. This raises the pressure on farm households to diversify into new agricultural commodities and ventures and imposes on them a need to establish input/output linkages with agribusiness enterprises.

Llanto and **Fukui** highlight the importance of micro-finance and provide an overview of some innovations in micro-finance institutions (MFIs) in south-east Asian economies. They conclude that innovations help reduce the MFIs' transaction costs and risks and make it possible for poor households to smooth investment and consumption fluctuations. The authors stress the critical role of government in ensuring the proper functioning of markets, in effective regulation of supervision of financial institutions to protect depositors, in supporting institutional innovation as opposed to product and process innovation, and in promotion of a competition policy which is crucial to induce innovations.

Swinnen and **Dries** provide some lessons from European transition economies on vertical contracting, in particular on trade and commodity credit, noticing that since the start of transition, access to credit has improved significantly in the best performing transition countries. They recognise that not all financial programmes and contract innovations were successful, but in most cases innovative vertical contracting between processors and their suppliers induced contract enforcement and reduced financial constraints for suppliers through financial assistance programmes.

Session IV addresses *Micro-credit institutions and arrangements for rural areas*. Hu observes that formal financing structures are not able to provide sufficient capital for agriculture and private enterprises in rural China. As a result, informal finance plays an increasing role as a credit provider. Through a personal survey and participation in the Rotating Savings and Credit Association (ROSCA) in a Chinese village, the author provides insights into how this institution functions, concerning membership, funds mobilization and utilization, benefits to members, and interest rate determination.

Park, Ren and Wang examine the potential role of micro-finance for poverty alleviation and financial reform in China. Some small-scale micro-finance programmes have demonstrated that the poor are capable of repaying loans at relatively high rates of interest and that such programmes can achieve financial sustainability. However, an inhospitable legal and regulatory environment and, in particular, an uncertain legal status of micro-finance institutions, a strict financial regulatory environment, and inadequate financial management capacity, prevent programme expansion.

Therefore, if expansion is to be achieved, a truly commercial financial system still needs to be created in China. In the meantime, micro-finance programmes can help push the boundaries of existing practices and accelerate meaningful reform by setting an example of innovative institutional design.

Du reviews the various aspects of micro-finance practice in China, such as the mode and the scale of operations, targeted population and sources of finance. He analyses the different types of micro-finance programmes, the developmental process and the problems encountered. The author suggests strengthening the regulation and supervision of existing programmes, adopting flexible interest rate policies, and shifting from subsidy based to fully sustainable, financially self-sufficient programmes.

Fukui and **Llanto** provide an overview of rural finance and micro-finance development in transition countries in South-East and East Asia. They focus on the institutional evolution and the inter-relation between policies and institutions and identify the diverse effects that formal and semi-formal financial institutions have to reach out to the poor in rural areas as well as the small economic players in the countryside. The authors discuss several policy implications such as the adoption of a market-based policy framework, the removal of restrictions preventing micro-finance institutions to operate, the establishment of legal and regulatory framework for micro-finance, and the improvement in governance of indigenous financial systems.

Pairault examines the stages of transformation from informal micro-finance institutions toward formal banking institutions. The author observes that this type of transformation takes a long time as it took one hundred years in Taiwan. It began in 1895 when the Chinese Imperial government relinquished sovereignty over the island and then ceded it to Japan. It ended in 1995 when Small and Medium Business Banks no longer had to manage ROSCA-based funds. The author stresses that both the Japanese colonial government and, later, the Chinese government have relied on similar strategies in dealing with ROSCA-based forms of finance: by regulating them, by rarely banning them, and by allowing certain types of micro-finance institutions to absorb them.

Five additional papers submitted to the Workshop are annexed to these Proceedings. These papers provide valuable information on the development of and reform in the Chinese financial sector. **Chen Fan** presents the results from a farm level survey focusing on mechanisms affecting credit demand and supply in rural areas. **Chen Liangbiao** describes pilot experiments in the Jiangsu province to transform RCCs into local rural commercial banks. **Li** examines the main challenges faced by agricultural insurance in China. **Luo** analyses factors which weaken the provision of rural financial services and explores ways to improve the supply of such services. **Ouyang** discusses the policy options for liberalising interest rates and the possible effects on farmers' incomes and rural development.

OPENING STATEMENTS

OPENING STATEMENT

By Kiyo Akasaka Deputy Secretary-General Organisation for Economic Co-operation and Development (OECD)

Ladies and Gentlemen,

It is a great pleasure for me to welcome you here in Paris and to open this meeting on behalf of the OECD.

Today we are already looking back on seven years of successful co-operation between the Chinese Ministry of Agriculture and the OECD. The first major meeting held in Paris in December 1996 focussed on China's grain economy and was subsequently followed by four joint workshops dealing with agricultural policies in China and OECD countries, the Chinese agro-processing sector, the integration of China's agriculture into the international trading system and agricultural policies in China after WTO accession. Each of these workshops has been very productive and informative and has achieved our goal of contributing to a better understanding of Chinese reforms in agriculture over the past 25 years and the challenges still ahead for China's agricultural sector. During these past seven years of our co-operation the increasingly open and internationally competitive environment in which future policy choices for China's agriculture will have to be made has featured more and more centrally in our debates.

One issue discussed during our last workshop held in Beijing in May 2002 was the diminishing role of agricultural policies in raising rural incomes after being at the core of substantive increases in farm incomes at the beginning of Chinese economic reforms two decades ago. In the future, reforms in other economy-wide areas will become increasingly important for sustained creation of employment, income rises and rural development. As narrowing the huge income gap between rural and urban areas is among the most pressing issues on China's reform agenda today, with this workshop the co-operation between the Ministry of Agriculture and OECD therefore moved to a broader view on conditions for rural development rather than looking at the development of agriculture and agricultural policies alone.

This brings me to the topic of today's workshop on rural finance and credit infrastructure. Evidence shows that reduced access to finance is an impediment to the development of agriculture as well as creation of off-farm employment and thus enlarged opportunities for income generation in rural areas of many developing and transition economies. Establishing a comprehensive and efficient rural credit system providing finance for both the dynamic, commercial sector of the rural economy (agricultural and non-agricultural) and the sector of small-scale farming, which lacks collateral and is isolated from markets, is one of the major challenges especially for countries like China with vast rural areas and a still dominant role of agriculture for large parts of the population.

The main objective of this workshop therefore is to identify bottlenecks and to suggest policies and approaches to develop a well-functioning and sustainable agricultural and rural finance system, which would address the diverse needs of the rural and agriculture sectors. Doing so we will be able to draw on the experiences of different types of countries, *i.e.* OECD member countries, emerging economies in East and South East Asia as well as transition countries in Central and Eastern Europe, and on that basis discuss the current situation, reform challenges and prospects of China's rural financial sector. We are happy that we can welcome such a broad array of experts here today,

providing us with in depth knowledge on reforms in different countries and all the different forms of rural financing arrangements both traditional and innovative.

So, on behalf of OECD let me again express my pleasure to welcome all the Chinese experts and policy makers, together with experts from OECD member and non-member countries, and from the OECD Secretariat. I am looking forward very much to fruitful discussions leading once more to mutual benefits for all participants like during our previous workshops.

Thank you.

OPENING STATEMENT

By Hongyu Zhang Deputy Director-General Ministry of Agriculture, China

Ladies and Gentlemen,

I am honoured to lead the Chinese delegation participating in the *Workshop on Rural Finance* and *Credit Infrastructure in China* and I would like to thank the OECD for the warm reception and thoughtful arrangements they have made for this conference.

In recent years, the Chinese Ministry of Agriculture has developed a very close and fruitful cooperation with the OECD. Last year, the workshop on *Agricultural Policies in China after WTO Accession* was successfully held in Beijing thanks to the joint effort of the OECD and the Chinese Ministry of Agriculture. The results of that conference provided helpful insights for further adjustment of agricultural policies after China's accession to WTO. Government support for agricultural finance was discussed extensively by many experts and participants. Today, Rural Finance and Credit Infrastructure in China is the main theme and we welcome all of you to make suggestions for the reform of the Chinese rural financial system from different perspectives. I believe that the meeting will be a success and will reach the anticipated goals thanks to the joint efforts of all of you.

Rural finance is an important part of the Chinese financial system. The Chinese government attaches high importance to the reform and development of this sector and after many years of effort, the reform of the rural financial system in China has constantly advanced. Rural financial institutions of all kinds have made huge contributions to the development of the rural economy and have played an increasingly important role in the provision of financial services to agriculture, the countryside and to farmers. The main achievements can be summarised as follows.

First, improvements in the rural financial system have been continuous. Diversified rural financial and non-financial institutions, such as a policy-related bank, a commercial bank and rural credit co-operatives, compose a relatively complete financial system serving Chinese agriculture and the needs of those living in the countryside. Secondly, the functions of rural financial institutions have been constantly enhanced, and various tools and instruments of financial services have been created. In particular, micro-finance loans for peasant households and co-insured loans help farmers to obtain loans on easier terms and have been highly praised by farmers in particular and society in general. Thirdly, the capital quality and operational performance of rural financial institutions have improved. With the deepening of reform and improved internal management, self-development and responsibility, financial institutions are gradually improving the quality of their capital and management practices, creating a firm foundation for the sustainable development of rural finance.

We realise that although China has made progress in reforming the rural financial system in recent years, there are still problems in meeting the increasing demand for capital and credit in the countryside, and providing support for the stable development of Chinese agriculture. In particular, as China undertakes complex reforms to develop the market economy, there has been no substantial progress with regard to the rural finance management and property rights systems. Many questions need further analysis and more studies. As the OECD and its members have much experience with the reform and development of rural finance, I think that that experience can be used as a reference in

China, particularly in view of the good communication and close cooperation that exists between China and OECD countries.

Faced with economic globalisation and the important task of accelerating its modernisation process, Chinese agriculture in the 21st century is facing new opportunities and challenges. Market-oriented reforms of the rural financial system is a general trend which will be beneficial to both China and world agriculture. We hope this workshop will provide useful information to support reforms of the rural financial system in China.

I would like to thank the OECD and the Japanese Embassy for sponsoring this workshop and I hope that our joint efforts will further promote communication and cooperation on Chinese rural financial policies, rural capital market development and risk management by rural financial institutions. I am also grateful to all participants for supporting the reform and development of Chinese rural finance. I am confident that a more open and improved Chinese rural financial system will contribute to the development of world agriculture.

I wish this workshop great success.

I wish all of you good health.

Thank you.

OPENING STATEMENT

By Norio Sato First Secretary Japanese Delegation to the OECD

Mr. Chairman and experts, it is a great pleasure for me to welcome you today.

On behalf of the Japanese government, I would like to express our gratitude to the OECD Secretariat for its excellent work in arranging this workshop, which represents one of the activities conducted by the OECD towards proposing reforms of the financial sector in non-OECD countries, and for which the Government of Japan has been making voluntary budgetary contributions.

It is clear that a sound financial system is a key element for promoting, and keeping robust, sustainable economic growth. A good economic environment leads to social stability and welfare. In addressing these themes it is very useful to refer to existing expertise and the experiences of other countries, even though each country or area has its specific problems. In this regard, OECD can and does play an important role in offering useful knowledge and experience to policy makers and other people concerned.

OECD is, in a sense, a unique international organization. By this, I mean that the OECD is not an international organisation where multilateral negotiations take place nor does its work include developing binding international rules of law. It is a think-tank offering its ample knowledge and expertise in various fields. It also offers opportunities where participants from different countries with various backgrounds can exchange their views and experience using the accumulated knowledge offered by the OECD Secretariat, which itself is international in composition. Through such activities, participants can surely gain lessons and information useful for their respective work as policymakers, scholars or businesspersons. This in turn will, in the long run, promote economic activities in the right direction and foster co-operation between countries for global economic development. In this regard, OECD is worthy of its name of "Organisation for Economic Co-operation and Development."

Asia is one of the world's economic development centres and its importance in the world economy has been steadily growing. The theme of this workshop is one that all countries had or will have to tackle. This particular theme is also an ambitious one from the perspective that it will open a new frontier in Asia.

Today, we have prominent experts attending this workshop as well as many interesting items on the agenda. I hope that we will have constructive discussions and that each participant will gain useful insights from this workshop. I would also like to draw your attention to the relationships which will surely develop among the participants during this conference and which will be a great asset for our future co-operative works.

In closing, I once again express our gratitude to the OECD Secretariat and wish all of you a great two-day conference.

SESSION I. SETTING THE FRAMEWORK: WHY IS RURAL FINANCE AN ISSUE IN CHINA

THE CREATION OF A FAVOURABLE ENVIRONMENT FOR INVESTMENT IN RURAL CHINA: CURRENT SITUATION AND FUTURE PROSPECTS

By Jun Han

Abstract

Since the late 1990s, the growth rate of farmers' income in China has begun to fall while the gap between urban and rural income is increasing yearly. China continues to have a rural population of more than 100 million whose daily per capita cost of living is less than USD 1 and who are classified as being in the impoverished stratum. Chinese leaders have clearly advocated the further promotion of rural development and the reduction of poverty so as to realise the long-term goal of establishing a well-to-do society. The realisation of these goals is inseparable from support for rural finance. Currently, the channels for rural investment in China include investment by individual peasants, investment through government budget channels, investment from banking channels and funds directly from foreign capital and the stock market. This report gives a concise introduction to the sources and use of rural investment in China, with the emphasis of the discussion on the main problems and the direction of policy development from now onwards. Research has shown that the total amount of government budget on agriculture and the countryside is still low and that there are many irrational points in its rural investment structure. The amount of support for rural credit is insufficient, the internal credit structure of rural financial institutions is unbalanced and peasant households have great difficulty in obtaining loans from financial institutions. Agricultural insurance is contracting and is far from meeting the requirements of agricultural development. The creation of a good environment for investment in China is tied to a further increase in the government's budget for agriculture with the creation of stable investment channels to support this sector. The use of government budget funds should be adjusted in accordance with the need to set up a public financial system. The reform and renewal of rural finance should be promoted and financial services to peasant households and small and medium-sized enterprises in the countryside should be improved. Guidance by government investment should be fostered and a pluralistic agricultural investment structure should gradually be established

1. The main sources of rural investment in China

Rural investment through government budget channels

The use of government budget channels for rural investment mainly consists of investment in such areas as agricultural production, agricultural science and technology, the spread of technology, agricultural ecology and environmental protection, together with investment in related areas such as water conservancy, meteorology and forestry. Of the twelve "Green Box" policy measures permitted by the World Trade Organisation (WTO), China uses six (government payment for general services, public stockholding for food security purpose, domestic food aid, payment for relief from natural disasters, payment under environmental programmes and payment under regional assistance programmes). On the 1996–1998 base calculation period, annual average "Amber Box" expenditure was 29.7 billion Yuan, 1.23% of the total agricultural output value. When compared with the 8.5% (174 billion Yuan) permitted through WTO negotiations, there is still a 144.3 billion Yuan gap in China's "Amber Box" support.

In recent years, an important source for the Chinese government's investment to support rural development has been the public debt. Between 1998 and 2001, total increase in investment in rural areas financed from this source was 144.6 billion Yuan, representing 28.35% of the total public debt increase of 510 billion Yuan. These funds were mainly used for infrastructure projects such as water conservancy, forestry, agriculture and meteorology, and for ecological and environmental construction projects in key areas. In the distribution of projects and provision of capital, the focus was on areas of central and western China. By industry, provision was as follows. Between 1998 and 2001, the state provided 104.1 billion Yuan for water conservancy projects, accounting for 72% of the total, and 27 billion Yuan for forestry projects, more than the total investment in forestry for the twenty years prior to reform and opening up policy.

Investment in rural development also includes investment in education, medical treatment and health. In all, investment in compulsory education in rural China has increased continuously, rising from 48.6 billion Yuan in 1994 to 92 billion Yuan in 2000 with expenditure for compulsory rural education rising from 28.7 billion Yuan in 1994 to 59.8 billion Yuan in 2000. However, such investment remains seriously insufficient. Between 1994 and 2000, the budgeted outlay on compulsory rural education accounted for 57.7% of the total outlay on compulsory rural education, and was mainly borne by the government at the township level. Town and township governments undertook about 78% of the total investment in compulsory education, with county government undertaking about 9% and provinces about 11%, while the central government undertook only about 2%. In June 2001, the State Council promulgated the "Resolution on the Reform and Development of Basic Education" which made clear that governments at the county level bore the major responsibility for local rural compulsory education and requiring that they take responsibility for payment of teachers' wages. In April 2002, the central government also emphasised two important changes, namely that the main responsibility for rural compulsory education should be transferred from the peasants to the government and that the main government responsibility should be transferred from towns and townships to counties.

Government investment in rural healthcare mainly refers to the allocation of funds and subsidies by government departments at every level to rural medical and health organisations from the county level and below. Generally speaking, as the economy develops, government action in relation to safeguarding health is gradually being strengthened and this is represented by the increased ratio of government health expenditure to total health expenditures. However, in China the ratio of government health expenditure to total rural health costs has constantly fallen. Between 1991 and 2000, the proportion of government investment in total rural health costs in China fell from 12.54% to 6.59%, while social health investment fell from 6.73% to 3.26%. During the same period, expenditure by peasants rose from 80.73% to 90.15%. From the perspective of the structure of this expenditure paid by governments at different levels, the central government only pays 2% and the rest is paid by local governments. This type of expenditure structure has been maintained continuously over the past ten years. Existing data shows that, at the local government level, the county, town and township accounts for 55-60% of all government budgeted expenditure. Between 1991 and 2000, the cumulative total of budgeted government expenditure on rural health was only 69 billion Yuan, accounting for just 15.9% of its total national budgeted expenditure on health. In the period between 1991 and 2000, the Chinese government's budgeted expenditure on health increased by 50.7 billion Yuan but expenditure used for health in the countryside only increased by 6.3 billion Yuan, just 12.4%.

Investment in agriculture and the countryside through financial channels

The Agricultural Development Bank of China (ADBC), the Agricultural Bank of China (ABC) and Rural Credit Co-operatives (RCCs) are the three main financial institutions serving Chinese

agriculture and the countryside. The government's policy to support credit on agriculture is mainly realised through these three financial institutions. The growth in the total amount of loans through rural financial institutions in China has been very rapid. In 1979, the total amount of loans was 45.4 billion Yuan rising to 3 238.7 billion Yuan by 2000, a 70-fold increase compared to 1979. Loans by the ABC were 41.1 billion Yuan in 1979 and 1 449.7 billion Yuan in 2000, a 35.3-fold increase over 1979. For the ADBC, the figures were 298.2 billion Yuan in 1994 and 740.1 billion Yuan in 2000, a 1.5-fold increase. The figures for RCCs were 4.8 billion Yuan in 1979 and 1 048.9 billion Yuan in 2000, meaning a 218.5-fold increase.

RCCs play a decisive role in serving agriculture and the development of the rural economy. At the end of 2001, there were over 40 000 RCC offices throughout the country with a balance of deposits of 1 700 billion Yuan and a balance of loans of 1 200 billion Yuan. Of this, the balance of agricultural loans was 441.7 billion Yuan and, as a proportion of agricultural loans by financial institutions, those by RCCs rose from 26% in 1979 to 77.7%. Currently, RCCs have become the main financial institution for agricultural loans. Loans issued by RCCs are mainly to peasant households for their cropping and livestock activities, processing, transport, schooling and consumption. Indeed, the main orientation of RCCs is towards peasants' households, which receive over 60% of loans made by this institution.

The ABC specialises as a commercial bank. Between 1980 and 2001, it cumulatively issued 14 282.7 billion Yuan of loans, of which 9 448.9 billion Yuan, or 66% of all loans involved agriculture. At the end of 2001, the balance for all types of loans was 1 604.6 billion Yuan, of which 866.1 billion Yuan, or 54%, involved agriculture.

The ADBC is a policy-related bank and operates a policy-related agricultural business regulated by the state. Correspondingly, its capital sources are also greatly different from those of commercial banks. Apart from registered capital funds granted by the state financial administration, it mainly relies on the Central Bank for its borrowing. Over 90% of loans from the ADBC are used for the purchase of such important agricultural products as grain, cotton and oilseeds.

The People's Insurance Company of China (PICC) is the only company running an agricultural insurance business on a national scale. From 1982 to 2001, its cumulative income from its agricultural insurance premiums was 7 billion Yuan and it paid out 6.2 billion Yuan in compensation. If the operation cost is taken into consideration for the same period, its cumulative losses came to 0.6 billion Yuan. In 2000, the income from agricultural insurance in China as a proportion of agricultural added value was only 0.043%. On average, each peasant household paid approximately 2.6 Yuan in agricultural insurance premiums and received approximately 1.8 Yuan in compensation.

Direct financing by the stock market is becoming an effective way of resolving the shortfall in agricultural investment

Apart from these two main channels, namely government budget and credits, the use of direct stock market financing has become an important supplementary source. By the end of 2001, of the listed companies in the Shanghai and Shenzhen stock markets, listed agricultural companies, the main businesses of which involved cropping and animal feeding, fisheries, agro-food processing industry, agricultural product marketing and seed breeding industry, numbered 54. At the same time, there were three agricultural companies listed on the Hong Kong stock market with funds raised totalling some 40 billion Yuan. With regard to listed agricultural companies, by the end of 2001 their numbers accounted for 4.47% of listed companies, and the funds raised accounted for 4.46% of the market total.

Some funds are raised for agricultural development using foreign capital

Currently, the use of foreign capital in Chinese agriculture takes four forms, namely foreign loans, foreign aid, direct investment by foreign firms and investment from such means as compensation trade. Before the Eighth Five-Year Plan (1991-1995), the use of foreign capital in agriculture mainly consisted of foreign loans and aid primarily directed towards construction of a basic agricultural infrastructure and projects to aid the poor. In recent years, the number of soft loans (with very low interest rates) has gradually decreased (during the 1992, 1994 and 1995 financial years, the proportion of soft loans was respectively 38%, 30% and 21%). As the strength of the Chinese economy and the level of per capita income increased, the difficulty in obtaining preferential loans and voluntary aid increased. In recent years, direct investment by foreign firms has become the main means by which Chinese agriculture uses foreign capital. According to statistics of the Ministry of Agriculture, in 1999 direct investment by foreign firms already accounted for 50% of foreign capital attracted to the domain of agriculture. By the end of 2001, Chinese agricultural projects absorbing investment from foreign firms totalled 11 260, with the amount of contractual investment by foreign firms standing at 13.9 billion Yuan. Between 1997 and 2001, real investment in agriculture by foreign firms was respectively USD 628 million, USD 624 million, USD 710 million, USD 676 million and USD 899 million.

2. Some outstanding problems in Chinese agricultural investment

Capital from government budget for agriculture and the countryside in China is still at a low level with many irrational aspects in the investment structure and imperfections in the management system

First, 60% of the budget reserved for agriculture is used for personnel and administrative expenses, while the proportion used for production is not high.

Second, a considerable proportion of government budget funding for agricultural investment is used for large or medium-sized water conservancy constructions while a smaller proportion is used for small and medium-sized basic projects from which peasants could benefit directly. Between 1996 and 2000, the investment by central government budget for water conservancy projects amounted to 110 billion Yuan, accounting for 70% of total central government budget on agriculture. Over the same period, the investment from the same source for forestry projects amounted to 23 billion Yuan, accounting for 14.3% of the total. With significant social benefits from water conservancy, forestry and ecology projects, beneficiaries were not limited only to agriculture. However, investment in them has, for a long time, been calculated as agricultural investment and this has to some degree exaggerated the scale of government agricultural investment.

Third, of government investment in agriculture, the subsidy used directly for marketing entities is too high. Since 1998, of government investment in agriculture, the annual subsidy for the marketing of grain, cotton, oil and sugar has been between 50 billion Yuan and 70 billion Yuan, accounting for more than 30% of the total of government agricultural support.

Fourth, agricultural research and extension lack adequate investment. According to some data, the current annual investment in agricultural science and technology in China is over 6 billion Yuan, accounting for approximately 0.25% of the total agricultural output value while the average in developed countries is 2.37% and 0.7–1% in developing countries.

Fifth, delineation of responsibility for agricultural investment between the central and local governments is not clear. The development of agriculture and the rural economy is within the

responsibility of both the central government and local governments. There is no clear-cut demarcation as to which project should receive central government investment and which should receive local government investment. Such a system increases the arbitrariness of the process of arranging and using funds, and local governments find all ways and means to load responsibility for agricultural support onto the central government.

Sixth, government investment in rural social development is far from adequate. The development of such social matters as rural education and health is lagging seriously behind. In terms of the distribution of financial resources between different levels of governments, the long-term situation of an excessively low ratio of central government revenue in total government revenue has been changed after the fiscal reform of 1994. The proportion today has increased to more than 50%. This indicates that the ability for central government to regulate and control the macro economy is continuously increasing. In the current structure of the allocation of financial resources, central and provincial-level governments hold the main resources but are basically free from any responsibility for expenditure on compulsory education. Most of their expenditure in this domain is used for higher education. As far as the compulsory education is concerned, they are only responsible for providing assistance to impoverished and minority nationality areas. County and township governments have poor financial resources yet they bear the great majority of outlay on compulsory education. Also, since reform, there is an extreme imbalance between the financial resources of different areas and this has further exacerbated the strain on basic rural educational expenditure in less-developed areas.

Local government investment in rural health care depends entirely on its financial capacity and on autonomous policies. Since tax resources are limited, county and township governments in central and western areas have difficulty in guaranteeing investment in town and township clinics and are basically unable to meet the demand of rural inhabitants for basic health care services. In recent years, improvement to the health of Chinese peasants and the raising of standards of health have both tended to slow down. In the countryside, the incidence of sickness and infectious diseases have returned in places where they were once under control, sometimes attaining the same levels as before the reforms began.

The total amount of rural credit is insufficient, the structure of credit within rural financial institutions is out of balance and it is very difficult for peasant households to obtain loans from financial institutions

In 2001, the balance of loans of financial institutions in China was 11 200 billion Yuan, of which agricultural loans only accounted for 570 billion Yuan, *i.e.* 5.1%. Loans to town and township enterprises (TVEs) were 640 billion Yuan, *i.e.* 5.8%. Even if loans by the Agricultural Development Bank for the procurement of agricultural products are added, the balance of loans by financial institutions for agriculture and activities in the countryside only account for 17% of the balance of loans nationwide.

The ratio of loans for agricultural activities by the ABC is declining. Before the mid-1980s, over 98% of all loans from the ABC was concentrated in the countryside. From the mid-1980s to the early 1990s, in order to resolve difficulties in selling agricultural products and to support the rapid growth of TVEs, the Agricultural Bank carried out a major adjustment of the structure of credit and relocated 60% of credit planned previously for agriculture for the purchase of agricultural products and the development of TVEs. After the mid-1990s, as progress in the commercialisation reform of the ABC quickened, the allocation of its financial resources was no longer limited to agriculture and the countryside and more resources were allocated to rural electricity network, transport and communication. After the 1990s, its organisational network gradually withdrew from the countryside, the rate of growth of agricultural loans decreased, the ratio in total loan began to fall and business

shifted to cities and from agriculture to industry. Currently, agricultural loans account for only 10% of all loans provided by the ABC.

RCCs cannot be the only institution providing credit to agriculture, and yet since the ABC has substantially cut back its basic rural business, RCCs have become the main financial institution for agricultural loans. Although RCCs are formal financial institutions which cover a vast area of the countryside with an extensive network, their provision of loans to peasant households is very limited. According to statistics, 25% of peasant households have access to loans. The proportion of agricultural loans in RCCs loans was 46.2% in 1990, falling to 34.2% in 2000. In view of the gradual withdrawal of all major commercial banks from the countryside, depending solely on RCCs for obtaining credit will by no means resolve the difficulties of peasants in obtaining loans.

The role of the ADBC in supporting agriculture is weakening. In its role as a policy-related agricultural financial institution specialising in the procurement of agricultural products, as the speed of marketisation in the buying and selling of grain and cotton has quickened, the room for policy-related operations in marketing of these products has diminished. Consequently, a considerable fall has occurred in the ADBC's loan business for purchasing grain and cotton.

The proportion of bad loans by Chinese rural financial institutions is quite high and the quality of credit has declined. At the end of 2002, RCCs throughout the country had bad loans amounting to 514.7 billion Yuan, accounting for 37% of the total sum of its loans. Moreover, of the four major state-owned commercial banks, the ABC has the highest ratio of bad assets.

Government control of interest rates has affected the willingness of financial institutions to provide loans. In some cases, financial institutions can charge a rate twice as high as the official maximum rate, that is to say, while the upper limit on annual interest rates is 5.14%, the actual rate can be increased to 10.3%. Since the amount of rural loans is small and the risks high, the transaction costs for loan operations are also high. Therefore, the flexibility in the range of interest rates is still not sufficient for commercial institutions to recover their costs. The losses caused to loan providers by the strict limits imposed on loan interest are growing, and in the end the government is requested to cover them.

Micro-finance coverage is low. Drawing lessons from the experience of countries such as Bangladesh, there have been almost ten years of micro-finance experiments in China. In 2001, the People's Bank of China (PBC) initiated a project to encourage RCCs to develop micro-finance services. The coverage of this project was quite broad and, by the end of 2001, there were 32 000 RCCs (almost 80% of all RCCs) developing a micro-finance service, with about 25% of peasant households obtaining this type of loan. However, the majority of micro-finance projects depend on new loans from the People's Bank of China for their maintenance, have not achieved a definite coverage rate, and are not sustainable.

Informal credit is quite common. In terms of the sources of borrowing, the main channel is popular private loans. It is estimated that between 50% and 60% of peasant households have obtained informal loans. The loans through popular borrowing accounts for more than 70% of farmers' total borrowing. Quite a high percentage of TVEs also seeks high interest financing through popular channels. However, informal credit has no legal status in China.

Agricultural insurance is contracting and is far from being able to meet the demands of agricultural development

During the early 1990s, there was a large scale increase in rural insurance in China. Later, as financial reform intensified, the PICC changed from a policy-related company to a commercial one and was not strong enough to bear excessive losses from rural insurance. Therefore, from 1994, the scale of rural insurance fell year by year with income from premiums falling from over 800 million Yuan in 1993 to under 400 million Yuan in 2001. Hence, the PICC played a very limited role in diversifying the agricultural risks and in providing agriculture with economic compensation. In the 1990s, when natural disasters in China were particularly serious, the share of crop area affected by these disasters was above 30%, and within this area the share of those seriously affected was over 50% with a maximum of 60.9%. However, the supply of insurance for crops did not increase but fell. The function of agricultural insurance to provide economic assistance to agriculture could not be fully brought into play.

The proportion of foreign investment in agriculture is very low

By the end of 2000, the number of Chinese agricultural projects absorbing foreign investment accounted for only 2.85% of the total foreign investment projects while contractual foreign investment funds in agriculture stood at only 1.82% of national total foreign investments. After 1997, the ratio of actual foreign investment in agriculture to total foreign investment was respectively 1.39%, 1.37%, 1.76%, 1.66% and 1.84%, which was far from being commensurate with the position of agriculture in the national economy. The average scale of foreign investments in agriculture is small and the distribution across regions uneven. Currently, 70% of Chinese agricultural projects absorbing foreign investment are concentrated on the coastal areas such as Guangdong, Fujian and Shandong while the central and western regions, which urgently need capital, can rarely attract foreign capital. At present, the ABC re-loans the World Bank credit down to the end-users with market interest rates. However, the rate is increased at each level of the ABC structure so that, when the World Bank loan is transferred to a grass-roots bank, the interest rate is quite high. In addition, World Bank loans are generally long or medium term loans; during the loan transfer process, the institution/company implementing the project is required to repay the loan in advance and this also adds to its burden. If the unit of account for the loan is US dollars, interest rate risks are borne by the institution/company implementing the project.

Use of the stock market for raising funds for agriculture is limited and changes of designated utilisation of the investment funds are quite serious, affecting the growth and performance of the main business of agricultural companies.

3. Direction of policy development from now on

The formation of channels for the stable growth of investment in agricultural infrastructure

Currently, the funds for agricultural infrastructure come mainly from a rise in a public debt. Since 1998, sales of government bonds have continuously provided more than 70% of capital for investments financed by the central government budget. From now on, if government bonds cease to be issued, agricultural investment will fall by a large margin. Over the last few years, the Chinese economy has maintained fairly rapid growth and central financial revenue has been relatively abundant. The pattern of distribution of national revenue needs to be adjusted so that the mechanism for the steady growth of investment in agricultural infrastructure is developed. The government's newly increased financial capacity should be allocated to agricultural infrastructure projects.

In accordance with the need to establish a system of public finance, the direction of the use of public financial funds for supporting agriculture should be adjusted

First, the WTO's "Green Box" policies should be fully used to increase investment in such areas as agricultural research and extension, equipment for inspection and testing of food quality and safety, infrastructure for the marketing of agricultural products, and training of peasants.

Secondly, subsidies for the procurement enterprises should gradually be reduced and a system of direct subsidies for peasant incomes should be established. In recent years, the government has heavily subsidised government enterprises responsible for the procurement of agricultural products such as grain and cotton. The past experience has proven that the effectiveness of such practices is low, the benefits to agriculture and peasants are not great and reform is needed. The direction and measures of reform are as follows. The approach of financial subsidy should be improved with the gradual adoption of direct subsidies for peasants. For example, the risk funds for the main agricultural products (such as the grain risk fund) should be transformed into a direct subsidy for peasant incomes. A system of direct subsidies for the use of advanced technology by peasants should be established. Part of the export subsidies for agricultural products should be used as a direct subsidy for peasant incomes. In 2001, export subsidies for Chinese grain and cotton were 2.7 billion Yuan. After entry into the WTO, China undertook to follow a policy of not subsidising the export of agricultural products. It is worth considering transferring this part of the subsidy as a direct income subsidy for peasants in grain and cotton producing areas. Ecological and environmental subsidies for peasants should be increased. The opportunity presented by a supply of grain that continues to be higher than the demand should be seized, and increased allowances should be given to peasants who return farm land over to forestry and pasture.

Thirdly, the central government's responsibilities for supporting basic rural education and rural public health should be enhanced. Basic education is a typical public good. If central government financial resources are lacking, a serious imbalance in the development of basic education is bound to arise. The central government's basic investments in education should be biased towards rural education in central and western areas, and other places experiencing difficulties, in order to promote the even development of basic rural education. In so far as rural public health services are concerned, practice shows that with the responsibility mainly resting on counties and townships, it is impossible to guarantee sufficient funds. A rural public health service is a government function and investment in it should be guaranteed through the establishment of a special payment transfer system earmarked for rural health organisation. Rural health funds should be used to support town and township clinics in developing a public health service.

Finally, state budget to aid the poor should be increased and the way such funds are used should be altered. From the point of view of developing aid for the poor, China is still faced with an enormous task. On the basis of an investigation at the end of 2002 by the National Bureau of Statistics which monitored rural poverty throughout the country, the rural population in absolute poverty was 28.2 million, a decrease of 1.1 million from the end of the previous year, with a poverty occurrence rate of 3.0%. The low-income rural population, where problems of food and clothing have initially been solved but not in a stable manner, was 58.3 million, a reduction of 2.8 million over the previous year. As a proportion of the rural population, the low-income population accounts for 6.2%. On the basis of the World Bank statistics, there are 106 million persons in China, equivalent to 11.5% of the rural population, whose daily expenditure is less than one US Dollar. In the years between 1994 and 2000, when investments to aid the poor was at its highest, the central government's annual share of support to the poor rose from 7.7 billion Yuan to 24.8 billion Yuan with the cumulative investment over seven years reaching 112.7 billion Yuan, an annual *per capita* investment of only 200 Yuan. Most of the impoverished population of China is concentrated in the economically and socially

undeveloped minority nationality areas of the centre and west where natural conditions are very bad. Not only is direct investment in production-related capital required but also much needs to be invested in improving basic facilities and basic living conditions such as power, transport, communications, education, health and drinking water for humans and livestock. Relative to such requirements, a level of investment of 200 Yuan is far from adequate. On the basis of the experience of World Bank loans for Chinese projects to aid the poor, *per capita* investment to solve the problem of adequate food and clothing in a stable manner would be 5 000 Yuan.

In the past, China focussed its resources to aid the poor on production or investment projects for basic facilities related to economic development. Investment in long-term social development and human capital investment projects was inadequate. An examination of the allocation of state expenditure to help the poor between 1991 and 1995 shows that 60% of funds to assist the poor was allocated directly to production, with 29% for agriculture and 31% for industry. Basic facilities accounted for 35% of the total expenditure while expenditure on education and public health was less than 2%. The levels of education, public health and nutrition among the impoverished population of China are still low. In order to realise the aim of aiding the poor, more help to the impoverished population should be given with the provision of more support for social development matters so that they have the conditions for basic education, health and nutrition.

Promote a comprehensive reform of the rural financial system as a whole

A fundamental resolution of the current outstanding problems of Chinese rural finance cannot be confined to minor repairs and adjustments to the current rural financial system. It is necessary to have the system as a whole in mind and again perform functional orientation and adjustment of the ABC, the ADBC and the RCCs with the aim of establishing a more complete and vigorous rural financial system which truly serves the "Three *Nong*" (agriculture, countryside and farmers) and to promote a comprehensive reform of rural finance. The key points of the reform of rural finance are as follows.

A thorough solution should be found to such common problems in RCCs as unclear property rights, incomplete legal corporate governance, comparatively low levels of management together with a lack of effective incentive mechanisms and control of insiders. The overall demands put forward by the central government with regard to the reform of RCCs are that property right relationships should be clear, the mechanisms of control should be reinforced, service functions should be strengthened, there should be appropriate state support and that local governments should be responsible. As a result of the differences throughout the country, it would be inappropriate to compel RCCs to reform in line with a centralised model. Currently, there are two schools of thought about this reform. The first is that RCCs should be reorganised as commercial structures. If business is reasonably good in developed areas and it is more appropriate to commercialise the running of RCCs, they should be changed into local joint-stock commercial banks. Those banks would be locally owned and based on autonomous, independent management. The second line of thought is to reorganise RCCs with a stratified structure. Drawing lessons from the successful experience of the development of co-operative banking abroad, RCCs can be changed into truly co-operative financial organisations. Otherwise, the current RCCs can be changed to the grass-roots network of the ADBC with policy-related loans as their main business. This second type of thinking is mainly suitable for areas where the level of economic development is rather low, which lack the necessary knowledge and skills of risk management and other financial operations. Whichever type of organisational form is adopted, it is necessary that problems of unclear property rights and poor legal corporate governance are resolved. Only in this way can there be a true solution to the problem of the government actually taking full responsibility for the bad loans of RCCs.

Problems of interest rate controls and the lack of an effective supervisory framework should be resolved. The negative effects brought of interest rate controls include not only distortions to the price of using funds and irrationality in the allocation of financial resources, but also the level of earnings by commercialised financial institutions in the rural financial market is directly affected. The wide range of flexibility in interest rates should be developed on the basis of market demand, with interest rate controls gradually relaxed so that the demand for commercialised financial institutions to carry on financial activities in the rural financial market can be met. The establishment of an effective supervisory framework will not only strengthen supervisory staff but, more importantly, should enhance ideas about supervision, improve supervisory technology and raise the quality and efficiency of supervision.

Finally, a rational system of rural financial institutions should be developed. The heavy burden on RCCs should be removed and their capacity to support agriculture strengthened. A solution to the current cumulative losses and dead or bad debts of RCCs amounting to 400 billion Yuan is a prerequisite. With regard to the "sunk" funds of RCCs formed as a result of all the state policies during the reform period, such bad loans should be cut out in the light of the policies for the state-owned commercial banks. With regard for RCCs where there is neither hope of saving them from decline nor any prospect of continuing, they should be resolutely shut down. The state can learn from the experience of co-operative finance abroad and exempt interest income from agricultural loans from business tax and reduce income tax, thus lightening the burden on RCCs. The ABC should mainly provide comprehensive financial services for agriculture and rural economic development. A certain ratio of the deposits taken in by the ABC in the countryside should be used for rural credit. The state should guide commercial banks through preferential tax policy to using a certain proportion of their funds for agriculture. Policy-related finance is an important means of giving support basically meeting the requirements of the WTO agreement and in general use in all countries throughout the world. The ADBC should be re-orientated and genuinely play the role of a policy-related bank. The entry of non-state-owned capital into the banking sector and small-scale commercial banks under development should be permitted. Other incentive policies should be provided to encourage other commercial banks to serve rural development. Micro-finance should be developed in the direction of systematisation, institutionalisation and sustainability.

The establishment of a policy-related agricultural insurance organisational system

A policy-related insurance system, directed from above by the government, would be run with high supervisory costs. A co-operative management model and mutual insurance operational model, both with government support, have been quite successful in some countries and pilot schemes should be encouraged in some places with good conditions. However, since Chinese peasants lack a tradition of co-operation and knowledge of insurance, it would be difficult for these two management models to become the main models for agricultural insurance in China. Since shareholder investment is made in order to obtain earnings and agricultural insurance risks are high, an agricultural insurance joint stock limited company model with government support would probably not be attractive. Therefore a government-led model should be established combining government and commercial insurance company management to act as the leading form of rural insurance in China.

Channels for funding resources to support agriculture should be widened and a pluralistic funds investment system should be established

According to some research, the overall investment in agriculture by Chinese society was 1 200 billion Yuan. Of this, agricultural credit investment accounted for 40%, peasant's own investment accounted for 37%, government investment at all levels accounted for 17% while other investment (including listed companies and foreign capital) was only 6%. This shows that investment

in agriculture by industrial and commercial enterprises, the capital market and foreign firms was extremely low. When seen from the perspective of developmental trends, China has great potential to be tapped through encouraging investment by social investors, developing the stock market and using foreign capital to raise funds. A multi-channel, pluralistic rural financial setup should gradually be created with individual investment by peasants as its mainstay, guided by state policy-related investment and supplemented by such funding as credit and foreign capital. In order to make social agricultural investment more attractive, it is necessary to further establish the means of encouraging agricultural investment through fostering support of agriculture through the support and guidance of public finance. The state should give preferential treatment and encouragement to agricultural investment through such means as tax exemptions, subsidies and discounted interest in order to attract social financial investment in agriculture. It should alter the methods of investment from public finance, reduce projects directly run by the government and increase support for projects run by peasants and society. It should also encourage the use of profits from agriculture for reinvestment in agriculture through such policy measures as preferential tax rates. An improved environment for investment will tap the potential for using foreign capital.

INSTITUTIONAL ISSUES AND PREREQUISITES FOR EFFICIENT SAVINGS MOBILIZATION AND ALLOCATION IN RURAL AND LESSER DEVELOPED REGIONS IN CHINA

By David Scott and Kathleen Druschel

Abstract

This paper outlines the institutional prerequisites needed to achieve a commercially sustainable rural financial services industry in China. It presents a vision for a future rural financial services industry built around a core of commercially-oriented financial institutions operated with sound corporate governance structures and the autonomy to develop and price products appropriate to target clientele. Complementary services such as credit information registries, credit guarantee schemes, and collateral registries, when suitably arranged according to best practice principles, would reduce transaction costs and information asymmetries in the market. Improved prudential regulations and supervision capacity would promote overall banking sector soundness. The paper evaluates the actions needed to achieve such a vision, highlighting issues facing rural credit co-operatives (RCCs), state-owned commercial banks, and the potential role of development banks as well as current initiatives in creating complementary service providers. It outlines the capacity building efforts financial institutions will need to undertake and the reorientation of bank supervision functions that will need to occur. Finally, the paper advocates for the comprehensive implementation of a pilot project in commercially sustainable rural finance of sufficient scale to provide broadly applicable lessons, and provides details of the proposed pilot.

1. Characteristics of efficient rural financial intermediation

The potential role of the financial services industry

The financial services industry can play an important role in a modern market economy by providing an array of efficiently priced products and services to firms, households and governments. In offering those products the financial system serves to mobilize and allocate the nation's savings, monitor the use of allocated savings, and facilitate transactions and the management of risk, all functions that are vital to a nation's economic activity and prosperity. This is no less true in rural areas, where a commercially sustainable rural financial system can be a key to promoting rural development and improving rural incomes and welfare. The rural financial services industry can support the ability of rural firms and households to engage in a wide range of profitable economic activities which can create rural jobs and supplement rural household incomes.

Critical to the effectiveness of the financial system as a force for growth, job creation and income expansion in rural or urban markets is that providers of financial services operate with a predominately commercial (*i.e.* for-profit) orientation. When financial institutions are managed with the overriding goal of sustainable profitability they have incentives to design and offer valuable and innovative products, to price those products adequately yet competitively, to manage and control the risks assumed in their business, to ensure the maintenance of an adequate cushion of capital to absorb losses that might be incurred over time, and to expand the number of clients they serve, whether through internal growth or acquisition of other financial services firms. These incentives are enhanced when a healthy degree of competition in the market exists.

Access to profit-making, commercially sustainable financial institutions creates positive incentives for clients as well. For example, when they do business with commercially sustainable financial institutions, borrowers have incentives to repay loans in order to ensure continued access to needed finance and other financial services, including the larger loans and lower interest rates that often are made available to borrowers that have demonstrated a willingness and ability to promptly repay previous loans. These incentives are far weaker when borrowers do business with financial institutions that are fragile and may be expected to require bail-outs in order to survive. Competition among providers gives users a wider choice of products, and a choice of institutions with which to do business.

There is no contradiction between the objective of fostering a commercially sustainable rural financial system and promoting rural income expansion and rural welfare. Most firms and households that have profitable business opportunities value timely, reliable and convenient *access* to financial services (especially loans, savings and insurance products) and generally are willing and able to pay a market price for them. Subsidized credit programmes are generally of little practical value to such firms and households. Because by its nature subsidized credit is in finite supply and is subject to bureaucratic administration, the subsidies are generally captured by relatively few borrowers (and often the most well "connected" borrowers), and rarely is allocated to those potential borrowers with the highest expected-return business opportunities. By offering credit in a convenient and flexible manner according to commercial principles and the expressed needs of their customers, commercially sustainable rural financial institutions can substantially improve the efficiency of the allocation of credit in rural markets. By pursuing business strategies oriented toward meeting the need of clients, they similarly can substantially improve rates of saving mobilization.

To achieve these and other outcomes that promote rural growth, job creation and income expansion, governments have important roles to play. Critically, they must avoid policies that either unnecessarily impede the ability of financial institutions to design, price and offer loans and other products, or that undermine the commercial incentive structure for those providers or for clients, especially borrowers. Similarly, they need to insulate financial institutions from ad hoc outside interventions that serve to undermine the operational autonomy of managers to pursue sustainable profitability. Governments can take facilitating actions, such as promoting competition among financial institutions in order to increase the supply of credit while ensuring that the cost of credit is kept as low as possible, and at the same time seeking to ensure that competition is rational, especially in terms of pricing credit risk in a manner consistent with sustainable profitability. Governments can take steps to reduce risks and costs and improve incentives by strengthening the utility of collateral to lenders and borrowers and by promoting the development of complementary service producers such as credit information registries, credit guarantee schemes, and collateral registries.²

Rural financial intermediation in China

Current situation

Since the start of the economic reform period in China, the rural economy has been rapidly changing. Agriculture's share of GDP has declined steeply, from 27% in 1990 to 15% in 2001. It can be assumed that an increased number of rural households are involved in a diverse array of

^{1.} The ability to pay market rates of interest generally is due to the high rates of return on the activities financed and the fact that the loans frequently are required for only short periods of time.

^{2.} There may be a limited and finite role for continued subsidies and/or development banks in filling market gaps, as will be discussed further below.

income-generating activities, many of them off-farm. Township and village enterprises (TVEs) are rapidly privatizing, and more small private firms are entering the rural market. The rural financial system has changed dramatically over the last 25 years as well,³ but rural financial reforms have not kept pace with actual and required further economic transition in rural areas.

China's rural financial services industry consists of state banks, mainly the Agricultural Bank of China (ABC), some smaller commercial banks mostly controlled by local governments, and the approximately 38 000 rural credit co-operatives (RCCs). In addition, the postal savings system offers savings instruments and payment services such as remittances. State banks have been withdrawing from the market, including the ABC, which has reduced its number of branches from 33 923 in 1999 to just 26 650 in 2001. This has left RCCs as the major officially licensed provider of financial services in rural areas. The formal financial services industry generally provides adequate savings facilities and rural household savings deposits grew from RMB 184 billion in 1990 to RMB 1 382 billion in 2001, a compounded annual growth rate of 20%. It performs far less well in making credit available. To some extent, informal providers such as moneylenders fill the void. For example, in 1998, formal loans to farmers amounted to RMB 34.5 billion while informal loans for farmers were estimated at RMB 146.1 billion. Local and international NGOs offering micro-finance play only a limited role in the credit markets, and are generally prohibited from accepting deposits.

The poor state of formal rural financial markets is substantially a reflection of the withdrawal of the state banks and the problems being experienced by the RCCs. Many RCCs are insolvent and some are illiquid. RCC ownership is ambiguous, which is further complicated by the fact that the China Banking Regulatory Commission (CBRC) plays both a quasi-managerial as well as supervisory role with respect to RCCs. Ownership and managerial ambiguities and weaknesses create disincentives and impediments for institutions to operate effectively with a goal of commercial sustainability. Political intervention in lending decisions by local officials, often motivated by considerations such as tax collection and maintaining employment, continues to result in what is often likely to be non-recoverable credit being made available to poorly performing firms and speculative ventures. This perpetuates weak incentives to implement commercially sustainable lending practices and instills a weak credit culture. Since obtaining access to formal financial services, especially credit, may be more dependent on connections than on being seen as a valuable client for the lender, and because it is expected that the central government will eventually contribute to a bail-out of poorly performing RCCs, repayment incentives are low, further exacerbating RCCs' weak financial position. Recent experiments with RCC reform, including the creation of county and provincial level RCC unions and associations and the conversion of some RCCs into commercial banks, have attempted to address these problems, but apparently offer few broadly applicable lessons so far.

The failure of the rural formal financial services industry to deliver convenient and efficient financial services in many rural markets is also a result of official restrictions on new product development such that only institutions authorized by the regulators may experiment with new financial instruments. Generally, permission is granted to state-owned banks, and RCCs have only been able to experiment under government-directed pilot projects. In part for this reason, the products

5. Asian Development Bank, TA 3150-PRC: A Study on Ways to Support Rural Poverty Reduction Projects/Final Report/October 2000, "A8-PRC Rural and Microfinance Approaches and Experience", p. 2.

^{3.} See Minggao Shen and Scott Rozelle, "Financial Intermediation and Transition in Rural China: An Evolutionary Approach" (forthcoming), for a comprehensive review of financial reforms as they responded to a changing rural economy.

^{4.} China Financial Yearbook 2000-2002.

offered by China's rural financial institutions are too homogeneous and do not meet the needs of a diverse range of users. Staff, in turn, have not acquired the skills needed to develop such demand-driven products and services.

The pricing of many financial instruments also are officially administered, with the consequence that providers and users of financial services are not able to freely agree on commercial terms for their business relationships. The PBC currently determines the band within which lending and deposit interest rates can be set. The current bands, even after recent relaxation on an experimental basis in some markets, are too narrow to adequately compensate for the higher administrative costs associated with rural lending. As a result, rural finance institutions are precluded from earning adequate returns on their assets and equity, and cannot become commercially sustainable. In fact, the cap imposed on lending rates likely results in losses to rural finance institutions after taking into consideration all costs, including establishing loan loss reserves.

In an effort to address some of the consequences of the current weaknesses in China's rural financial system, the government, particularly the PBC, has placed increasing emphasis on ensuring a flow of subsidized agricultural credit to small farmers. But some studies have suggested that, like in other countries, the finite amount of subsidized credit is provided to relatively well-off borrowers. These efforts appear to be more of a stop-gap nature, and will not substitute for a comprehensive programme to reform rural finance in China. The recent experiments with RCC reform noted above, and the 250+ micro-finance pilots undertaken in China over the last decade, do not yet seem to offer the foundations for a viable rural finance reform strategy. Perhaps surprising, what has never been tested in China, at least in a comprehensive manner, is the adoption of the principles, policies and practices inherent in commercially sustainable finance.

A vision of the future rural financial services industry

This paper argues that the objectives of growth, job creation and income expansion in China's changing rural economy best can be promoted by putting into place a consistent and mutually reinforcing framework of institutions and institutional capacity for efficient, commercially sustainable, rural financial intermediation. The overarching goal of government would not be to make cheap loans available in rural markets, but rather to improve convenient access to commercially based, efficient financial services by as many potential clients as possible. This system would be built around a core of commercially-oriented financial institutions, including banks and credit co-operatives. The government's main role would be to create the infrastructure needed to facilitate the emergence and growth of such institutions.⁷ An efficient, commercially sustainable, rural financial services industry would have the following characteristics:

A commercial orientation. Financial institutions would be governed with the goal of commercial sustainability, requiring that managers would control and price the risks assumed in their business to ensure an adequate return on equity capital and the maintenance of an adequate cushion of capital to absorb losses that might be incurred over time. Financial institutions would compete for clients and markets, mainly involving competition from the healthier existing domestic banks and co-operatives

^{6.} Albert Park, Sangui Wang, and Guobao Wu, "Regional Poverty Targeting in China", *Journal of Public Economics*, 86 (1), 2002. See also Shenggen Fan, Linxiu Zhang, and Xiaobo Zhang, "Growth Inequality, and Poverty in Rural China: The Role of Public Investments", *IFPRI Research Report* No. 125, 2002; and Scott Rozelle, Jikun Huang and Linxiu Zhang, "Growth or Policy? Which is Winning China's War on Poverty?" *Food Policy*.

^{7.} This would not necessarily preclude subsidization by government for certain purposes, such as primary agriculture.

as well as new domestic and possibly foreign entrants. Well-managed and financially sound financial institutions would be allowed to expand geographically across administrative boundaries. Institutions' competitive capabilities would be predicated on their ability to lend to smaller and private firms. Unviable institutions would be constrained in their ability to take on new business (in which they would likely under-price risks and distort competition) and would be removed from the system.

In pursuit of profitability, institutions would design and distribute new types of products, including loans and savings products tailored to the needs of customers. Rural finance intermediaries would take steps to reduce costs and increase operating efficiency, for example by reducing loan processing times. New lending technologies that have been employed successfully in other transitional countries would help to minimize the risk of loan defaults. Management and staff would be trained well, in particular in assessing and pricing risks and would be remunerated based on individual or small group performance.

Sound corporate governance. Corporate governance structures would clearly specify the distribution of rights and responsibilities among different participants in the institutions and the rules and procedures for decision-making. Under this framework, objectives would be set and performance monitored so that managers are held accountable to boards (and boards to shareholders/members) for meeting those targets. Internal controls would aid in this process, particularly by ensuring the integrity of the information produced by accounting and management information systems. Managers would determine their institution's comparative advantages and define business strategies for markets in which they can compete profitably. Institutions would be free from political intervention in their lending practices.

Liberalized interest rates and fees. The government would liberalize interest rates to allow rural finance intermediaries to competitively price products. Efforts to promote competition and facilitate a lowering of institutions' operational costs (see Complementary Service Providers below) would be important means by which rates and fees are kept as low as possible.

Institutional linkages to achieve synergies and lower costs. Various forms of co-operation and business relationships between rural financial institutions and service providers would help reduce costs while better enabling the institutional infrastructure of policies, processes and systems necessary to support sound commercial operations to be put in place in all financial institutions. These arrangements would pool and/or outsource resources in areas like treasury management, internal control, internal audit, and independent loan review (including the determination of appropriate loan loss reserves). They would facilitate the shared use of scarce professional expertise and knowledge.

Complementary service providers that help reduce risks and costs. Complementary service providers would help reduce information asymmetries and fill market gaps. Comprehensive credit information registries would compile and make available both positive and negative information regarding firms as well as individuals (including the individuals owning and operating firms). Financially sustainable credit guarantee schemes would price guarantees accurately and create appropriate incentives for lenders and borrowers by, among other things, offering only partial guarantees. Both type of service providers could be organized by the public and/or private sector. Public sector credit guarantee schemes might appropriately be wound-down over time as a critical mass of financial institutions develop better capacity to evaluate risks and mainstream small business lending into their business strategies. The utility of collateral for lenders and debtors would be improved. The pool of assets that can be legally used as collateral would be expanded, and collateral

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^{8.} Positive information would include information indicating the on-time repayment performance of borrowers, helping to establish their "reputation collateral".

registries would transparently provide information (in one database) on existing liens, improving the efficiency with which lenders can take possession of and sell collateral assets and promoting development of more liquid markets for such assets so that the prospects for realizing their value is improved.

Complementary service providers would facilitate lending to a wider range of potential clients by reducing costs associated with evaluating credit risks, and by mitigating those risks to some extent. Thus they can play a role in pioneering lending to smaller firms and in fostering competition. Rural financial intermediaries would utilize these complementary services to engage in a more diversified range of lending activities, including to serve traditionally underserved clients.

Improved prudential regulation and supervision. The CBRC would more effectively promote overall banking sector soundness by withdrawing from micro-level interventions in matters more appropriately left to financial institution management, and focusing instead on prudential regulation (including capital adequacy) and evaluating the capacity of boards and senior managers to manage risks and ensure sustainable profitability. It would thus provide greater operational autonomy to financial institutions, including to design and price products and to compensate and discipline or dismiss staff. It would become a strong constituency for reduced political intervention in lending decisions. The CBRC would exercise its authority to evaluate the suitability of new investors before authorizing changes in controlling ownership of banks, to ensure that, in the process of raising the large sums of new capital required in the rural financial services industry, corporate governance and management is strengthened and to protect against the potential that new owners simply loot the institution. It also would weed out from the banking system those financially and operationally distressed institutions that are unable to raise new capital and achieve viability. In the near term special emphasis would be placed on ensuring that financial institutions meet minimum standards for the internal infrastructure of policies, processes, and information systems necessary to support sound commercial operations.

2. Institutional requirements for realizing this potential

Financial institutions

In order to achieve this vision of an efficient rural financial system, a number of steps will need to be taken by government, donors, and the existing financial institutions. These will strengthen and reform RCCs while transforming state-owned banks into commercial, private institutions and allowing new institutions to enter the field.

Rural Credit Co-operatives

One priority in resolving the plight of the RCCs will be to address the ownership issue by providing clarity as to who owns these institutions, creating legally binding arrangements that allow the owners to exert governance over management, and creating incentives for owners to protect the capital of the institution and generate an adequate rate of return on that capital. This will involve clarifying the legal form of RCCs, which to date, despite the terminology employed, have not been constituted as genuine co-operatives. Given the diversity between rural financial markets across China, strategies employed to address this issue may be different according to local economic contexts.

One option for clarifying the legal form and ownership of RCCs would create 'true' co-operatives based on local member-based ownership and independent management. Another option is to convert them into shareholding banks. Experiments have been undertaken in Jiangsu Province which have

created rural community banks that use existing RCCs as branch offices. Merging RCCs into a single legal entity at the county or provincial level might be part of either option.

Regardless of ownership structure, current initiatives across the country have created RCC unions (RCCUs) in every county to unite township-level RCCs. The RCCUs fill a variety of roles from providing services to member RCCs to performing a perfunctory regulatory role. On the whole, implementation of these RCCUs has been in a top-down manner. Potential exists for them to be more demand-driven institutions that provide resources in areas like treasury management, internal controls, internal audits, and independent loan reviews (including the determination of appropriate loan loss reserves) for use by many RCCs. This would permit the shared use of scarce professional expertise and knowledge.

The success of any transition will depend on the ability and willingness of local governments to cease interventions in RCCs' decisions regarding credit allocation and rescheduling of defaulted loans. New ownership arrangements that are genuinely supported by provincial governments will be one element of the solution. Action by the CBRC to sanction improper behavior by board members, senior managers or even third parties would be another. Another possible complementary step would involve handing the implicit subsidies inherent in policy-based subsidized lending directly to local governments to use for other, more productive, rural development activities. This might ease local government concerns regarding granting RCCs operational autonomy in lending decisions and product pricing.

New product development would allow RCCs to design financial instruments that meet the needs of target clientele. In China's case this will involve granting the legal authority to do so, as current restrictions allow product development only after pre-authorization. Staff capacity building will also be needed so that market research can effectively be carried out and translated into effective product development, testing, and implementation. When a commercially-oriented rural financial market develops, the competitive environment will demand the ability to flexibly adapt to clients' needs in order to attract and keep clients and achieve commercial sustainability.⁹

In order to re-orient RCCs towards commercial sustainability, a protocol for sharing responsibility for the historical losses of the RCCs will need agreed upon to ensure sufficient recapitalization to put the institutions on a sustainable basis. ¹⁰ This will require an agreement between the central and provincial (and possibly sub-provincial) governments (under the assumption that losses will not be imposed on RCC depositors). A due diligence process that accurately determines the proper amount of recapitalization also is necessary.

Furthermore, it will also be prudent to ensure the exit of non-viable RCCs from the system. There are two available options for existing institutions. In cases where there is little asset or franchise value to entice new investors, the RCC could be closed and liquidated. Depositors could then transfer their funds to other institutions. In markets where no alternative financial service providers exist, especially pertinent for rural areas, deposits and good assets could be transferred to another viable institution.

^{9.} Over the last two years RCCs have begun offering "micro-finance" products under the directive of the PBC. While this programme has been widely implemented, the top-down process of implementation did not build staff capacity in developing products uniquely tailored to target clientele. There is a potential role for donors in facilitating such training.

^{10.} Failure to adequately recapitalize RCCs will make it impossible to achieve sustainable profitability. In fact, contributing assets (such as a cash equity capital contribution) in an amount sufficient to ensure future profitable operations is the primary determinant of the amount of recapitalization required.

Deposit and asset transfers should be voluntary and not a mandated merger of weak institutions, as has often been the case in the past.

State Commercial Banks (SCBs)

The existing state commercial banks can come to play an important role in rural finance in China. (State *development* banks are addressed in the next section.) The withdrawal from rural markets over the last few years by the state commercial banks, including the ABC, may prove to have been shortsighted. The extensive SCB branch network in China is an important potential asset in the context of rural finance. Two of the key impediments to the profitability of rural branches are existing restrictions on interest rates that can be charged on loans and the failure of state banks to adopt the operating policies and practices used by successful micro and rural finance lenders in other countries to keep down costs, including loan losses. Both impediments could be overcome. Branches that are unprofitable today could become profitable with a new product mix and more appropriate product pricing and operating practices. The remaining key impediment, government interventions in lending decisions, especially by local governments, would then also need to be remedied.

A key goal of the central government has been and remains to commercialize the SCBs. Yet, attempts to do so have thus far not proven effective, having tended to focus on symptoms of non-commercial behaviour rather than root causes. Given their size, for the benefit of China's economy it is essential that these banks be transformed into dynamic profit-seeking institutions operating on a commercial basis. This also is what is required if the SCBs are to be able to raise the new equity capital they require. Yet given their governance history, their size and the widely varying public perceptions of their social responsibilities, putting these banks on a fully commercial basis is proving an exceptional challenge.

While clearly controversial in China, it is only through careful privatization that the goal of commercialization ultimately can be attained and sustained. Although there have been a few examples in history of state banks performing effectively over the long-run, these have occurred under social and economic conditions widely different from those in China. Trying to commercialize the SCBs in an environment where only limited steps toward private control are envisaged most likely will not prove effective. In particular, diversifying ownership by dispersing a share of the equity to the general public will offer little improvement in governance. Instead, privatization should be oriented in the near term toward attracting domestic and foreign strategic investors able to provide significant new equity capital and to contribute meaningfully to strengthening governance and management. Privatization to strategic investors who possess this capacity, and who put substantial capital at risk, will fundamentally improve the incentives for bank managers to pursue commercial operations, and will substantially reduce the potential for further calls on the state budget for recapitalization. Effort should be made to attract strategic investors in the near and medium term, while public stock market offerings could be considered in the longer term.

It is unlikely that qualified strategic investors will be interested in acquiring any of the SCBs as currently configured. To attract strategic investors, the banks will need to be subdivided to make them more manageable as private entities, for example by divesting one or more coherent business units from one or more of the existing SCBs. The consequence in the long run would be a large number of smaller, more governable and manageable, and more strategically rational and differentiated state banks that could be more readily privatized. As part of this process, it should be envisioned that some SCBs would be strategically reoriented toward rural and semi-rural markets, to serving agro-industries, and the like.

To facilitate commercialization, divestment and privatization, near term steps should be taken to put into place new ownership and governance arrangements for SCBs. Ownership functions, today dispersed among several political and government units, would be consolidated into a single body and made explicit. The SCBs would be corporatized, creating a distinct legal entity with a shareholding structure and a board of directors.

Subject only to these new ownership and governance structures, the state banks would be granted operational autonomy. Operational autonomy is of fundamental importance to the commercialization process, especially by allowing bank managers needed flexibility in the design and pricing of products and services, and in personnel decisions.

To complement these efforts, the SCBs should be freed from any requirement to engage in concessionary (policy) lending. Any remaining concessionary lending would be progressively transferred to state development (policy) banks. In parallel, concessionary lending by SCBs would be progressively eliminated. Within a set period of time SCBs would be required to engage solely in commercial activities. The speed with which these goals can be achieved will depend on a number of factors, including the magnitude of current concessionary and noncommercial lending, the extent of necessary capacity-building in state commercial and development banks, and the central government's ability to adopt complementary fiscal reforms (since some concessionary and noncommercial lending in effect would be transferred to the budget).

State Development Banks (SDBs)

While the core of the rural finance strategy should be to foster a commercial orientation among the great majority of rural finance institutions, there may well continue to be a role in rural markets for state development banking. Commercial financial institutions will have to be insulated from any pressure to engage in concessionary lending. Any remaining socially desirable concessionary lending would be conducted by state development banks. In rural markets this will require an analysis of future demands for concessionary lending, including the nature of such lending (financing certain types of primary agriculture and/or very small farmers) and where (geographically) such lending will be required. It also would require a realistic assessment of whether existing development banks (the Agricultural Development Bank of China, ADBC) can practically meet the future demand for concessionary lending. Should that assessment suggest that future demand exceeds the physical, administrative and/or financial capacity of ADBC, or that the nature of the concessionary lending is inconsistent with its mandate, then a decision would be required as to whether to establish additional capacity. As mentioned above, it may be best to divest portions of SCBs into smaller units, of which one or more might be explicitly converted into a development bank.

In any case, a key element of the reform strategy for SDBs would be to explicitly define and circumscribe in law their developmental mandate, including their role in concessionary lending and in market development, as well as the basis for any subsidies they might enjoy. Concessionary lending would be made subject to explicit policy guidance regarding borrower eligibility, purpose and degree

^{11.} With respect to most of the legitimate social objectives currently being pursued through concessionary and non-recoverable lending by the state banking system, a case can be made that explicit fiscal subsidies would be a more efficient means to achieve those objectives. As fiscal reforms proceed, the justifiable need for concessionary lending should decline.

^{12.} Other forms of ensuring certain targeted borrowers have access to finance should also be explored. For example, finance might be provided to firms engaged in purchasing primary agricultural commodities from small farmers under programmes where the funds are on-lent to farmers for working capital purposes.

of concession. It would be made clear that under no circumstances would non-repayment be an acceptable form of concession. ¹³ Steps would be adopted to progressively increase the transparency of concessionary lending and to improve its pricing by reducing the degree of concession or subsidy. Governance and supervisory measures would be taken to ensure that concessionary lending complies with official policies, that the SDBs do not stray beyond their mandates, and that they maintain financial discipline. With progress in implementing parallel and complementary measures and policies, it would be expected that the aggregate need for concessionary lending would decline over time and that SDBs would either be wound-down or converted to commercial banks and eventually privatized.

As with China's RCCs and SCBs, a clear governance framework must be established for SDBs. Boards of directors need to be held accountable for achieving explicit mandates by a clearly designated "owner" within government, and managers must be held accountable to boards of directors. This framework will help prevent local political forces from using such banks as instruments of political patronage.

Likely there will continue to be substantial demand for concessionary lending for infrastructure investments in rural markets, especially for public good type infrastructure that does not generate sufficient revenues to cover costs. ¹⁴ The role of the China Development Bank (CDB) in meeting that demand would be made more explicit, with respect to both its mandate for providing concessionary finance and for developing the infrastructure finance markets. Its role in market development would include promoting greater use of syndicated lending (now virtually nonexistent) as a means to spread risks in larger projects among a greater number of banks. ¹⁵

Institutional capacity building

It is crucial to place emphasis on developing internal institutional capacity and the skills of managers and staff in all financial institutions in China. Risk management capacity will need strengthened. Currently, an inability to efficiently assume, pool, price, and manage risk inhibits the rural finance intermediaries' ability to earn an adequate return on invested capital and earn the profits that will make them competitive in a commercial rural financial market. Strategic business plans will need to be developed by senior managers to guide the RCCs through changes in the rural market, for example in the shift from agricultural to non-agricultural productive activities and the corresponding change in financial services demands. An internal governance infrastructure, including internal controls, internal audit, and management information systems will need to be installed as a foundation for sound management and commercially sustainable operations.

These initiatives depend importantly on the ability of the institution to recruit, train, and retain qualified staff. This includes the recruitment of qualified boards of directors to enforce proper risk management and other areas of internal governance. Staff will need to be trained in market research and new product development, as mentioned above, and in the use of new technologies. In order to both retain staff and integrate the profit motive into bank operations, an incentive system based largely in positive performance-based remuneration, which rewards strong loan portfolios for example, will

13. Non-repayment would explicitly result in ineligibility for future concessionary lending.

^{14.} Infrastructure investment in the more developed and wealthy markets, and infrastructure that can generate revenues that cover costs, would increasingly be financed in the capital markets by commercial bank lending (including syndicated lending) on a commercial basis.

^{15.} The CDB might also be expected to play a role in the development of capital market infrastructure financing mechanisms.

need to be implemented.¹⁶ There is a potential role for government and donors to play in offering training to set up internal control systems and build staff capacity in utilizing these systems. Smaller financial institutions will need to recognize the potential value of outsourcing some key functions rather than using scarce resources to recruit and train staff in these areas.

Complementary service providers

To create a competitive environment, increase potential returns on financial institution capital, and induce investors to enter China's financial services market, there is also a need to develop complementary service providers that reduce information asymmetries, help create a level playing field among actors, and promote access to credit across a wide segment of the population. Three such services are credit information registries, credit guarantee schemes, and collateral registries.

Credit Information Registries (CIRs)

Currently, some steps are being taken to create a national credit information registry under the guidance of the State Council. A national system would benefit the development of China's financial sector by reducing the risk of lending to middle and lower-income rural firms and households. CIRs can improve banks' ability to judge and appropriately price credit risks and reduce loan processing times and costs, and can offer similar benefits to potential trade creditors. Well functioning CIRs create positive incentives for borrowers to repay loans in a timely manner by enhancing the value of "reputation collateral" derived from timely repayment of all types of credit. This increases the profitability of lending in the long run, which will contribute to building a more sound, competitive rural financial services industry.

To achieve these results, an effective credit information system would collect both positive and negative information. Information should come from both bank and non-bank lenders to augment the predictive power of the registry. An adequate regulatory structure and privacy protections for clients with channels to dispute incorrect information would need to be in place before an effective registry can be implemented. Adjustments to bank secrecy laws will need to be made, which currently prohibit the distribution of information. Furthermore, existing initiatives to create a system to be used for a wide range of objectives, including tax reporting, should be re-evaluated to ensure that this does not reduce the incentive to participate in the registry. Seeking to use CIRs for tax enforcement or other unrelated purposes will undermine their effectiveness in achieving their principle objective, increasing access to efficiently priced credit.

There is currently a credit rating system in use by China's RCCs. Under this system, a three-person team methodically evaluates the credit-worthiness of each household. According to a pre-determined formula across a variety of criteria, each household is then given a 'credit certificate' indicating the credit line available (without collateral) at the local RCC. This information is kept by the local RCC. While such a movement represents an important starting point to expanding access to credit, it will not reduce risk and information asymmetries for all creditors. A comprehensive CIR would make this information publicly available in a neutral location so that rural households may use their credit ratings to leverage the financial product that most meets their needs, offered by any institution. The reduction in risk would bring more investors into the rural financial sector and foster competition.

such as large, government-backed firms.

^{16.} Some current systems employ negative performance-based remuneration, where staff are punished for poor or non-performing loans, causing loan officers to lend mainly to firms perceived to be "safe",

There will need to be an examination of whether public or private registries would be most useful in the Chinese context. Public registries generally help to strengthen bank supervision and can also be imperative when only a few banks compete in similar markets, weakening incentives to share information. There could also be a mixture of public and private registries, so that, for example, the central bank may collect information, send it to private registries, who collect, analyze, and re-package that data and sell it to financial institutions. ¹⁷

Credit Guarantee Schemes (CGSs)

The central government has taken many steps to improve the flow of credit to smaller firms in urban areas. Besides urging banks to penetrate that market, the government has promoted the establishment of credit guarantee schemes for smaller firms. The largest component of such schemes are the government-sponsored credit guarantee agencies established by municipalities and provinces. In addition, there are a smaller number of member-SME-funded mutual guarantee funds and private-sector invested commercial guarantee companies, both forms of which pre-date the establishment of government credit guarantee agencies. Reportedly central government officials are considering establishing a national guarantee scheme that might reinsure provincial schemes' obligations. These initiatives, however, have largely been urban-based and plagued by insufficient risk-sharing between banks and CGSs.

To facilitate lending to a specific sector, credit guarantee schemes seek to reduce risks and transaction costs by supplementing bank credit analysis and pricing processes. Other motivations for establishing credit guarantee schemes include overcoming limitations on the ability of businesses to provide acceptable collateral and to circumvent interest rate controls. Credit guarantee schemes can create their own distortions, however, by undermining incentives for borrowers and banks and creating potential financial liabilities for governments. The credit analysis and pricing skills of many credit guarantee agencies, often staffed by government bureaucrats, may not necessarily be better than the banks' capacity. They also may be in a weaker position to evaluate the creditworthiness of borrowers than the lending bank. Although pooling a large number of loans in a large credit guarantee programme could offer some risk-sharing advantages, these are likely to be more than fully offset by a worsening of the average loan-loss experience. This is especially likely where banks retain none of the credit risk, which is often the practice in China.

In order for credit guarantee schemes to be a more effective means of filling market gaps in China, including in the rural sector, a number of prerequisites must be met. A healthy banking sector must be in place that operates competitively under commercial imperatives, as has been outlined above. Banks within the sector must be committed to servicing the sector targeted by the CGS. This targeted group must be heterogeneous enough to diversify the risk they pose. There must be risk sharing among participants, all of whom must have the management capacity to implement such a project. Guarantees should be temporary and serve only as a bridge to formal financial sector transactions. Political support will be key, but political intervention must not be permitted. In designing the CGS, it must not guarantee the full size of the loan, and CGS staff should carry out an independent review for each borrower. Loan default rates above five per cent should signal systemic

^{17.} Margaret Miller, "Credit Reporting Systems around the Globe: The State of the Art in Public Credit Registries and Private Credit Reporting Firms", Washington, DC, 2001.

^{18.} Michiel Bastiaenen and Peter van Rooij, "Guarantee Funds and NGOs: Promise and Pitfalls, a Review of Key Issues", International Labor Office, Geneva, 1997.

problems in the scheme and a need to redesign the system. Collateral must be taken, in any form, to instill a repayment culture in the borrowers.¹⁹

If the CGS system in China can be re-designed to reflect these best practice criteria, they could serve as important components of the transition to a modern financial system, including in bridging any gaps in financial services that occur as banks commercialize and privatize.

Collateral registries

Acceptable collateral in China includes mortgages on land use rights and real property; means of transportation, equipment and other movables; cashable savings instruments; and pledges on transferable stocks, patents, and trademarks. The most commonly used collateral are real estate assets, and some collateral such as equipment is often eschewed by banks. Collateral practices are generally incompatible with the availability of collateral for rural households, who most often have property rights to the house but not the land it occupies.

Registration rules that govern the use of each type of collateral exist, yet registration requires complicated procedures that make it difficult to properly secure contracts. While each type of collateral is ostensibly registered at the agency governing that type of collateral, ambiguities persist. For registration of land use rights, for example, it is unclear from the law whether this implies the land administration authority or the urban real property administration authority. In addition, optional registrations can be carried out at local notarial authorities. Registration authorities are under-funded and under-staffed, making their approval only a 'rubber-stamp,' which reduces the validity of the claim as the quality of verification can not be ensured.

Collateral registration can also be an expensive process, and the fees required can inhibit access to credit. Registration fees are generally levied as a portion of the asset's value, providing incentives for the registrar to overvalue the asset. Annual renewal fees contribute to the high cost of the use of collateral. Complicated registration procedures and high costs create a burden for both debtors and creditors, especially when the need to secure more than one type of collateral for a single debt.

There appears to be, however, no standard way for a creditor to know whether a piece of collateral has already been pledged to another creditor. In addition, there are uncertainties surrounding the maturity of registration, especially given the current financial system where loans are often repeatedly extended. Court decisions on the maturity of registration and whether security on overdue loans is invalid vary from court to court. Another difficulty is that registration is localized, even for movables. Thus, when movables leave the local authority, it will be even more difficult to know whether they have been pledged elsewhere. Security interests are generally enforced through a sale of property and not through judicial proceedings, a further cost to both creditors and borrowers. The state of the Chinese judiciary, where courts have an inadequate means to enforce decisions, further increases the hassle of using the security system.²¹

Therefore, in order to increase the utility of collateral for lenders, thus allowing them to take greater risks and extend credit to a broader population, a national collateral registry should be created that consolidates the site of registration in one institution, makes the information nationally available

^{19.} International Finance Corporation, *China's Emerging Private Enterprises: Prospects for the New Century*, Washington, DC, 2000.

^{20.} Ibid.

^{21.} Yan Zhang, "Taking and Enforcing Credit Security in China", World Bank, Washington, DC, 1999.

in an accessible, searchable database, and reduces the costs of collateral registration (in time and money). It is possible that this could be combined with the credit information registry outlined above, as many of the prerequisites to setting up such a system overlap.

Supervisory capacity

Among the important institutional prerequisites for a commercially sustainable rural financial system is a substantial reorientation of the bank (and RCC) supervision functions. Bank supervision increasingly should focus on the quality of governance and management as well as the adequacy of the internal governance infrastructure (internal controls, internal and external auditing, risk management systems) that underpin commercial operations. Prudential regulations that establish basic parameters on financial institution risk-taking should come to replace current detailed regulations that often seek to dictate micro-level managerial decisions. This requires not only a profound philosophical reorientation of the bank supervision function, but also many years of institutional restructuring involving revamping supervisory objectives, policies and procedures. A comprehensive and time-bound institutional strengthening programme would best be undertaken involving a substantial investment in training personnel.

During this institution-building phase, finite CBRC resources would be directed mainly to ensuring initially that all banks put in place an adequate internal governance infrastructure²², that ownership changes among banks and RCCs result in improved governance and management, and that unviable financial institutions are removed from the system. The CBRC should ensure, for example, that new controlling shareholders of banks meet appropriate suitability standards,²³ and more generally that new investors serve to enhance the soundness of the bank. To resolve unviable institutions, CBRC would put in place the policies, processes and skills needed to identify the weakest institutions, to seek time-bound improvement in their operations, and failing that, to intervene in them.

Rather than preauthorize all new products, CBRC would ensure that financial institutions have in place internal procedures that subject new products to legal review (to ensure the product does not violate law or regulation), accounting review (to vet the proposed accounting and auditing procedures for the product), and risk review (to ensure that appropriate authorization requirements are in place and that the product has been incorporated into existing risk measurement and monitoring systems or that those systems have been modified to accommodate the product). In this way the regulators can be more comfortable that financial institutions will behave prudently when launching new products without stifling innovation and competition.

Policies affecting the relative roles of official supervision and market supervision in China also should evolve over time. These policies would recognize that even in the most developed markets characterized by relatively well-functioning official institutions, the conduct of effective bank supervision is challenging, and that market discipline is an important complement to official supervision. In China, market discipline would come to play a much more prominent role than today. Promoting the disclosure of ample accurate information regarding financial institutions and financial transactions would increasingly create strong incentives for improved bank and financial institution

Over time this internal infrastructure would come to assume many of the roles the supervisors currently attempt to play themselves directly.

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^{23.} The bank supervisory authority has powers to ensure that new shareholders meet suitability standards, including powers to investigate and sanction circumventions of regulatory requirements by dispersing their ownership interests among various legal entities below the 10% legal single-party threshold. New policies and procedures would be adopted to ensure vigorous application of those powers.

performance (as well as to protect consumers from being misled in their dealings with financial institutions).

3. Pilot in commercially sustainable rural finance

As noted earlier, China has yet to formally experiment in a comprehensive way with the principles, policies and practices inherent in commercially sustainable rural finance. While some of these have been a feature of some of the many micro-finance and rural finance pilots undertaken over the past decade, a clear lesson from experience in other countries is that implementation of a comprehensive package of measures is required for success. It may be highly valuable to undertake such a pilot in China today.

Since the early 1990s, about 260 pilot micro-finance and rural pilot projects have been undertaken. These projects have involved existing rural finance intermediaries, local government bureaus, and newly created institutions. Most charged interest rates that were not set at commercial levels. Limited experiments with small staff incentives for loan recovery and borrower incentives for timely loan repayment were implemented in some cases. Varying and incomplete forms of evaluation methodologies and data collection practices were employed which has made an assessment and comparison of their performance difficult. It is widely believed, however, that the majority of these projects have not achieved substantial market impact or financial sustainability, largely because they were still subject to continued political intervention, interest rate controls and competition from subsidized lending programmes. There have also been attempts at testing different forms of RCC organization and allowing greater flexibility in interest rates in selected rural areas, but these experiments have not built enough knowledge to support fundamental reform strategies in rural finance.

The proposed pilot of commercially sustainable rural finance would involve the delivery of financial services, notably loans, to economically active individuals and firms engaged in profitable business of any type in rural markets. It would involve certain requisite features, including adequate interest rate and product design flexibility so as to be able to tailor products to client needs and price those products in a manner to ensure financial sustainability, and flexibility in personnel decisions and compensation policies. The pilot would be subject to rigorous analysis of market impact and financial sustainability. Market impact would assess measures such as the number and growth in clients, the relative income levels of clients, and the quality of services provided.²⁴ The pilot should be of sufficient scope to ensure that lessons of broad applicability throughout rural China can be drawn. Therefore the pilot might best be undertaken in at least 70 and up to 200 test units in three or four geographic markets, with wide enough variance in average income levels, natural endowments, and other factors among the regions to gain representation of the general conditions prevailing in most of rural China.

Pilot implementing units would have to have the legal authority to make loans and take deposits, while ideally offering convenient physical access to most economically active individuals and firms in the geographic market. Possibilities include RCCs, state bank branches such as the ABC or ADBC, or a combination thereof. If possible, there would be more than one implementing unit in the same market so that clients have a choice and there would be competition among the units. Implementing units must have the autonomy to set lending interest rates, determine the terms and conditions for loan and deposit products, and offer performance-based staff compensation. Capacity building and

^{24.} See Jacob Yaron, "From Old to New Roles of Government in Establishing Sound Rural Financial Institutions", paper prepared for the Workshop on Rural Finance and Credit Infrastructure in China, Paris, 2003.

technical support would be available during the first year or two of the pilot to ensure proper implementation of these procedures.

A pilot leadership unit (PLU) would need to be formed to guide the pilot, headed by a strong leader with a solid understanding of commercially sustainable rural finance principles and practices, and with the political clout and willingness to overcome ideological or institutional resistance. The PLU would provide or facilitate access to key services for implementing units such as uniform management information and internal control systems, standardized loan evaluation and decision-making procedures, and specifications for staff incentives. Technical assistance would be made available to the PLU to ensure proper management and governance of the pilot.

Government financial support (subsidies) would only be provided for institutional capacity building during the first two years of the pilot and would cover staff training, implementation of IT packages, and design and documentation of new products, policies, and procedures. Financing would also be required for the PLU.²⁵

During implementation, all units would be subject to standardized and detailed analysis of operating costs and revenues associated with the pilot, return on imputed equity, ²⁶ and market impact.

It is imperative for the pilot not to repeat a piece-meal approach to experimenting with the policies and practices that underlie commercially sustainable finance in an effort to achieve quick results. Should only some components of best practices be tested, without providing for necessary conditions such as adequate flexibility in lending interest rates and autonomy in lending practices and performance-based incentives, launching yet another pilot may only lead to a waste of resources and a loss of credibility in future reform programmes.

Comprehensively implementing this pilot would test the applicability of liberalized interest rates, staff and client incentives, and management autonomy in China's existing rural finance intermediaries. Demonstrating implementation potential, understanding possible implementation challenges, and gaining practical knowledge about applicability in the Chinese context would guide the development of an enabling legal and regulatory framework and appropriate governance structures for China's rural finance intermediaries, thus paving the way for building a commercially sustainable rural financial services industry.

26. The value of equity would be imputed because many of the pilot units would in fact have no real capital.

^{25.} Ideally some international financial support to partially match the required investment by government would be provided.

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THE SYSTEM OF CHINESE RURAL FINANCIAL ORGANISATIONS: ACHIEVEMENTS, SHORTCOMINGS AND INSTITUTIONAL RENEWAL

By Hongyu Zhang

Abstract

An essential aim of the Chinese government's agricultural policy has been to meet the basic capital requirements of agriculture, the countryside and peasants, and to provide them with comprehensive financial services. Over the last twenty or more years of reform, the Chinese government has made every effort to ensure the realisation of this policy objective through the establishment of a complete system of financial organisations. This paper starts with the history and current situation of the system of financial organisations in the Chinese countryside, emphasising the division of responsibilities and functions among them. It indicates various capital requirements by the pluralistic business entities in China's countryside, various functional orientations of the pluralistic rural financial institutions, and concludes that, at present, the choices made are reasonable ones. However, in light of the functional defects of China's current system of rural financial organisations, the author puts forward his ideas on innovative reforms of rural financial organisations.

1. Posing the questions

Whether or not current agricultural development constitutes the reform of traditional agriculture, there is an urgent demand for capital. Although an examination of the basic characteristics of demand indicates that the amounts demanded by individual peasant households are small, the number of households is great and the discrepancy between them is large, so that free movement of capital between supply and demand in the countryside is much more complex than for cities and non-agricultural industry. In addition, the characteristics of the agricultural industry determined by natural risks and uncertainties, together with the poor ability of peasants to repay loans and the extreme ease with which moral hazards occur result in high transaction costs. In all countries, whether it is the government involved in providing support or financial institutions actuated by commercial motives, in general all consider that the provision of a complete financial service in rural areas is particularly difficult.

China is a major agricultural country that is undergoing transformation. Since the reform and opening up of rural China began, peasant household families have become the basic unit of production, and the imbalance between supply and demand in rural finance has intensified in three ways. First, the number of peasant households in China is enormous. According to statistics for 2001, there are 244 million peasant households in China. Each of them is the object of actual and potential demand for capital. This has determined that the total demand for capital in the Chinese countryside is enormous. Secondly, the average scale of operation of peasant households in China is tiny. On average, each peasant household manages 0.53 hectares which is almost the smallest unit worldwide. This also indicates that the demand for capital by a single peasant household is limited. Thirdly, the characteristics of China's economic regions are very different. The natural resources of the various regions and the level of economic and social development result in a large disparity between peasant households. As far as capital is concerned, multilayer and pluralistic variations in demand are apparent. Satisfying the different aspirations is exceptionally difficult. This is also a problem of China's rural finance, not only in relation to developed countries throughout the world but also to the majority of those in the course of development. It is clear that it is the root cause for the complexity of

the flow of funds, for defects which easily grow larger, and for difficulties with the implementation of institutional innovations. In other words, the question of how to guarantee that rural funds from restricted channels of supply and organisational networks flow towards hundreds of millions of peasant households and realise a balance of supply and demand is a challenging subject among other important problems of the Chinese countryside and agriculture.

In view of the complexity of the financial problems of Chinese agriculture, meeting the most basic funding requirements of agriculture, the countryside and peasants, and the provision of satisfactory financial services to peasant households has always been one of the basic goals of the government's rural policies. In more than twenty years since the reform and opening-up of the Chinese countryside began, the reform of the rural financial system has never ceased. The government has made every effort to guarantee the realisation of its policy goals through the construction of a fairly complete system of financial institutions. In fact, when examining the history and the current state of development of financial institutions in China, any discussion and analysis of the problems of Chinese rural finance will revolve around their achievements. Starting from this position, the basic problems which this paper needs to explain can be summed up as follows.

- The basic framework of the organisational system of Chinese rural finance, the history and current state of this system, the different areas of activity of the different financial institutions and how the range of functions should be delimited.
- How the Chinese rural financial institutions can meet the basic funding requirements of the
 countryside, agriculture and peasants and how the functional position of Chinese financial
 institutions should be appraised in the process of redirection towards the market economy?
 Whether the functional position of different financial institutions is a rational choice and
 what are the institutional results.
- The shortage in the supply of rural capital is a global problem. The situation of the supply of rural capital in China manifestly reinforces this feature. In relation to the huge demand for rural capital, there has always been a shortfall in its supply over many years. Even more noteworthy is that, for many years, the Chinese countryside's contribution towards funds has exceeded by far the financial services it has received. This shows that there are some defects in the organisational system of rural finance itself. What exactly are the factors restricting the balance of supply and demand in rural finance?
- Institutional innovation is important. The state of rural financial services in China should be thoroughly improved and it is necessary to be resolute in surmounting the obstacle of the old system and courageously carry out institutional innovation. What then are the key areas for the innovation of the Chinese rural financial system in the new period? How will structural reform of rural finance and new system arrangements sustain rural economic development and provide the peasants with satisfactory services?

An analysis of and reply to these questions form the basis of this paper.

2. The system of rural finance institutions: its history and current state

Financial development depends on economic growth. The formation and completion of the system of Chinese rural financial institutions have to a considerable degree kept pace with the growth of agriculture and rural economic development. At the same time, the development process of the system of Chinese rural financial institutions is also a progressively implemented process, interwoven with the structural reform of Chinese finance and the reform of the rural economic structure. The

structural reform of Chinese rural financial development promotes the development of a system of rural financial institutions.

Before entering the reform era, China had a highly-centralised planned economy in addition to a highly-centralised banking organisation. For many years, the People's Bank of China (PBC) was the only banking organisation in the country and there was no independent system of rural financial institutions. One of the outstanding achievements of the structural reform of the Chinese rural economy, which began at the end of 1978, was the impetus given to the development of Chinese rural financial facilities. The structural reform of the rural economy gave impetus to the marketisation and monetisation of the rural economy. This has created a demand for pluralism of investment and finance in rural areas which, in turn, has necessitated the transformation of the rural financial system towards a system based on diversified financial organisations. Two trends in the history of changes in the rural financial institutional system should be mentioned. The first was the politically-led reform of the former system of rural financial institutions. The results of the reform were the formation of the main framework for rural policy finance, commercial finance and co-operative finance supply entities, namely the so-called official rural financial supply entities and organisations. The second was a spontaneous development of unofficial institutions aiming for profit.

An important question which the Chinese government is still investigating today is what kind of system of rural financial institutions needs to be established to be able to adapt to the needs of national economic development in transformation. When studied from a historical perspective, we have for many years made still more attempts to seek the turning point for developing a new structure within the framework of the old structure. According to this school of thought, during the early days of reform and opening up in 1979, the Agricultural Bank of China (ABC) was restored and, by 1983, the bank had basically developed a comprehensive, independent organisational structure. Thereafter, it was assumed that the rural credit co-operatives (RCCs), which had been set up in the 1950s, should become the grassroots organisations of the ABC. Beginning in 1985, the government launched its reform of the ABC with commercialisation as the main theme. The ABC's relationship with the RCCs was adjusted with the latter taking part in business activities in accordance with the requirement for "autonomous management, independent accounting, full responsibility for profits and losses and bearing one's own risks". In order to strengthen the management of the RCCs, joint unions of RCCs at county level were established throughout the country. At the same time, the policy of financial retrenchment which began in 1986 provided an opportunity for the development of rural unofficial financial institutions and lending and borrowing activities. During the early 1980s, rural co-operative foundations (RCFs) were established spontaneously and developed quite rapidly at the time. During the early 1990s, as the Chinese economic and financial structural reform continuously intensified, after the foundation of the Agricultural Development Bank of China (ADBC) in 1994, the ABC turned towards commercial banking. From this, the rural financial system was formed with co-operative finance as its basis and with both a division of operations and co-operation between commercial financial institutions and policy financial institutions. In addition, some business was also developed within the rural domain by the People's Insurance Company of China (PICC) and its branches, including agricultural insurance business, and by some financial trust and investment companies formed by the government and departments at every level (Figure 1). So far, following over twenty years of reform and development, a situation has arisen of official financial institutions and unofficial funding organisations coexisting within the Chinese rural finance.

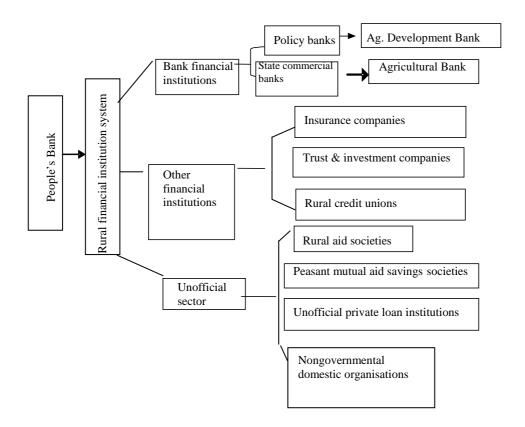


Figure 1. Structure diagram of the system of rural financial organisations in China

It can be seen from Figure 1 that, with the PBC acting as a central bank implementing a unified monetary policy and supervising the whole financial system, the system of rural finance in China is actually composed of three kinds of financial organisations and institutions. The first consists of state financial institutions, including the ADBC and the ABC. The second is the system of non-banking financial institutions and the third is the unofficial funding organisations. The RCCs are dealing with the banking business, but they have always been regarded as financial institutions of a non-banking character in China.

3. Rural financial organisations and institutions: division of responsibilities and performance

Three large financial institutions make up the system of rural financial organisations in China - the ADBC, the ABC and the RCCs. They are mainly geared towards Chinese agriculture, the countryside and peasants and together they constitute a rural financial setup with a division of operations and co-operation between them with regard to policy, commercial and co-operative finance. Government policy concerning the supply of capital and credit support is mainly implemented through these three financial institutions.

The ABC is the largest commercial bank involved in agriculture. Agricultural, rural and peasant credit business has always been the focus of its activity. The ABC is involved in agricultural loans, including special agricultural loans (aid for poverty, comprehensive agricultural development and

ancillary business in grain, cotton and oil), normal agricultural loans (farming, forestry, livestock, fisheries and the processing of agricultural products), loans for township and village enterprises (TVEs), loans for rural supply and marketing co-operatives, loans for the purchase of agricultural products, and loans for basic agricultural and rural facilities. Between 1980 and 2001, the ABC issued loans of all types to the cumulative value of 14 282.7 billion Yuan of which loans for agriculture accounted for 9 448.9 billion Yuan, *i.e.* 66%. In 2001, the balance of loans of all types was 1 604.6 billion Yuan of which 866.1 billion Yuan was for agriculture, *i.e.* 54%.

As a policy bank, the ADBC mainly undertakes financial business for reasons of agricultural policy regulated by the state. Apart from registered capital approved and assigned by the State Financial Administration, it mainly relies on loans from the Central Bank and issues a certain quantity of financial bonds to raise loan capital. The ADBC undertakes the supply and management of funds destined for the procurement of selected agricultural products, with 90% or more loans allocated for the purchase, storage and marketing of such important agricultural products as grain, cotton and oil. By the end of November 2001, the balance of loans from the ADBC was 723.8 billion Yuan of which loans for grain and oil accounted for 584.4 billion Yuan, those for cotton accounted for 122.9 billion Yuan, loans for simple storehouse construction were 8.6 billion Yuan, special reserve loans stood at 5 billion Yuan and the remainder at 3 billion Yuan.

The RCCs are the institutions at the lowest level in the Chinese rural financial organisational system. With regard to demand for all types of finance by peasant households and in the countryside in general, they always play a decisive role in providing support for agriculture and rural economic development. By the end of 2002, there were 35 000 RCCs in China and 2 460 joint unions at county level. In 2001, the balance of the RCC's deposits of all types was 1 700 billion Yuan, accounting for 12% of the total of deposits in financial institutions. The balance of loans was 1 200 billion Yuan, accounting for 11% of the total of loans from financial institutions. The balance of agricultural loans was 441.7 billion Yuan. The proportion of agricultural loans by the RCCs rose from 26% of all such loans from financial institutions in 1979 to 77.7% in 2001 and they have become the main financial institution for agricultural loans in China. Agricultural loans are mainly issued to peasant households, giving key support to crop production, fish breeding, animal raising, agro-food processing and marketing as well as to children's education and consumer expenditure. According to statistics, 60% or more of the agricultural loans from RCCs are for peasant households. The percentage of peasant households having access to loans has reached 25% or more.

Over the past twenty years and more, the total of agricultural loans from Chinese rural financial institutions has grown very rapidly. In 1979, it was 12.9 billion Yuan and it grew to 571.1 billion Yuan in 2001, which was 44.3 times the figure for 1979. The figures for the ABC were 9.5 billion Yuan in 1979 and 127.2 billion Yuan in 2001, 13.4 times the amount for 1979. The figures for the RCCs were 3.2 billion Yuan in 1979 and 443.2 billion Yuan in 2001, 134.4 times the amount for 1979. From a structural perspective, the proportion of agricultural loans from the ABC fell from 74% in 1979 to 22.3% in 2001, while the proportion of those from the RCCs rose from 26% to 77.7% over the same time. This shows that the RCCs have become the main financial institution for agricultural loans.

The overall scale of loans to TVEs provided by rural financial institutions was 4.4 billion Yuan in 1979, rising to 639.1 billion Yuan in 2001, *i.e.* 145.3 times the amount for 1979. For the ABC it was 3 billion Yuan in 1979 and 145.1 billion Yuan in 2001, *i.e.* 48.5 times the amount for 1979. For the RCCs it was 1.4 billion Yuan in 1979 and 494.1 billion Yuan in 2001, it means 350.4 times the amount for 1979. When considered from the perspective of the rate of increase, however, there was a general tendency to fall. From a structural perspective, the proportion of loans to TVEs from the ABC fell from 67.9% in 1979 to 22.7% in 2001 while the proportion from the RCCs rose from 32.1% in

1979 to 77.3%. This shows that the RCCs have currently replaced the ABC as the main financial institution for loans to the TVEs.

In addition, the PICC undertakes the function of rural insurance business. The development of this business can reduce the risks of peasant household operations to a considerable extent, stabilise peasant household incomes and is beneficial for encouraging the increase in demand for small loans by peasant households. However, insurance promoted by Chinese domestic insurance companies for peasant households and rural enterprises is mainly concentrated on certain risks outside the domain of production such as property insurance, fire insurance on dwellings and medical insurance. There is a great shortage of crop, fish breeding and animal raising insurance which peasant households most need. Currently, apart from crop insurance and fish breeding and animal raising insurance promoted by the Xinjiang Bingtuan Insurance Company in Xinjiang and by the Shanghai Company of the PICC in the suburbs of Shanghai, these types of insurance are missing in other areas. The main cause for the difficulty in promoting insurance for crop and livestock business in China lies in the high risks involved in Chinese agricultural production and the insurance losses of commercial insurance companies undertaking such business are considerable while the government fails to provide rural insurance with appropriate support policy such as subsidies.

The Chinese rural financial trust and investment industry is also underdeveloped. One reason is that there are few institutions and the structure is not sound. The second is that the regional scope of business is small, the volume of business is small and demand for trusts and investments by rural enterprises and peasant households remains unsatisfied. Naturally, following China's entry to the WTO, there has been a rapid development of Chinese rural financial trust and investment operations.

Rural aid societies and peasant household mutual aid savings societies are unofficial rural financial institutions registered with and managed by the Chinese Ministry of Civil Affairs. The problems they have encountered in the course of their development are mainly that they are small-scale with very limited funding capabilities and lack the ability to withstand risks. At the same time, the development of some business is also faced with the problem of how to stay in line with Chinese current financial legislation.

Popular private lending and borrowing are relatively widespread in the Chinese countryside. It is especially widespread in economically developed areas and places where there is much demand for funds by peasant households and other operational bodies. Speaking frankly, the development of popular private lending and borrowing organisations in China is generally clandestine and the government is incapable of bringing it under its supervision. It can only replace and exclude the development of popular private lending and borrowing by enhancing the rural small loans business of official financial organisations and providing a more favourable service to peasant households. The distribution of responsibilities and functional boundaries of the various organisations and institutions is clear. Table 1 shows clearly the respective functions and activities of the various organisations and institutions within Chinese rural financial system.

Table 1. The functions and activities of the various organisations and institutions within the Chinese rural financial system

Name of organisation or institution	Main functions	Object of service
People's Bank of China (PBC)	Maintenance of order in the rural financial market, supervision of the business activities of rural financial institutions	Official rural financial institutions
Agricultural Development Bank of China (ADBC)	State special reserve loans for main agricultural products; loans for purchase and sale of agricultural products; loans for processing enterprises; loans for small-scale basic construction in crop production, forestry, livestock, and water conservancy; loans for technical improvements; loans for economic development of remote and impoverished areas and for county-run industry in poor counties; loans for comprehensive agricultural development and other agricultural loans for which the financial administration pays interest.	Grain marketing enterprise, relevant departments of grass-roots government, processing enterprises
Agricultural Bank of China (ABC)	Rural industrial and commercial loans	
Rural credit co-operatives (RCCs)	Deposit taking, small loans for peasant households, loans for small rural industrial and commercial businesses	Rural enterprises and peasant households
Insurance companies	Rural property insurance and life assurance	
Trust and investment company	Rural trusts and investments	
Post Office Savings	Deposit taking	
Rural societies for aiding the poor	Microfinance for peasant households	Peasant households
Peasant Mutual Aid savings	Peasant household savings and small loans	
Private, popular loans and savings organisations	Small loans between peasant households, rural enterprises and between peasant households and rural enterprises	Peasant households, rural enterprises

It is clear that varying functional orientation of the diversified Chinese rural financial institutions provide a reasonable choice for the pluralistic business entities in the Chinese rural economy. Firstly, the structural reform of Chinese rural finance, the new system of rural financial organisations and the functional orientation of the various institutions satisfies demands of peasant households and provides ground for agricultural and rural growth. The supply and demand operations of rural capital guarantee that the government has sufficient regulation and control functions, but also reflect the operating principles of the market economy. Secondly, with the separation of policy finance and commercial finance, a distinction is made between political will and enterprise activity. This guarantees that the government has the channel to give financial aid to the countryside, agriculture and peasants, through its support for important regions, industries and projects, and to secure a rational deployment of resources. At the same time, the behaviour of commercialised financial institutions is also perfected and the problem of low long-term benefits from the supply of rural finance can be resolved to the maximum extent. It is hoped that the development of rural co-operative financial organisations can stimulate support for rural finance institutions providing a face-to-face service for the peasants. Thirdly, as long as government regulation and control of pluralistic, multi-layer, unofficial financial

organisations is strengthened and their activities are standardised, they can similarly make a contribution toward the development of the Chinese rural economy.

Realistically speaking, through more than twenty years of effort, as the organisational system of rural finance in China has continuously improved, there has also been considerable improvement in the state of the financial services provided by rural financial organisations to the countryside, agriculture and the peasants. In particular, as a result of the gradual formation of a system combining the three major rural financial services, namely policy, commercial and co-operative finance, an excellent foundation has been provided to guarantee the demand for funds by the Chinese countryside, agriculture and peasants. Moreover, during the growth of the system of three large official rural financial service organisations, namely the ADBC, the ABC and the RCCs, their operating mechanisms were also continuously perfected. Basically, they can respond to the demand for finance of all rural business entities and this achievement is significant.

- The perfection of the system of financial organisations, the gradual implementation of diversification in the instruments and methods of financial services and the continuous expansion of the multilevel and local scope of rural financial services, in particular the continuous improvement of modes of credit, have greatly promoted the increased ability of peasant households and other rural business entities to obtain credit. As of the mid-1990s, the credit rationing system, which the Chinese rural financial supply sector had implemented for a long time, gradually began to weaken. The ability of the main bodies involved in rural economic activities to take on credit operations depended increasingly on their credit worthiness. In the late 1990s, in order to mitigate problems in the provision of loans to peasant households and other rural business entities, the PBC encouraged rural financial institutions, and in particular the RCCs, to spare no effort in implementing joint household coinsurance and microfinance loans, the loan credit certificate (card) system, the establishment of a credit rating system for peasant households and other major rural business entities and simplified loan procedures. This was an all-round improvement to the situation regarding loans for peasant households and other major rural business entities and made it possible for them to seek new opportunities for economic growth. By the end of 2002, the balance of microfinance loans by RCCs to peasant households was 74.6 billion Yuan, an increase of 41.9 billion Yuan compared to the beginning of the year, a growth of 128.4%. The recovery rate on expiry of microfinance loans to peasant households reached 81%, creating the foundation for realising a sound cycle of economic activities. By the end of June 2002, 31 446 RCCs nationwide were offering microfinance loans, accounting for approximately 90% of the total number of the RCCs. In all, 43.2 million peasant households had obtained support in the form of microfinance loans, the cumulative value of which was over 200 billion Yuan. In such agricultural provinces as Hubei, Hunan and Sichuan, the share of peasant households receiving loans was 50% or more and 95% or more of loans to peasant households were supplied by the RCCs. The proportion of the balance of agricultural loans from the latter stood at 80.4% of agricultural loans from all financial institutions. The popularising of microfinance loans to peasant households has changed the situation compared to the past when there were many links in the chain of organising loans for peasant households, inefficiency and a low recovery rate. It has improved the borrowing situation for peasant households and their loan problems have been effectively resolved.
- ii) The continuous expansion in the quantity of rural loans has provided a guarantee of reliable sources of funds for increasing peasant income, increasing agricultural production, rural development and agricultural structural adjustment. Between 1980 and 2002, the net per capita income of Chinese peasants rose from 191.33 Yuan in 1980 to 2 476 Yuan in 2002, an annual increase of 12.34%. Between 1980 and 2001, the gross value of agricultural output rose from 145.4 billion Yuan to 1 446.3 billion Yuan, an annual increase of 11.56%. The year-end balance of agricultural loans for all financial institutions rose, however, from 17.6 billion Yuan to 688.9 billion Yuan in 2002, realising an annual average rate of increase of 22.94%. The growth in the balance of agricultural loans was much

more rapid than the growth in the gross value of agricultural output and peasant net income, providing agriculture and rural economic development with powerful support.

iii) Strengthening of the ability of rural financial institutions to supply funds for the agriculture. At the end of 2002, the balance of all deposits with the RCCs nationwide was 1 987.5 billion Yuan, an increase of 258.9 billion Yuan from the beginning of the year while the balance of loans was 1 393.8 billion Yuan, an increase of 195.1 billion Yuan. Bad loans fell by 14.9 billion Yuan, with their ratio in all loans falling by 7.3 percentage points. In the same year, losses fell and profits climbed by 7.1 billion Yuan. On the basis of its former quota of 70 billion Yuan in reloans, the PBC especially arranged 26 billion Yuan in reloans for use in supporting the extension of microfinance loans to peasant households in central and western regions. With support for agricultural industrialisation as its point of intervention, the ABC has expanded the strength of its support for agriculture and the countryside, issuing a cumulative total of 27.7 billion Yuan in loans for the whole year to support agricultural industrialisation, with the balance reaching 56.2 billion Yuan.

4. Functional defects in the system of rural financial organisations

Having gone through many years of reform and development, China currently enjoys a relatively complete system of rural financial organisations. However, where the rural financial system arrangements are concerned, perhaps because of long-standing malpractice which is extremely serious, there is greater criticism than praise for them. In fact, when all is said and done, the history in China of the use of modern financial methods to support economic and social development is much shorter when compared with the developed countries. Added to this, since China has for a long time implemented a strategy of dual economic and social development, the pattern of national economic distribution has favoured the cities and industry at the expense of the interests of the countryside, agriculture and peasants. Therefore, the majority of criticisms of the rural finance system consider that the contribution of capital to the national economy by the countryside is greater by far than the capital support it receives from other sectors of the economy. Moreover, from the point of view of meeting the ever increasing demand for capital from peasant households and other rural business entities, China still lacks a system of rural financial organisations in the fullest sense. With policy, commercial and co-operative finance as the mainstay, although other financial institutions coexist in the rural system, commercialised financial institutions dealing in insurance, securities, guarantees and leases in rural areas, in particular business in rural central and western areas, are basically in virgin territory. Up to now, a system of rural financial organisations in the full sense of the word has not yet matured in China.

The imperfections and functional unsoundness of the system of rural financial organisations in China at the present time show obvious institutional shortcomings.

i) Rural policy finance functions are incomplete and it is difficult for the ADBC to assume the heavy burden of Chinese policy finance. One reason is that capital sources of the ADBC are not stable. The main source of its capital should be funds freely allocated by the financial administration and repayment loans. However, since the pressure of the imbalance between government revenue and expenditure accumulated over many years is enormous, the allocation of supplementary funding frequently cannot be made available on time. In fact, the ADBC cannot avoid raising money through issuing financial bonds to commercial banks and by borrowing from the Central Bank so that the cost of financing goes up and an enormous interest gap is created for the ADBC's preferential loans. The second reason is that the efficiency of fund operations by the ADBC is poor. The funds of the ADBC are mainly loans for purchasing, marketing and storage, mainly as circulating capital loans, of such agricultural products as grain, cotton and oil. Under the current system of dividing responsibilities for policy funds in China, the ADBC mainly issues its loans to state-owned companies that buy and sell

grain and cotton, implementing the government's policy of buying these products at a protected price. In particular, it should be pointed out that the policy of buying surplus grain from the peasants at protected prices is the policy from which the peasants benefit most out of all policy measures supporting agriculture implemented by the Chinese government. Between 1994 and 2000, in order to guarantee the implementation of this policy measure, the ADBC extended procurement fund loans of about 200 billion Yuan annually to the grain purchasing sector. At the end of 2000, the cumulative loans issued by the ADBC for agricultural products amounted to 582.9 billion Yuan, with a balance of 730.4 billion Yuan, of which the balance of loans for the purchase of grain at protected prices was 230.7 billion Yuan. At the same time, however, since there was no stimulus or pressure on grain enterprises which had obtained loans from the ADBC to repay them, a relatively high proportion of bad loans was readily generated. This subsequently influenced the recovery of reloan funds by the Central Bank. Moreover, the grain and cotton price support policy should in general be borne by appropriate financial administration funds. The inability of the Central Bank to recover reloan funds implies that it functions as the government institution providing funds for the purchase of major agricultural products. The third reason is that the ADBC's scope of operations is narrow and it has a single function. In its early days, the ADBC also undertook such functions as production loans for a variety of agricultural developments and technical improvements, mainly in the form of fixed asset loans, and also loans to help the poor. Its aim was to improve the conditions of agricultural production and promote the economic development of impoverished areas. Later, as a result of policy adjustment, the ADBC only played the role of a policy financial organisation in the procurement of agricultural products and its operational functions were reduced to one namely a "grain bank".

ii) The function of state-owned commercial finance within the domain of rural finance tends to weaken. The satisfaction of market demand for rural finance requires support for savings and loans on a large scale. However, due to risk avoidance and stronger profit orientation, in recent years, state-owned financial institutions have all along become much weaker in rural financial business. In 1997, the Chinese government demanded that all state-owned commercial banks should withdraw their institutions at county level and below. Between 1998 and today, the four major commercial banks, namely the ABC, the Construction Bank of China, the National Industrial and Commercial Bank of China and the Bank of China together removed 31 000 branch offices at county level and below with the result that, in the majority of rural areas, there was a strong trend towards the reduction of financial institutions to one and, thus, to the monopolisation of local financial markets. Since grass-root financial institutions were withdrawn and the network was inadequate, a serious outflow of rural capital was brought into being. In 2002, it was estimated that capital drained from rural areas by the state-owned commercial banks by the absorption of deposits reached 300 billion Yuan. Secondly, since the Asian financial crisis, great changes occurred in the ABC with regard to its market orientation and operational policy. Its conduct on commercial basis became more pronounced each day. Seeking good results, it strongly reduced operational network and curtailed grassroot level institutions. Also, in view of long capital recovery term, low earnings rate and considerable risks in agriculture, the capital put into circulation by the ABC has been moved from mainly serving agriculture to the development of commerce and industry and from the countryside to the cities. Before the mid-1980s, 98% and more of all loans from the ABC were concentrated on the countryside. Between the mid-1980s to the early 1990s, in order to resolve the "sales difficulty" of agricultural products and to support TVEs, the ABC used 60% of its credit capital every year for the purchase of agricultural products and for the development of TVEs. At present, as the business of the ABC expands towards towns and non-agricultural industry, agricultural loans only account for 10% of all loans by the ABC. Therefore, as loans have been withdrawn from the grassroot level, a huge quantity of rural savings has been drained from the countryside. Currently, the range of business operations of the ABC is fundamentally no different from other state-owned commercial banks and the leading position which it held for a long time in rural finance has been greatly weakened.

- iii) The RCCs cannot adapt to the requirements of rural economic development. In 1996, the Chinese State Council decided that the RCCs should be separated from the jurisdiction of the ABC. A co-operative financial organisation in accordance with the principles of the co-operative system was specified. So far, however, the reform of the RCCs has made no real headway. This is apparent for the following reasons. Firstly, the operations of the RCCs are performed with the invisible guarantee of the government and they still depend on state credit. Secondly, it is difficult to shake off interference by local government in the operation of the RCCs. Thirdly, so-called democratic management exists in name only - the proper members' representative meetings, the board of directors and board of supervisors cannot be brought into play. Fourthly, the means and methods of service by the RCCs are not suited to the requirements of rural and agricultural economic development and cannot meet the peasants' demand for a wide variety of financial services which is growing day by day. Fifthly, proceeding from a consideration of self-financed sustainable development, there is a serious tendency towards commercialisation in the RCCs operations. This leads to a major flow of capital to cities or non-agricultural sectors where the rate of returns is higher while peasant households and other business entities which genuinely need loans from the RCCs frequently experience difficulty in obtaining loans. At the same time, the RCCs also cause much capital to flow from the countryside every year through such means as the payment of reserves against deposits, the transfer of deposits to the Central Bank and the purchase of government and financial bonds. Since the 1990s, the average annual transfer of funds by the RCCs has been approximately 200 billion Yuan.
- iv) Large part of rural capital is withdrawn by Chinese Post Office savings. After the state-owned commercial banks cut back their networks of rural deposit operations, the Post Office network which is spread all over the cities and countryside of China was provided with an enormous area for the absorption of savings and rural financial resources began to be concentrated in the Post Office and the RCCs. The Post Office has a network of 32 000 business agencies where it takes in deposits and the scale of its savings has developed rapidly. The quota of savings accepted and deposited annually rose from 55.7 billion Yuan in 1988 to 146.5 billion Yuan in 2002, when the year-end balance reached 737.6 billion Yuan. Of this, 65% came from areas at county level and below, with 34% from towns and townships and the rural areas under their administration. The Post Office does not issue loans and all capital is transferred to the PBC, flowing straight out of the countryside. Although the PBC also returns part of this capital to the rural domain by means of reloans to rural financial institutions, the scale of these reloans is very limited and is far from being able to compensate the loss of rural capital.
- v) Rural insurance is not suited for the requirements of rural development. As a major agricultural country, on average 30 million hectares of crops are stricken by natural disasters each year, accounting for one-fourth of the area sown over the whole country and with the ratio of areas where disasters occur to those suffering disasters being 40% or more. However, aid in respect of losses from natural disasters still depends primarily on two channels, namely policy aid for rural disasters from various offices of the Ministry of Civil Affairs and commercial agricultural insurance by PICC. In reality, such compensatory disaster relief is not subject to sufficient state financial restrictions, does not suit the demands of economic development and structural adjustment of agriculture, and is detrimental to encouraging peasant households to undertake insurance policies. This greatly limits the development of rural insurance facilities. Although the PICC undertook rural insurance as of 1982, the development of rural insurance facilities has never been successful, with considerable fluctuation. The ratio of income from rural insurance premiums nationwide as a proportion of the total amount of income from property insurance fell from 3.6% in 1992 to 0.6% in 2002. As a result of the lack of appropriate policy support, such as a government subsidy, together with the high loss ratio of rural insurance, agricultural insurance business provided by commercial insurance institutions has atrophied to a large extent. In 2002, the income from agricultural insurance in China accounted for 0.045% of agricultural added value, with the average insurance premium paid by peasants at 2.6 Yuan and

indemnity obtained from agricultural insurance at only 1.8 Yuan. This is far from being able to satisfy the demands of agricultural economic development and structural adjustment.

In brief, as a result of the unsoundness of the organisational system of rural finance in China and defects in its institutional functions, the problems of rural finance in China are pronounced. In the first place, peasants and other business entities experience difficulty in obtaining loans. It is difficult to meet the demand for financial services other than deposits and loans. The lack of credit loans results in the loss of many opportunities for agricultural development while credit obtained from official channels is insufficient and this has caused the uncontrolled development of unofficial rural financial organisations. Secondly, there are serious problems of unclear property rights, incomplete supervisory institutions and moral risks in both commercialised and co-operative financial institutions. This results in poor operational performance and difficulty in realising sustainable development. Thirdly, there is insufficient incentive for the structural reform of rural finance, the institutional design is imperfect and there is too much interference by local government while there is insufficient responsibility. There is enormous capital investment by the Central Bank in rural financial institutions but the results are poor.

It is precisely because of functional defects in official rural financial organisations that it is difficult to meet the demand for capital by peasant households which is growing day by day. This provides the unofficial financial institutions and organisations which exist in large numbers in the countryside with enormous room for survival and opportunities for development. In China, the so-called unofficial financial institutions and organisations consist mainly of popular finance in such forms as loan societies, savings societies, direct financing by town and township or individual private enterprises and co-operative mutual foundations. In addition there are also some popular financial organisations such as mutual aid societies and credit service centres. The existence of this popular finance is an important manifestation of such characteristics of Chinese financial institutions as lack of balance, financial duality and the difficulty in meeting rural financial demand through official channels. In the form of unofficial organisations, popular rural finance in China is often clandestine in nature or else prohibited. However, popular financial activity in many places is frequently a part of financial system arrangements outside of the local government setup. With the difficulty in satisfying rural financial demand through official financial system arrangements, such unofficial arrangements play a positive role in such matters as expanding funding for rural production operations, invigorating the rural financial market, raising financial efficiency and, in particular, encouraging private rural economic development. Its role in promoting reform of the rural financial system is evident.

There are many problems with the functioning of the popular rural financial organisations and with their funding activities. Firstly, interest rates on deposits and loans are generally rather high so that production and operational costs for peasant households rise while their competitiveness falls. Secondly, there are considerable financial risks. There is good and bad among popular financial organisations and some are run in a chaotic fashion, taking huge risks, which is extremely disadvantageous for maintaining normal financial order and this has affected the stability of the financial market and rural society. Thirdly, popular financial organisations generally develop on a small scale with activity which is either clandestine or semi-overt and the government cannot provide effective supervision.

5. Innovation in rural financial organisations: some thoughts on reform

Whether or not innovation of the rural financial organisational system can be realised within a time scale that is not excessively long is the key to whether or not sustained agricultural development can be maintained and the structural adjustment of agriculture can be successfully advanced. The following basic principles need to be grasped in order to introduce innovation in the Chinese rural financial organisational system and to create a basis for sustainable development. The first is to be

guided by rural financial demand in adjusting the organisational structure of rural finance. The second is that structural adjustment of the rural financial organisation should not only be suited to the demand for the further liberalisation and development of the Chinese economy but also the demand for global economic integration. The third is that the relationship between rural financial development and rural economic growth should be handled properly. At the same time it should be noted that renewal of the Chinese rural financial organisational system requires that it should be promoted together with the improvement of the rural financial market system and of the operational mechanisms of rural finance.

i) Approaches should differ in line with the level of economic and social development and the amount of resources available in different areas. A multilayer rural finance organisation structure should be provided. The American economist Hugh T. Patrick has provided two different models in respect of the supply of capital. The first is the "following demand" model, that is to say business entities may engender demand for financial services in the wake of economic growth and act as a reflection of this demand with the financial system continuously developing. In other words, demand for financial services by business entities results in the emergence of financial institutions and related financial services. The second is the "leading supply" model. Supply by financial institutions and related financial services precede demand, with the emphasis on the action of the supply side of financial services in boosting the economy. The two models complement each other at different stages of economic development and, as a result, an optimum sequence is revealed.

In the early stage of economic development, the leading supply model of finance occupies the principal position but, in the wake of economic development, the demand type model gradually occupies the principal position. Objectively, Chinese economic development is strongly localised and hierarchical. The demand for financial products also manifests strong localised and hierarchical characteristics. In the economically underdeveloped central and western areas, traditional agriculture dominates. Not only is the scale of demand for deposits and loans quite small but information is quite highly dispersed. When commercial banking institutions come to areas of this type in order to cater for the demand for loans by peasant households and other business entities, the cost of information gathering and updating is quite high and there is a lack of benefits of scale. Hence there is currently no economic base for the rapid development of commercial banking in such places. Although the RCCs have superiority where information is concerned, they lack the potential for sustained development. Hence, the "leading supply" model should be chosen to develop rural finance in these areas. With the premise of a stable basic structure with co-operative finance, policy finance activity should be brought fully into play.

In the economically developed areas of the east, the market economy has developed to a large extent, with the private economy and privately owned enterprises largely dominating economic development. Unlike the simple provision of loans to state-owned enterprises, the ability of the financial system to provide capital to the private economy is intimately linked to the economic growth. Although co-operative financial organisations have no technical difficulties in realising institutional innovations, their non co-operative characteristics is constantly revealed in their operational management and they may go along the "following demand" model of development. While enhancing the institutional innovations of co-operative financial organisations, some of the larger RCCs have been changed to the co-operative share-holding system, frequently with good results. However, attention needs to be given to the creation of an effective system of property rights which can provide an incentive, thus to increase the actual strength of RCCs as co-operative institutions. Also, in the main production areas for agricultural products in the centre, agriculture is in the middle of a process of transition towards modern agriculture. It is necessary to proceed from the relative superiority of local development and selectively develop a multilayer rural financial organisational structure in order to meet the funding requirements of peasant households and other business entities.

- ii) The implementation of the diversification of the rural financial organisational structure and integrated development of rural financial facilities. The phenomenon of inadequate rural financial supply needs to be changed to a pluralistic structural network of financial organisations including policy banks, commercial banks, rural co-operative banks, the RCCs, securities, leasing, insurance, guarantees and rural social security institutions. Rural securities companies mainly provide a service of direct funding to rural collective and individual private economic organisations. Rural leasing companies are mainly involved in leasing services for large and medium-scale rural mechanical equipment. Rural loan guarantee companies are mainly involved in the provision of credit and capital guarantee services with regard to loans to individual and privately operated companies and peasant households. The deposit guarantee companies of rural financial organisations mainly reduce the operational risks of financial operational entities by enhancing the credit of rural financial organisations. In addition, various financial or non-financial organisations or bodies including rural trust companies, investment consultancy companies, enterprise and family finance companies, should all be developed as appropriate.
- iii) There should be a rational demarcation of the boundary between policy and commercial finance. Policy finance is an important means of government support to agriculture that is widely used by all countries. Essentially, it is a quasi-budgetary means and a combination of funds provided by the government budget and commercial finance. Therefore, the boundary between policy and commercial financing needs to be rationally demarcated with the policy financial business of the ABC returned to the jurisdiction of the ADBC. Loans such as those for agricultural development undertaken by the RCCs where the policy element is strong should also be transferred to the ADBC and integrated under the collective management of that bank so that the advantages of a policy bank are fully brought into play. At the same time, the pressure of policy financial services on the RCCs and the ABC will be mitigated. As far as the commercial loans operated by the ADBC are concerned, consideration should be given to transferring them to the ABC or the RCCs, realising the thorough separation of policy finance from commercial finance and expanding the range of operations of the ADBC. This will transform it from a simple "grain bank" to a comprehensive policy bank supporting agricultural development, the construction of basic rural facilities, rural structural adjustment and the import and export of agricultural products.
- iv) Financial institutions within county boundaries should be reformed and integrated, local small and medium-sized banks should be fostered and benign cycle mechanisms for rural capital should be established. County economies in China are the basis for national economic development and for economic and social activity in the regions. Hence, the organisational system of finance within counties must be reformed and integrated to respond to a whole series of problems identified above.

In the first place, problems of the integration of the resources of state-owned commercial banks at county level should be explored. Consideration should be given to the integration of the system of branches of state-owned commercial banks to form small or medium financial organisations with local characteristics. Such small or medium financial organisations should be focused on the provision of small loans. This will benefit the circulation of funds to peasant households, small and medium-sized town and village enterprises and key industrialised enterprises. In the United States during the mid 1990s, a study of the banking service of the Federal Bank of New York showed that the smaller the scale of the bank, the greater the proportion of small loans in the total amount of loans and the higher the ratio of small loans to the bank's assets. For banks with assets less than USD 100 million, the ratio of small loans to the total amount of assets was 8.9% and the ratio of small loans to the total amount of industrial and commercial loans was 96.7%, and for banks with assets higher than USD 5 billion these ration were 2.9% and 16.9%, respectively.

Secondly, a diversified form of organisation for RCCs should be created. The overall demands for reform are that property right relationships should be clarified, mechanisms for constraint should be enhanced, service functions should be strengthened and there should be an appropriate government support and local government responsibility. With these as the foundation, the mode of development for credit unions can be determined on the basis of actual local circumstances. Since regional economic development in China is uneven, the disparity between competitive ability of peasant households and business entities in different areas is large and the demand for financial services is by no means the same. Some want to do business with financial institutions on market principles; others hope to obtain the services of financial institutions by co-operative methods. In economically developed areas, where sufficient economic strength exists and the ability of industry to give support to agriculture is more powerful, RCCs can change into the shareholder system according to voluntary principles and make a gradual transition towards agricultural commercial banks. In central and western areas, the conditions for economic and social development are rather poor, and the provision of more government support is needed so that the credit co-operative system can be gradually developed and perfected. With the assimilation of additional nongovernmental capital to replenish the principal, they can develop into standardised credit co-operatives or rural credit banks or implement the shareholder system. In general, reform of RCCs should be adapted to the demands of diversified economic development through the diversification of their organisational structure, thereby giving more effective guidance to rural economic development and agricultural structural adjustment and realising the effective allocation of rural credit resources.

Thirdly, the relationship between the Post Office and the Central Bank, commercial banks and RCCs should be adjusted. It is necessary to establish mechanisms for the return of the Post Office funds so that rural capital is put to use for the countryside, agriculture and peasants. In addition, there are two further means by which the establishment of the mechanisms for the return of capital to rural areas can be enhanced. The first is to increase reloans for RCCs from PBC. The second is to sever the capital relationship between the Post Office savings and the Central Bank so that Post Office functions as the representative agent for the ABC or the RCCs in saving activities. This will mean that rural capital remains in the countryside and that the mechanism for a benign cycle will be established. In the light of current conditions, the latter idea is a more feasible choice.

The process of introducing market principles to interest rates should be accelerated by using the mechanism of applying market principles to the price of rural fund. The gradual establishment of rural markets and capital markets will bring new ideas to the financial market system. To develop a market economy, more flexibility of interest rates setting should be implemented and interest rate controls gradually relaxed to meet the need for a variety of financial institutions to participate in financial activities in the rural financial market. In particular, since entry into the WTO, it is essential to relax the restrictions on the rural financial market in an appropriate manner, bringing down the entry thresholds for the rural market and supporting the development of other forms of financial organisation within permitted bounds. The feasibility of private capital entering the rural economic market should be studied. Peasants should be encouraged to develop new forms of co-operative business organisations on a voluntary basis so that a competitive, diverse and effective system of rural financial organisations is gradually fostered. At present, special attention should be given to research into the problems of unofficial rural financial institutions and, through their legalisation, the realisation of the organic interaction between the official and unofficial rural financial markets. The growth of the rural inter-bank loan market should be encouraged in order to facilitate the circulation of necessary funds for RCCs. Financial and product innovation should be encouraged so as to provide peasant households or other business entities with diversified financial instruments including loans, securities finance, stock exchange, property guarantees, leasing, insurance and settlement of payments so as to adapt to the need for diversified rural finance.

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FINANCIAL SYSTEM AND FINANCIAL REGULATORY POLICIES IN CHINA AND THEIR IMPACT ON RURAL FINANCE REFORM

By John K. Thompson

Abstract

This note surveys the overall problems facing the financial system. While the financial system has taken on many of the attributes of a market-based system the degree of state intervention remains very high by international comparison. The effectiveness of the reform largely depends on how well it performs three basic tasks: 1) to mobilise national savings; 2) to allocate credit to its most efficient uses; and 3) to encourage efficient resource utilisation in the real economy. China has done very well by the first measure, with high levels of accounts in banks and high stock market capitalisation. The reform has been less effective in allocating credit to the most efficient uses. More than 90% of funds go to SOEs, which are among the least efficient sectors of the economy. The sectors that have provided the greatest stimulus to growth in the past two decades, (agriculture, SMEs and private sector) have been locked out. Likewise the reform has not encouraged efficient resource utilisation in productive sectors of the economy. Problems of credit misallocation and weak balance sheets in the banking system are identified. The paper then highlights specific measures that need to be taken to improve the operation of banks as effective market-based credit intermediaries in line with international standards and practices. A brief summary of the problems of the capital markets, with recommendations for reform, is also presented.

I. Historical background

Since the adoption of reforms two decades ago, the banking system and the capital markets have taken on many of the attributes of a market-based system. As part of the reform, the authorities have sought to expand the role that market forces, rather than state directives, play in resource allocation. Nevertheless, even after successive waves of reform the degree of state intervention remains very high by international comparison.

With the liberalisation of agriculture and industry in the early 1980s, personal incomes rose leading to a surge in bank deposits. Simultaneously, the traditional monobank system that had characterised central planning was broken up, with the Peoples Bank of China (PBC) assuming the functions of a central bank and four state-owned commercial banks (SOCBs) emerging from the lending departments of the monobank. The SOCBs directed these deposits to state-owned enterprises (SOEs). Although SOE investments were in principle still guided by the central authorities, sub-national governments had major roles. Generally, SOES depended upon external sources of finance. After 1987, new financial institutions including joint stock banks and non-bank financial intermediaries (NBFIs) were formed and trading in government securities was permitted.

By the early 1990s, central government finances had become noticeably weaker and the SOEs increasingly turned to the banking system for funds. With deposits still rising, it was possible to extend rising amounts of credit to the SOEs. The capital market grew rapidly after the authorisation the two stock exchanges (in Shanghai and Shenzhen) in 1991 and many SOEs began to issue equity. Later in the 1990s, the functions of financial supervision were removed from the PBC, with the China Securities Regulatory Commission (CSRC) placed in charge of capital markets and the China Insurance Regulatory Commission (CIRC) in charge of insurance in 1998. In 2003, the function of

bank supervision was also placed in 1992 in an independent body, leaving the PBC mainly responsible for monetary policy. (See below)

By the mid-1990s poor loan quality and low profitability weakened bank balance sheets. The government become increasingly aware of the need to accelerate financial reform, noting the weakness of the banks and the rampant speculation in the capital market. Overall it was seen that the partial financial liberalisation had enabled the country to continue growing, but without deeper reform the risk of crisis would increase.

Since the banking sector is most relevant for agricultural finance, this note will discuss the financial sector as a whole with special emphasis on banking. Major challenges in the capital markets will be outlined briefly.

II. Key trends and problems in China's financial system

A. Overview

As of now, five characteristics of the financial system stand out¹:

- 1. High amounts of resources mobilised;
- 2. Continued official interference on many levels with financial considerations often subordinated to other objectives;
- 3. Excessive channelling of resources to large state owned enterprises (SOEs);
- 4. Underdevelopment of various mechanisms of the financial sector; and
- 5. Some risk of instability due to weak banks and speculative capital markets.

The effectiveness of the reform largely depends on how well it performs three basic tasks: 1) to mobilise national savings; 2) to allocate credit to its most efficient uses; and 3) to encourage efficient resource utilisation in the real economy.

Considering first savings mobilisation, China like most Asian countries has extremely high rates of savings as manifested in high levels of accounts in Chinese banks and of stock market capitalisation. In many developing countries, financial systems have had difficulty in mobilising savings due to negative real interest rates, often linked to inflation. Regulation of interest rates below market levels or other distortions that have discouraged savers from placing their funds in the formal financial sector ("financial repression"). In many Latin American countries, for example, there has been a persistent tendency to insufficient savings, which as been translated to large current deficits, external debt and inflation. Partly because Chinese inflation has been fairly low (with the exception of a few fairly brief episodes (Oppers 1997), outright financial repression has not been a serious problem.

The second task is to allocate credit to the most efficient uses. Particularly important in this regard is the success of financial systems in allocating funds to activities with high capacity for innovation and productivity enhancement. The effectiveness of the financial system in carrying out these functions depends critically upon its ability to process information about investment outlets,

^{1.} This paper is based upon analysis begun in Pigott, Charles and Thompson, John K, "Developing the Financial System and Financial Regulatory Policy", in OECD (2002).

which in turn depends on the quality of information that the economic actors provide. (Leahy et al., 2000; Tsuro, 2000).

More than 90% of loans from the banking system go to state owned enterprises, and the share of equity issued by SOEs on the country's two stock exchanges is even higher. Other end-users of funds such as the rural sector, small and medium enterprises (SMEs) enterprises and the private sector have effectively been squeezed out of the formal financial system. SOEs are the among the least efficient sectors of the economy and the other sectors mentioned (agriculture, SMEs and private sector) have provided the greatest stimulus to growth in the past two decades, but have been obliged to obtain their funds through internal cash flow or informal channels.

The third task is to encourage efficient resource utilisation in productive sectors of the economy. Strict lending standards, the requirement that loans be repaid, and the monitoring of borrower's behaviour by financial markets provide incentives ("discipline") for economically efficient behaviour. Financial systems further contribute by providing means to reorganise enterprises, re-deploy resources, and transfer ownership and control. The effectiveness of these mechanisms depends not only on the characteristics of the financial system itself but also on the clarity of property rights, enforceability of contracts, and related aspects of the legal and regulatory framework for the economy as a whole. On this score the continued use of the financial system to support the state enterprises with only a minimum of discipline required on the part of the SOEs suggests that to date the financial sector reform has not reached the objective of promoting more efficient resource allocation in real sectors of the economy.

B. Main problems facing the banking sector

Institutional weakness and restricted product range

China now has the four large SOCBs which accounted for 62% of assets in 2000. Other credit institutions included three policy banks (9% of assets), 10 joint stock commercial banks (10%) more than 100 city commercial banks (4%), several thousand credit cooperatives (10%) and some 200 foreign-affiliated banks (3%).

Laws and regulations narrowly limit the flexibility of banks. Whereas in most countries the trend is toward desegmentation, China has rather rigid separation of banking, securities and investment. In banking, there are tight restraints on product innovation, partly because banks tended to engage in speculative activities when allowed more freedom to innovate. Banks have little control over their costs and little capacity to vary charges to customers for risk. There is little scope for banks to compete among themselves. Skills such as marketing are not well developed. Unlike most banking systems where fee-based income accounts for a rising share of bank earnings, Chinese banks still earn most income from interest.

Facilities for channelling savings among sectors and financial institutions and markets are very limited. By virtue of their branch networks, the SOCBs have a major advantage in gathering savings but less of an advantage in allocating savings to their most productive uses. Interbank, and other short-term markets that in other countries are important conduits for transferring funds among institutions, are growing but are still relatively limited. Flows of funds among regions, although more flexible in recent years, are limited by the same factors.

Even basic financial instruments to deal with liquidity fluctuations, and other specialised needs are quite limited. Risk management tools, e.g. financial futures and options, are still not permitted. The

fixed income market, other than in government debt, is primitive and even the government debt market lacks depth and liquidity

Low profitability/high costs/weak balance sheets

Returns on equity in Chinese banks tend to average about 2-3% whereas the norm for well managed banks in OECD countries tends is at least 10-15%. Return on assets averages about 20 basis points; a minimum acceptable rate in advanced banking systems is considered about 100 basis points. (Estimates of Chinese ratios are probably too generous since the level of non-performing loans is underestimated.) Cost ratios at Chinese banks tend to be high and the scope for cost reductions through cuts in personnel or branch closings is small. The banks have little control over their interest costs, since interest rates are determined officially. The possibility to vary interest charges to reflect risk is limited. Against the background of low core earnings, banks have little leeway to earn sufficient profits to build up reserves against non-performing loans (NPLs). As a result, there is a strong tendency to understate the level of NPLs. Bank capitalisation is low. Overall, it is clear that with moderately rigorous reporting standards, the banks would fall below the accepted 8% capital adequacy standard and probably would be insolvent.

NPLs, financial reporting and loan classification

A major problem has been the high level of non performing loans (NPLs) which are officially estimated to be at least 25% of total loans but would be much higher under more credible loan classification standards. In 2000, the state transferred a large amount of NPLs to four asset management companies (AMCs) in order to improve banks' balance sheets. However, the possibility to strengthen balance sheets by preventing new NPLs is doubtful. All of the elements of flexibility in pricing, cost control, diversification of revenue sources that would enable management to engineer a "turnaround" in performance are missing. Finally, the rate of taxation on banks' profits is high.

With low quality balance sheet and profitability, the incentives of banks to take effective action against underperforming enterprises are weak, thus encouraging excessively optimistic reporting. The processes of tracking credits and classifying borrowers by credit quality need improvement. The previous system of loan classification was based exclusively on delinquency criteria. Even this system was not subjected to adequate audits. A new five category system was introduced in 2002, but a forward looking system that evaluates credits based on the financial prospects of the borrower has not been introduced. In 2003, the newly formed China Banking Regulatory Commission (CBRC) announced that a system based upon international standards would be introduced.

Distortions in credit allocation

As mentioned above, SOEs receive a disproportionately high share of credits from financial institutions and markets, while the share directly received by non-state enterprises is low compared to their contribution to the overall economy. Within the SOE sector, larger enterprises, particularly those participating in central or local government industrial development efforts, tend to have more favourable access to credit than smaller SOEs, or those not so well connected. The low profitability of SOEs and their comparatively low growth rate reinforces the credit misallocation. Admittedly, the limited access of non-state firms to formal credit channels is partly offset by substantial indirect borrowing through affiliated SOEs or other non-financial entities as well as through informal channels.

Although bank-lending standards have been tightened for many enterprises, mandates to direct credit to priority sectors or projects (such as government infrastructure spending) together with pressures to keep loss-making SOEs afloat suggest that considerations beyond strict commercial

criteria still play a role in a significant amount of lending. The SOCBs in particular continue to be used in part as government agents in these efforts. Implicit government guarantees, which are unevenly distributed, play a major role in determining which enterprises receive loans. Borrowers, especially large SOEs, face only limited sanctions if they fail to repay.

The tightening of lending standards that began in 1996 and efforts to make SOES more autonomous and accountable have probably improved financial discipline for some enterprises. However, it is much less clear that larger SOEs face effective discipline. Competing government claims on enterprises, such as the effective seniority given to social security fund obligations (Lardy, 2000), impede loan contract enforcement and disclosure. These problems together with their own financially weakened state limit banks' incentives to effectively monitor their borrowers.

Recent measures have in certain respects increased divergences in credit access among enterprises. Banks' efforts to avoid incurring new non-performing loans have sharply reduced the access of SMEs, state owned and non-state, to bank credit, while larger SOEs backed by central or local governments are able to get loans largely because of the implicit guarantee that backing confers. This together with the divestiture of smaller SOEs from government control has led to a virtual credit crunch for SMEs generally, one which could get worse as medium-sized SOEs are divested. In contrast, larger SOEs destined to remain under state control have been the main beneficiaries of the development of the stock market and SOEs continue to have nearly exclusive access to commercial paper and the corporate bond issuance.

Weaknesses in corporate governance

Chinese banks, especially the SOCBs, have substandard systems of corporate governance, partly because they do not have clear owners and the obligation of the managers to the owners is not clear in any case. Some of the solutions currently under consideration call for a listing of several banks in order to improve accountability to their owners. However, since the protection of shareholder rights on currently listed companies is low and boards are not independent, this can only be effective if combined with measures to strengthen enforcement in corporate governance generally.

Financial mechanisms to facilitate enterprise reorganisation, re-deploy resources, and provide a market for corporate control are developing but are severely impaired by government regulation and involvement in enterprise management as well as the weak property rights regime. Merger and acquisitions are generally arranged by government agencies and their structuring is still influenced by non-economic considerations, such as employment maintenance, rather than based on maximisation of the value of the new entity (OECD Reforming China's Enterprises, 2000). Acquisitions or mergers that cross regional boundaries are hindered by government red tape and not infrequently by local protectionism. Together with factors that restrict the scope for bankruptcy or liquidation, these problems make it hard to reallocate resources or transfer control from inefficient to efficient enterprises.

These weaknesses stem in part from conditions common to developing and transition economies. Unclear and conflicting property rights, weak commercial law enforcement, and limited bankruptcy regimes have been common issues in transition economies. However two more distinctive features of China's financial system pose special challenges. First, although the degree of government direct control does vary, the almost complete public ownership of financial institutions poses major challenges to efforts to ensure that they operate according to strict commercial principles, exercise effective financial discipline, and observe prudential norms. Second, the concentration of financial activities on the four SOCBs and the relatively limited array of other bank and of non-bank financial institutions makes for particular difficulty in providing adequate financing to a large segment of

sectors and enterprises critical to the economy's development, but which do not have the preferred status accorded to larger SOEs.

C. NBFIs

The NBFIs appear to be in even worse shape than the banks. Several of the intentional trust and investment corporations (ITICs) have experienced missed payments and defaults. The government is seeking to reduce their scope of business activities while barring them from accepting deposits and preventing bond issues and international borrowing. However, the authorities have not kept their promise to cut back sharply on the number of these institutions.

The urban and rural credit cooperatives are reported to be in poor condition.

D. The capital markets

In 1990, the government authorised the enterprise sector to raise funds through the capital markets. This decision reflected two goals: 1) to mobilise private savings in order to finance SOEs and 2) to improve SOE performance through public listing. By the year 2000, more than 1 100 companies were listed. The equity market capitalisation was second highest in Asia and equivalent to about 50% of GDP, a figure that compares favourably with those of many other Asian countries and some OECD countries. The population has been persuaded to commit a significant part of its savings to the securities market. In addition, the Chinese securities market utilises advanced information and communication technology. Progress has been made in building a basic legal and regulatory framework.

Despite its size and technological complexity, the capital market has not been effective in promoting corporate efficiency. In a well-functioning capital market, investments are made under the presumption that data released by companies are reasonably accurate. Poor performance is reflected in difficult market conditions.

For a variety of reasons the Chinese capital market has not functioned in this manner. Valuations are very high by international comparison even though many listed companies have fundamental problems of profitability. Access to stock market listing has been rationed on the basis of a mix of commercial criteria along with other criteria such as equity among regions and the desire to reduce state support for SOEs. Share prices are not well co-related with corporate results. Controlling shareholders in collaboration with allied securities dealers and some investment funds have operated in ways that information flows can be controlled and prices can be manipulated.

The discipline provided by the stock market likewise is weakened by the relatively small share of equity that is listed, the limited protection of minority investors' rights and the implicit government backing enjoyed by many of the listed firms. The corporate governance regime of Chinese listed companies has not been attentive to the concerns of minority shareholders.²

The market is dominated by small retail investors and fund managers operating on the fringes of legality. These investors are concerned primarily with short term trading profit based upon actual or supposed insider information. The market has frequently been marred by speculation and market manipulation. Virtually all funds raised by SOEs, the sector of the economy where problems of

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^{2.} This generalisation needs to be qualified. Even in markets such as China where there are basic doubts about the overall level of respect for the interests of minority shareholders, some companies perform noticeably better than others on this score and this is noted by investors.

efficiency have been most intractable. The more dynamic private sector has been almost completely excluded from the formal capital market.

In the late 1990s, the authorities became convinced that the capital market could assist in providing retirement income for the population through funded pensions, thus easing the large funding problem in the existing pension system. The authorities envisage the capital market assuming a more active role in allocating resources by exposing securities issuers to market scrutiny. Before the capital market can assume this enlarged role, its institutional quality will have to be brought up to world levels. In the next phase of its development, SOEs are expected to place more of their equity on the market, thus exposing listed companies to market scrutiny and lessening the capability of insiders and the authorities to influence share prices. Non-state companies are programmed to begin issuance on a sizeable scale. Institutional investors and foreign investors will encourage greater professionalism among investors with performance and more emphasis on fundamental analysis. Stricter enforcement will reduce speculation and market manipulation.³

III. Challenges and priorities in the financial system

A. Banking

Upgrading banking supervision: the use of international standards

In China, the exercise of financial supervision has traditionally been subordinated to other considerations, especially to the support of the government's economic, social and regional objectives. In the future when a larger share of decisions will be made by the markets, new financial instruments will be introduced and the economy will be exposed to international forces. In order to accomplish this expanded mission while minimising the risk of systemic disturbances, market supervisors will have to make significant adaptations. In building market-oriented systems of financial supervision China will be able to make use of the extensive experience that is already available in other markets. In the past few years, market supervisors and other officials from major countries have been working together in various forums to elaborate global standards on a number of issues. Bodies such as the Basle Committee Supervision, International on Banking the Organisation Commission (IOSCO), the International Association of Insurance Supervisors (IAIS), the OECD and the Financial Stability Forum (FSF) have participated in the process of setting up recognised standards and best practices. China participates in many of these forums.

A considerable body of international best practices in Banking Supervision has evolved. Several international groupings, most notably the Basle Committee on Banking Supervision, have formulated a large body of standards that cover aspects of banking supervision.⁴ China has been associated with international groups involved in the formulation and implementation of standards.

3. For a full discussion of the outlook for the capital markets with policy recommendations, see John K. Thompson and Sang-mok Choi, "Priorities for the Development of China's Capital Markets", in OECD (2002).

4. The most comprehensive statement was the "Core Principles for Effective Banking Supervision" issued in 1997. These principles were formulated by the Basle Committee on Banking Supervision, which co-operated with some non-G10 countries, including China, in their formulation. Other issues covered by the Group include risk management, corporate governance of banks, disclosure and co-operation among supervisors.

The independence and authority of the banking supervisor

In order to fulfil its mission, the bank supervision agency needs sufficient independence from other official bodies as well as legal and institutional authority to insist on enforcing high standards, even if this conflicts with other government policy objectives such as to support objectives such as economic growth, social cohesion or regional development. Bank supervisors may come under pressure to acquiesce in overstatement of bank balance sheet quality in order to postpone financial and/or industrial restructuring. If bank supervisors were to press hard for remedial action, the banks would have to take action against the borrowers, thereby forcing borrowers to restructure.

Internationally, there is a trend in banking regulation away from its earlier orientation of setting detailed rules and close monitoring of bank balance sheets for compliance. This surveillance was often accompanied by strict prohibitions on the range of activities that banks could undertake tight controls on interest rates and other bank charges and restrictions on product innovation. With deregulation, banking has become a highly competitive and innovative industry in which private market participants are constantly challenged to develop new products. Attempts to enforce traditional regulations often leads to excessive rigidity and banks to expend considerable energy on finding means to exploit gaps and inconsistencies in regulations. Instead, banking supervision is based upon an assumption that the primary responsibility for enforcing credit discipline and managing and controlling risk should be located in individual banks. Banks are increasingly expected to focus on: (1) adequate rates of return; and (2) prudential soundness. The primary role of the supervisor is to be sure that banks have established credible and effective governance structures focused on these two objectives, particularly on meeting prudential standards.

It may seem axiomatic to posit these objectives for banks, but it is clear that deviations from this pattern have been common and that such deviations often lie at the origin of banking crises, especially in emerging markets. In China, banks have often been under pressure from governments or allied industrial groups to pursue other aims and restrictions on bank activity have been such that it was practically impossible for banks to focus on profitability and soundness. Recent statements by Chinese officials indicate an awareness of possible conflicts among the objectives assigned to banks. One of the stated objectives in listing banks publicly is to strengthen accountability of those responsible for the bank for attaining adequate profitability and prudential soundness.

The optimal institutional arrangements for financial supervision are an area of some contention in many countries. There is considerable divergence of views over whether the central bank should retain responsibility for banking supervision and whether the entity responsible for supervision of banks should be separate from the entities responsible for securities and insurance. As mentioned earlier, the PBC was initially placed in charge of all financial supervision, but in the mid 1990s supervisory responsibilities for securities and insurance were transferred to other agencies.

In June 2003, another major institutional change took place when the functions of bank supervision of the PBC were transferred to a new agency, the CBRC. The CBRC will take charge of supervision of banks, asset management companies, policy banks, investment and trust companies, finance companies as well as urban and rural credit cooperatives. The newly appointed head of the CBRC stated that the agency intends to follow the precepts of modern banking supervision by assessing the adequacy of banks own risk management capabilities rather than in setting detailed rules and monitoring for compliance with those rules. It was also stipulated that the CSRC intends to insist on stronger in-house governance regimes for banks in preparation for the public listing of those banks.

Banks as commercial entities

The almost complete government ownership of China's financial system presents particularly acute challenges. Government-owned financial institutions in OECD countries have declined in importance over the past several decades and now have a quite limited role. The general decline in government ownership of financial institutions reflects a trend away from the use of banks as institutions to promote "special objectives" (e.g. support of industrial policy, maintenance of employment, development of local communities and containment of the cost of servicing government debt) toward allocation of financial resources by market forces. Under this internationally accepted paradigm, banks are expected to develop governance systems focused on: (1) earning a competitive rate of return; and (2) maintaining prudential soundness. As experience in OECD and non-OECD (especially Asian) countries shows, high government ownership and control interfere with the operation of banks as commercial entities. The subordination of prudential policy to other objectives further compounds the problem by preventing bank supervisors from exercising effective oversight.

The formation of the CBRC as well as assertions by the agency's head indicate that one of the key objectives of the new supervisory regime is to require Chinese banks to implement the new governance paradigm for banks. One of the means by which this will be achieved will be publicly listing the banks, thereby subjecting them to systematic scrutiny by the markets. While this is clearly a step in the right direction, it is worth repeating that this measure will only succeed if corporate governance practices are generally upgraded.

In China, the need to replace administrative with market-based credit allocation is a firmly accepted goal of official policy, but full privatisation of the financial system is not. This raises two strategic questions. The first is how large a role will be allowed for private ownership of financial institutions. The second is how to improve, and sustain, commercially oriented behaviour consistent with prudential norms for financial institutions that remain government-owned.

The current strategy to improve the commercial orientation of the banks is similar to that being followed for non-financial SOEs. The strategy relies heavily on creation of modern corporate governance structures - boards of supervisors and directors consistent with international practice - and ownership diversification through stock market listing and other means. Some progress has been made for the joint stock banks (JSB, although further diversification through listing will occur over the next several years) but is only beginning for the SOCBs.

The reforms to date have not ended the practice of government appointment of senior bank management, nor can they guarantee that imposition of non-commercial considerations on lending decisions will end. Ownership diversification may help eventually improve banks' governance and responsiveness to market forces, but its impact is likely to be very limited for some time to come by the continued role of financial institutions in implementing government policies and the limited mechanisms for securing the rights of minority shareholders in China. These limits are most severe for the SOCBs but in principle they affect any institution whose majority owner is also a major customer and regulator, and which is responsible for, or has a major interest in, other major customers. This is true of virtually all the JSB and other smaller banks and non-financial institutions.

Two other policies have potentially important bearing on the commercial orientation of financial institutions. The first comprises efforts to increase competition by encouraging the formation of new banks and other financial institutions. While competition can be a powerful impetus to improved governance, the pace and degree to which authorities are prepared to countenance inroads into the markets of the SOCBs is still unclear. In addition to competition, regulatory policies to weed out

poorly managed institutions and tighten prudential standards also help to improve governance, particularly with respect to smaller institutions.

No doubt, it will be difficult to ensure that government-owned financial institutions function completely as commercial institutions, or that there is a level playing field in the financial system as a whole. However other countries' experiences also suggest further steps that might improve performance. An important step would be to establish a much stricter "arms length" relation between financial institutions' management and government agencies along the lines taken in a number of other countries. Specific steps include establishment of professional standards requiring that top financial institution management have prior experience beyond line government agencies. Further measures can be taken to improve accountability of local branches to head offices, control by boards over management and accountability of boards and management at head offices to the supervisory authorities. Other desired reforms include stricter and broader requirements for public disclosure of information on performance and requirements for regular audits by independent outside public accounting firms.

Official guarantees and deposit insurance

A major underpinning of the legal and regulatory infrastructure for a market-based financial system is a delineation of those activities that for which the authorities provide guarantees and those where market participants bear the risk. In China as in many Asian countries it was common not to have formal government guarantees for bank deposits but to encourage market participants to believe that the government would not allow banks to fail. Due to government ownership of banks and industry, the perceived commitment of the Chinese authorities to support banks is even greater than other Asian countries. There is no formal system of deposit insurance in China, but it is the presumption of most market participants that all deposits in state banks, at a minimum, are government guaranteed.

The deposit insurance scheme is one of the main elements in delineating those activities where market participants are expected to bear risk from those with government guarantees. Under such schemes, the government guarantees that depositors will be compensated for insured deposits even if the institution becomes insolvent or illiquid.⁵ Therefore, in the post-1997 effort to reform financial systems in Asia, efforts are being made to introduce formal deposit insurance schemes, making it clear that any bank liabilities not specifically covered by such insurance are made at the risk of the investor. Coverage of deposit insurance is typically limited to a certain amounts. When banks can accept guaranteed deposits in very large amounts, market competition and pricing can be distorted. Banks can take excessive risk without offering adequate risk premiums.

The four SOCBs present a difficult problem. These banks already will hold a significant advantage over other banks if a system of limited deposit insurance is introduced, since market participants already believe that they enjoy substantial government support, even without a formal guarantee. It should be an important policy goal to place these banks on an equal footing with other banks and to encourage the development of prudentially based governance and in-house risk management capacity in these banks. Insofar as possible, it should be the policy that in case of insolvency, the government will honour liabilities not explicitly covered by insurance, only to the

^{5.} Considerable work has been done through a Working Group of the Financial Stability Forum. This group has issued a number of reports suggesting policy measures that can be taken to strengthen

deposit insurance. The most recent comprehensive summary of the work of that group is found in *Report on the Working Group in Deposit Insurance*, Financial Stability Forum, March 2001. See www.fsforum.org

extent that the banking supervisors conclude that it is in the interest of cost-efficient bank rehabilitation to assume such liabilities.

Normally, the deposit insurance system is funded by contributions of banks. All banking institutions that receive insured deposits, should be required to pay insurance premiums which should be proportional to the riskiness of the bank and its activities. However, since Chinese banks are in a period of transition and there is little history of these banks acting as free-standing institutions upon which premiums can be calculated, differentiated premiums should be phased in with limited deposit coverage and progress on bank reform.

Although the government is only obligated to support certain deposits, it may on a case by case basis decide to extend the safety net to a wider set of liabilities. Such expanded guarantees are often extended in times of imminent crises. For example in banking crises in Sweden in the early 1990s or in Japan and Korea in the late 1990s, the government decided to extend guarantees rather widely in order to prevent a complete collapse of confidence in the banking system. In all of these cases, it was decided to phase in partial deposit coverage over a period of years. In the specific case of China, where most banks are still contending with basic problems of balance sheet quality and risk management, it would not be practical to introduce a credible system of limited deposit coverage immediately. However, a regime of partial deposit insurance should be an integral part of bank reform. Once a workable programme of bank restructuring is formulated, a timetable for a medium-term transition to partial deposit insurance can be announced.

Enlarging access to credit for dynamic sectors

Financing for SMEs, new enterprises and the rural sector has been a difficult challenge in all countries. The focus in OECD countries has been on improving financing for new firms and in particular, new technology-based firms SMEs undergoing substantial expansion or modernisation of their capacities. In China, the priorities are broader and the task complicated by the shift away from administrative credit allocation by financial institutions, the priority of bank lenders to avoid new NPLs, and the changing ties between SOE and their traditional government backers. A key challenge is to ensure that non-state enterprises, together with SOEs whose official backing by governments has been severed, can obtain financing on equal terms with those that are still officially favoured.

Explicit government efforts in China to improve SME access to outside credit are fairly recent and at an early stage. The efforts are focused on strengthening commercial banks' facilities for lending to SME and on developing regionally based credit guarantee programmes financed by contributions from participating enterprises and local governments. Beginning in 1999, commercial banks were given an explicit, if general, mandate to establish special units for lending to SME, including private enterprises. The effectiveness of this effort is difficult to evaluate. Lending to private entities has been rising rapidly, but much is due to increased consumer and housing credit. The inability to vary interest rates enough to fully reflect credit risks further limits the incentives to lend to SME. Interviews with government and bank officials together with anecdotal evidence suggest that there has been little if any improvement in credit access for SME as a whole. OECD countries have developed a broad array of instruments over the past several decades to facilitate SME access to external credit.

Several aspects of OECD county experiences are worth emphasising because of their potential relevance to China's efforts to improve SME finance. A basic principle ("best practice") of OECD countries efforts is to leave specific credit allocation decisions to private market forces. In particular, the programmes do not impose specific quotas for SME lending on private banks or other financial institutions. A second principle is that SME financing needs to be integrated into the broader framework of efforts to foster SME development. In many countries, government sponsored facilities

to facilitate SME financing are subject to, or associated with, the overall umbrella agencies responsible for SME policy. Integrating financing with efforts to address other key SME needs - access to markets, technology, and managerial skills - helps to ensure that programmes are mutually reinforcing and thereby make efficient use of the public resources involved. There is also substantial co-ordination required between SME policies at the central, regional and local government levels. The integration of SME programmes is less far along in China, partly because the overall framework is still developing.

The need to "leverage" scarce government resources and preserve incentives for beneficiary companies to operate efficiently has been an important influence on the structure of OECD SME programmes and is equally relevant for China. OECD countries typically have used partial guarantees and subsidies together with co-financing as a means of spreading public funds as widely as possible, sharing the risks with the private sector, and sustaining incentives for beneficiary firms to remain in good credit-standing. Partnership programmes involving other enterprises in SME development also help to leverage and maintain standards. In some countries, SME and venture capital finance firms have developed new financial instruments better tailored to SME needs and which help to improve their access to private funding. OECD experience, including problems that have arisen in the past, is that the financial entities responsible for extending guarantees or subsidies need to be subject to rigorous supervision by relevant regulatory bodies if abuses are to be prevented and funds used in a productive manner. These experiences also suggest that public entities involved in SME financing function better if required to meet commercial objectives, at least in part.

Interest-rate liberalisation

Interest-rate liberalisation is a key to improvement of the capabilities of China's financial system in several ways. First, preventing interest rates from adjusting to market forces inevitably involves rationing of financial flows, which tends to perpetuate the influence of administrative mechanisms that are at the root of many present distortions. Second, as noted earlier, interest rates are not sufficiently flexible to account for credit or other risks faced by lenders. As a result, higher risk projects that would be a worthwhile use of resources for society as a whole receive less than socially optimal levels of financing. Third, restrictions on nominal interest rates can magnify fluctuations in real interest rates by preventing nominal rates from adjusting to changes in inflation. Fourth, limited interest rate flexibility is an obstacle to the development of money and capital markets, which need to allow free play of market forces to function effectively but which are subject to distortions if interest rates in other components of the financial system are not allowed to vary also.

China is arguably relatively advanced toward interest-rate liberalisation for countries at a comparable stage of development. Money market interest rates have been substantially liberalised and banks are allowed some, if limited, flexibility in setting loan rates. This flexibility is comparable to that prevailing in Japan during the late 1960s and in Korea in the early 1980s. Liberalisation of rates on domestic currency loans and deposits has been viewed as more problematic, in part because of concerns that it would drive down loan spreads and reduce the already quite low level of bank profits. Recently, however, Chinese authorities have announced plans to free key domestic interest rates over

^{6.} Guarantee ratios vary considerably. In drawing lessons for China, Lu, Wei (2000) argues for a low ratio, noting that in Chinese Taipei it has typically been set around 20%.

^{7.} Spain in the mid-1990s began to introduce participation loans through the government-owned National Innovation Enterprise (ENISA). These are subordinated longer-term loans to finance fixed assets, which have "last" status among claims in the event of bankruptcy. See OECD (2000*b*), pp. 175-176.

the next three years, beginning with remaining restrictions on money market instruments and followed by the freeing of rates on loans and large fixed term deposits.

This plan, if it proceeds on schedule, should help significantly to improve the effectiveness and flexibility of the financial system to meet the changing financial demands that will be coming from the real economy. The scope and schedule of the interest-rate liberalisation should also allow authorities adequate flexibility to manage any changes in capital control policy that become appropriate. Liberalisation of interest rates on smaller deposits, while desirable as an ultimate goal, is likely to have to wait until there has been a substantial and sustained improvement in bank profitability. Experiences in other countries do indicate that phased interest liberalisation needs to be carefully co-ordinated in line with market developments in order to prevent distortions. For example, continued control of large bank deposit rates while money market rates are freed can lead to disruptive flows of funds out of banks in periods of rising interest rates. Freeing deposit rates before lending rates are liberalised can unduly squeeze loan margins.

Banks' risk management capability

It is universally accepted that banks should have strong internal "credit cultures" consisting of a strong in-house capability to analyse credit risk coupled with in-house systems to monitor the granting of credit and the assumption of risk. In the current process of financial restructuring in many Asian countries, banks are undertaking substantial efforts to upgrade internal credit assessment, scoring and decision-making systems. The CBRC is insisting that stronger risk management systems must be incorporated in to the governance regimes for banks.

Banks policies concerning the acceptance and pricing of risk should be written and communicated to the relevant parts of the organisation. In order to enforce adherence within the organisations to credit policies, the credit and risk management functions must have considerable support from senior management and the board. Risk-based pricing tends to raise profitability, an identified weakness of Chinese banks.

An adequate credit system provides the management with timely information about the state of bank exposure in various forms to each client by the various parts of the organisation. A bank may have credit exposure to a single company operating through various subsidiaries, while borrowing by various affiliated companies may raise the risk concentration. It is generally observed that management of Chinese banks does not have adequate information about credits granted within their own banks.

An essential part of the credit risk management systems is a reliable in-house loan classification system. In advanced countries, the bank's internal credit department is often more rigorous than the banking supervisors in calling attention to problem loans are and demanding remedial action. In 1998, the PBC requested the government-owned banks to set up an experimental system under which loans would be subdivided into five categories: normal, special attention, substandard, doubtful and probable loss. There appears to have been limited progress in implementing the scheme. Moreover, the definition of NPL as well as rules governing provisions, write-offs and loan disposal are not transparent enough that banks could actually implement such reforms. In the existing system, it is not clear that there would be any benefit for banks to introduce stricter loan classification policies. On the contrary, banks may have significant incentives to overstate the quality of their loan portfolio. The CBRC has recently stated that it plans to require banks to set up loan classification systems based upon international standards.

Efficient risk management systems also identify the various kinds of risk assumed by banks. Traditional banking has largely been concerned with credit risk, *i.e.* the risk that a given borrower or counterparty would be unable to honour its commitments due to insolvency or illiquidity. As a matter of fact, this is still the major risk facing Chinese banks and will probably be the most serious issue in risk management for Chinese banks for the next few years. However, with liberalisation and innovation, Chinese banks will probably begin to assume other risks, including interest rate risk, market risk (the risk of adverse movements in prices of financial assets), currency risk, liquidity risk and operational risk.

Internal risk management systems can result in remedial actions such as refusal of new credits, requests for guarantees, attempts to reduce exposure through sale of credits and greater differentiation in the price of credits. When the credit score of a borrower declines, the bank normally places the borrower on a watch list and begins to implement procedures to monitor closely exposure to the borrower and to communicate concerns. Decisions must be made about provisioning and/or loan write-offs.

B. Priorities for the reform of the capital market

Over the past few years, key Chinese spokesmen have identified a number of key areas of the capital market where reforms are needed. If actually implemented these reforms would significantly raise the quality of the Chinese market. The following include the most important reform measures⁸:

Policies that have limited access of capital markets to SOEs should be modified. Access should be based upon the ability of issuers to meet listing requirements. In particular, new and innovative industries, SMEs and private companies should be allowed to raise funds in the capital market.

The differences between the various categories of foreign and domestic shares should be gradually eliminated. This can be achieved regardless of whether China achieves full convertibility on capital account. This liberalisation measure should be carefully sequenced in order to minimise the risk of destabilising the equity markets where prices of shares available only to domestic residents and to non-residents differ significantly. Some steps have been taken in this direction by allowing Chinese residents to purchase the "B" shares formally reserved for residents. More recently, the establishment of qualified institutional investors (QIIs), currently in implementation will give foreign investors partial access to the previously restricted "A" share market.

Efforts to strengthen shareholder rights and raise standards of corporate governance should be intensified. Companies that do not meet listing requirements, including those operating at losses for more than the stipulated periods, should be subjected to ordinary disciplinary processes. Action against insider trading and market manipulation should be accelerated.

Foreign securities dealers, investment banks and asset managers should be accorded access to the domestic market. Since Chinese accession to WTO, joint ventures in securities market operations and in funds management have been authorised.

All investment funds that solicit funds from the general public should be brought within the formal regulatory framework for Collective Investment Schemes (CIS), based upon models found in

^{8.} For a similar set of recommendations see Anthony Neoh, "China's Domestic Capital Markets in the New Millennium", Two Parts. 21 and 23 August 2000. *China Online (www.chinaonline.com)*.

major financial markets. CIS should be obliged to observe international standards of valuation and disclosure.

In contrast to the situation in banking, the Chinese investment industry by contrast is well-focused on profitability. Indeed, the main problem in the capital market is frequent abuse of fiduciary relationships in pursuit of profit. The number and complexity of transactions and the potential for abuse are so large that it would not be practical for the supervisor to oversee each operation. At various stages of the investment process the potential exists for fraud, misrepresentation and conflict of interest. In China, instances of improper dealings (*e.g.* investors include insider trading, market manipulation and failure to seek best execution) are continually being uncovered.

In the course, of 2000-2003, the China Securities Regulatory Commission (CSRC) has brought a large number of cases to light. Almost certainly, the heightened publicity given such cases does not necessarily mean that the number of offences has risen, but that efforts to expose such malfeasance have been accelerated. Thus, the activities of the securities market supervisor are only part of the overall institutional, regulatory and competitive environment that seek to assure a fair, efficient and transparent environment. Other important elements include: *a)* industry self-regulatory practices; *b)* the internal compliance and audit functions of each institution; and *c)* market competition. A successful policy to develop high professional standards will blend all three of these elements in such a way that individual firms will feel the urgency of observing high.

In most countries, the activities of industry associations and self-regulatory organisations (SROs) complement official regulation. Some of the useful tools of self-regulation include industry of codes best practice, disciplinary committees as well as procedures for investigation and punishment of infractions. The major SROs in China are the two stock exchanges and the *Securities Association of China* (SAC). To date the CSRC has tended to use a highly directive approach, delegating only small amounts of authority to SROs. The stock exchanges in particular have sometimes complained about micro-management by the CSRC. It some degree it is understandable that the CSRC still is involved in more detailed rule setting than its counterparts in other countries, since Chinese intermediaries do not have strong internal control functions and the SROs lack experience.⁹

Finally, market competition is an important element in constructing a sound framework to ensure that market participant's act in accord with established standards. In most advanced markets securities market intermediaries are highly sensitive to the risk that the discovery of irregular practices will lead to a loss of reputation and hence to a loss of business. As professionalism gains, intermediaries find that market competition significantly offsets the information asymmetry that initially favoured the intermediaries. For example, in markets dominated by institutional investors, competition tends to force intermediaries to disclosure more information than the minimum required and to provide customers with best execution.

^{9.} Statement by CSRC Chairman Zhou, reported in China On Line, 13 April 2001.

Since the early months of 2001, the CSRC has been sending strong signals to the market that it now feels increasingly capable of acting act as an independent supervisory body whose main commitment is to market integrity. The CSRC ordered the de-listing of several companies that had not reached minimum profitability requirements. Additionally, cases of insider trading and market manipulation have been prosecuted. The CSRC will seek to enhance its credibility as a market-based supervisor in future years. The fact that the CSRC has been able to step up its campaign to enforce rules of conduct against major firms and securities dealers indicates that institutional capacity to police markets is improving and that the CSRC believes that its campaign enjoys support in official circles. At the same time, the CSRC believes that it is important to obtain additional authorisation in order to be able to require testimony from suspected violators of market regulations and to be able to impose adequate penalties.

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SESSION II.	PRIVATE A	ND CO-OPERA'	TIVE BANKING I	FOR CHINA'S	RURAL AREAS

THE DIFFICULTIES AND POLICY REFORM IN CHINA'S RURAL FINANCE

By Xiaohe Ma

Abstract

The predicament currently faced by rural finance in China is mainly related to the inadequate supply of financial services by the two-tier system of official financial institutions. Constraints on the demand side are of secondary importance. However, it is necessary to proceed from the two sides, supply and demand, if the complex financial constraints are to be removed.

At present, the limitations on rural finance constitute one of the bottlenecks in the "Three Nong" (agriculture, countryside and farmers) problem. How such constraints came into being and how to eliminate their impeding effect on agriculture and the rural economy have become a matter of vast interest in the decision-making and academic circles. With this in mind, this paper starts from the present situation, analyses the reasons why rural finance has currently fallen into difficulties and puts forward proposals for reform.

1. Analysis of the present situation of Chinese rural finance

The institutions currently providing rural financial services in China include both official and unofficial financial organisations. The official financial institutions mainly include rural credit co-operatives (RCCs), the Agricultural Bank of China (ABC), the Agricultural Development Bank of China (ADBC) and rural Post Office Savings. In addition, such government-owned commercial banks as the Industrial and Commercial Bank and the life and property insurance companies in Xinjiang and Shanghai provide a few financial services to the peasants. By "unofficial financial organisations" is generally meant loans from popular organisations, mainly loans between private individuals and in the form of clandestine money shops.

Of the official financial institutions, RCCs are the main force in rural finance. Most of their loans are oriented towards peasants. Between 1996 and 2001, the total of loans granted to peasants by RCCs was 1 654.8 billion Yuan with the average annual amount being 275.8 billion Yuan. At the end of 2001, the balance of agricultural loans from RCCs accounted for 77% of the balance of agricultural loans from all financial institutions. The object of their loans includes peasant households, organisations of the rural collective economy and agro-food processing enterprises. In 2001, the total of loans granted to peasant households by RCCs was 365.7 billion Yuan, accounting for 84% of the total of agricultural loans provided.

As a state-owned commercial bank, the ABC is an important power in rural finance, involved in agriculture-related loans including specialised rural loans (aid for the poor, development and subsidiary grain, cotton and oil business), conventional agricultural loans (crop production, forestry, water conservancy, livestock, fishing and agro-food processing), loans for township and village enterprises (TVEs), loans for rural supply and marketing co-operatives, loans for the purchase of agricultural products and for the construction of basic rural facilities. The main targets of service are agricultural enterprises and there are very few loans for peasant households. During the entire development process, the loan structure of the ABC has been subjected to constant adjustment, the range of loans is gradually expanding and the proportion of rural loans is gradually decreasing. The

total amount of rural loans fell from 593.7 billion Yuan in 1997 to 353.6 billion Yuan in 2001 and the proportion in the total loans issued by the ABC decreased from 54% to 30% over the same period.

The ADBC is a bank created for policy reasons. Its functional position has been adjusted along with the reform of the grain and cotton marketing systems. It has changed from the comprehensive functions in the early days of its establishment to its later single function. When founded in 1994, the range of its main credit business included loans for the procurement and storage of grain, cotton, oil, sugar and meat; loans for the transfer, marketing and wholesale of grain and oil; policy loans for grain, cotton and oil processing enterprises; loans for poverty reduction and development; loans for small-scale capital construction and technical improvement involving crop production, forestry, livestock and aquatic products. In 1998, the range of its credit business was reduced to the sole responsibility for the supply and management of funds for the purchase of grain, cotton and oil. These funds could not be used for any other purpose. Up to the end of November 2001, the balance of its loans was 723.8 billion Yuan, of which 584.4 billion Yuan was for the procurement of loans for grain and oil and 122.9 billion Yuan for the cotton procurement loans. The two items together account for approximately 97.7% of the balance of the ADBC loans.

Rural Post Office Savings have a single financial service function, providing only a savings service and no loan business. Since the establishment of Post Office Savings in 1989, the amount of rural Post Office Savings has continued to increase. In 1997, Post Office Savings deposits stood at 88.3 billion Yuan, almost doubling by 2000 when they increased to 163.3 billion Yuan.

Agricultural insurance is currently mainly run by a state-owned commercial insurance company: the People's Insurance Company of China (PICC). The scope of its business includes insurance for crops and animal husbandry with over forty kinds of insurance. In the early 1990s, the scale of agricultural insurance increased. Subsequently, as a result of serious losses and the transformation of PICC from a policy-type company to a commercial one, the scale of agricultural insurance fell year by year. Income from insurance charges fell from 800 million Yuan in 1993 to less than 400 million Yuan in 2001. Currently, apart from such provinces (or cities or autonomous regions) as Xinjiang, Shanghai and Yunnan where there is still agricultural insurance business on a relatively high scale, the scale of agricultural insurance business in other provinces and cities is rather small. As far as policy is concerned, the main instruments are the provision of administrative support by local governments, exemption from business tax and the provision of peasant households with a certain ratio of subsidised insurance premiums and permitting of "supplementing agricultural insurance from rural insurance".

In the unofficial financial organisations, the majority of the clandestine money shops and fund-raising financial companies which masquerade under a variety of names are still active in the provision of loans to private individuals although they are illegal and large in number. Unofficial finance consists mainly of the provision of loan services to peasant households, with popular lending accounting for a very high proportion of such loans, approximately 70%. The proportion of loans from official financial institutions by the peasant households is very low, being about 25% (Song, 2002).

The current reform of rural finance is still underway. Pilot projects have already begun in developed areas to establish rural co-operative banks, for example the joint rural credit co-operative of Yin County in Ningbo, Zhejiang Province, was transformed into the first rural co-operative bank in China on 8 April 2003.² In addition, the RCCs in eight counties nationwide are experimenting with

^{1.} See Chen Xiwen (2002), pp. 338–433 for the data and standpoint in the above.

^{2.} See http://finance.sina.com.cn, People's Network – International Finance Report, 11 April 2003.

reforms to adopt market principles in their interest rates so that interest on their deposits could go up by 30% while interest on loans could go up by 70%.

2. The predicament currently faced by rural finance and contributing factors

For more than twenty years, the rural financial system in China has undergone many reforms. As far as the introduction of market principles is concerned, there have been major breakthroughs. However, in further opening up to the outside world following entry into the WTO, the process of reform of all economic structures throughout the country was accelerated. By contrast, the reform of rural financial system lags far behind. The delay of rural financial reform has seriously restricted agricultural and rural economic development and difficulties with loans have become a bottleneck for the increase of peasant income. At the heart of the problems currently faced by rural finance in China is the existence of serious financial constraints. These financial constraints are mainly centred on the official rural financial sector, with both shortage in the supply of funds and insufficient demand for funds in this sector. However, the main issue are supply related constraints while those related to demand³ are less important.

(1) Factors contributing to supply-related constraints on rural finance

Currently, supply-related finance constraints in Chinese rural finance mainly reside in the insufficient network of official financial institutions and in an insufficient supply of funds by these institutions.

The first is that the network of rural financial institution is inadequate. At present, although nominally the institutions providing financial services to the countryside include the ABC, the ADBC, RCCs, rural Post Office Savings and the PICC, those institutions which can in fact supply funds to the countryside are very limited. The ADBC acts as a policy bank and does not provide any loans to ordinary enterprises involved in agriculture or to peasant households. Rural Post Office Savings organisations only provide a savings service and not issue loans. Although the ABC provides loans for agriculture, this is mainly for basic rural facilities and agricultural product processing companies, with very few loans for peasant households. Moreover, after the withdrawal from the rural financial network over recent years by the Industrial and Commercial bank, the Construction Bank and the Bank of China, the ABC has not filled the gap. Therefore, millions of peasant households and tens of thousands of rural enterprises can only apply for loans from RCCs. However, only some 40 000 or so RCCs are legal entities and do not form a financial network. It can be seen from above that there is a lack of financial institutions which can provide credit services and this is one of causes for the insufficiency in the supply of rural funding.

The second is a set of policies constraining agriculture's access to capital. Since the natural risks and market risks of agricultural loans are higher than the risks for other commercial loans, a series of loan policy regulations implemented by the ABC make access to agricultural loans even more difficult. Therefore, in its rural financial services, the approach of the ABC to collect many deposits but to provide few or even no loans is quite apparent. The policy regulates that the Post Office Savings can only deal in savings operations, but not in loans issuing operations in the countryside. Therefore, a large amount of rural capital is transferred to the People's Bank of China (PBC).

During the process of several large policy adjustments, RCCs have accumulated huge amount of bad debts, their losses are very serious and the supply of capital is extremely short. For example, a large number of loans extended to the "collective units" before 1978 had long ago become bad debts.

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^{3.} See Gao Fan's (2002) paper for details of demand related financial constraints.

During the development process of TVEs, rural collective organizations have applied for a large number of loans. Bad debts came into being because some TVEs were eliminated by the market or liquidated, shut down or suspended for government policy reasons (Liu, 2003). When the ABC was separated from the RCCs, it transferred a large number of bad debts to the latter. After the rural co-operative foundation (RCF) was closed down, the state transferred a large number of bad debts to the RCCs. All these debts constitute bad assets for the RCCs. In addition, RCCs are nominally co-operative peasant financial organisations but are actually the extensions of the state-owned banking system in the countryside. They become some kind of interest group independent from peasants, and their operating process is usually controlled by insiders. The "Three Meetings" (meetings of members, of the board of directors and of board of supervisors) are a mere formality, management is chaotic, operations poor and losses serious. By the end of 2000, the RCCs book value of bad assets throughout the country had reached 517.3 billion Yuan, accounting for 49.9% of all loan balances. The accumulative losses stood at 108.3 billion Yuan, accounting for approximately 10% of the total assets of RCCs (Sheng et al., 2001). A huge amount of policy and operational losses severely weakened the capacity of RCCs to provide loans. In order to cover the RCCs' shortage of loan capital, the PBC adopted a re-loan policy but the scale of the funds was far from being able to meet demand.

Moreover, due to losses in the agricultural insurance activities and inability to obtain policy-related subsidies, the PICC was also forced to contract the scope of its business and to reduce compensations paid to farmers. Thus, through various channels, the policy arrangements described above directly or indirectly reduced the supply of funds to the countryside.

The third is that strict financial control of the countryside has hampered the establishment of new types of rural financial institutions. Although the state financial control is widespread worldwide during development process and China is not an exception, however, there is a significant disparity between cities and the countryside in financial controls in China. When compared with cities, rural financial controls are stricter. For example, non-governmental banks are permitted in cities but not in the countryside and, thus, the flow of funds from countryside into the cities is encouraged. Co-operative foundations in the countryside are abolished and clandestine money shops are cracked down on and outlawed. However, the establishment of new rural financial institutions is also prohibited. This delays the formation and development of non-governmental rural financial institutions. This double standard in respect to urban and rural non-state-owned financial institutions leads in fact to a discriminatory policy in the development of new types of rural financial organisations, stimulates an outflow of rural capital and reduces resources for the supply of rural capital.

Further examination shows that the fundamental reason for the insufficient supply of institutions and of capital lies in the traditional industrialisation strategies giving priority to urban and industrial development adopted in China a long time ago, but still applied. Since reform and opening up to the outside world and especially since the 1990s, the mainstay of China's industrialisation has already been changed from state-owned industry to state-owned enterprises (SOEs), TVEs and foreign-funded enterprises. At the same time, industrialisation has changed from government-led to market-led one. Consumption by urban and rural residents has become the key driving force to promote industrial development. At present, the financial system arrangements should be redirected as quickly as possible. Financial services should target not only SOEs, but also TVEs and foreign-funded enterprises, and not only cities but also the countryside. However, the reform of the Chinese financial system has not moved in this direction. Due to the inertia of the traditional system, financial institutions continue to raise funds in accordance with the methods of traditional industrialisation with investment funds mainly directed towards state-owned industry and the cities. Since the Asian financial crisis in particular, a policy of financial retrenchment has been implemented in order to take

precautions against financial risks. As a result, rural finance and rural industry have been sacrificed, but urban finance and urban industry have been protected.

Why has the government adopted stricter financial controls over rural finance than over urban finance, thus restricting the development of rural non-governmental financial organisations? The underlying cause lies mainly in the thinking inherited by the financial policy-making authorities, namely that the quality of rural finance is not high, farmer lacks legal awareness and that it is easy to get into trouble. Also, rural transport is inconvenient, communications are not always available, the service offices are numerous but small, there is a lack of financial talent, supervision is difficult and operational costs are high. Finance is an especially sensitive industry, once bankruptcy and liquidation occur, peasants will generally ask the government to settle accounts, which is damaging for social and political stability. In the past and even now, this perception has a degree of rationality. However, since China entered the WTO, competition in the world of finance intensifies each day. As experience with supervision continues to build up, the capacity to supervise increases and the limitations of the above concepts become obvious. Since the authorities stick to these ideas, inevitably a system of rewards and penalties to avoid mistakes will dominate over a strategy striving for success. Government management departments would also prefer strict control rather than brave the risks brought about by reform. It is perceived that to undertake market reforms of finance, risks are too great and anticipated returns too low, while exercising strict financial control is not risky and may provide some political gains. It can be seen that the current financial environment and the distorted mechanisms for encouraging reform press financial policy-making authorities to preserve the status quo. They are not encouraged to lift restrictions or to carry out reform, but rather to adopt excessively cautious partial measures.

(2) The origin of demand-related constraints on rural finance

The insufficient effective demand by peasant households for services offered by official financial institutions leads to the demand-related financial constraints. Currently, there is an insufficient demand for financing by peasant households. On the one hand there is insufficient natural demand which is mainly determined by the low degree of rural commercialisation, high farmer self-consumption of grain, oil, meat and vegetables and a limited degree of monetisation which have reduced the commercial demand by peasant households for funds. On the other hand, stimulation of demand is insufficient and this is the main cause of demand-related financial constraints. In turn, this is the result of policy limiting the development of rural finance institutions.

Firstly, as the provision of consumer credit services by official institutions is lagging, demand by peasant households for such credit is weak. Currently, it is difficult to activate the rural market in this respect, partly due to low peasants' incomes. However, when peasants build houses, buy durable consumer goods, educate their children, or hold weddings or funerals, it is generally very difficult for them to obtain loans from official financial institutions. This forces peasants to transfer the demand for consumer credit to unofficial financial institutions and, as a result, the demand for funds from official financial institutions is reduced.

Secondly, risks in agriculture and the low degree of rural marketisation have reduced investment demand by peasant households. As natural disasters frequently occur in China and farm produce is perishable, the natural risks in agricultural production operations are high. But agricultural insurance is backward. At the same time, because of the low degree of market development, the risks and costs for obtaining information and technology, as well as market transactions costs, are high for peasant households. Due to such risks and a lack of policy tools to overcome them, the majority of peasant households can choose only to operate within traditional industries instead of entering into other

businesses, outside agriculture. This restricts their channels for investment and reduces their demand for borrowing capital from official financial institutions.

Thirdly, loans from official financial institutions are difficult to access which inhibits demand for investment by peasant households. Investment loans from official financial institutions such as RCCs and the ABC are difficult for peasant households, mainly because of a lack of collateral (for example, land use rights cannot be mortgaged), guarantees are difficult and formalities complex. Striking examples of this are the difficulties with obtaining loans by impoverished peasant families or by peasants living in backward areas, as well as by households with medium or high incomes for expanding their scale of production or adjusting their agricultural setup. Since the ABC has been transformed into a state-owned commercial bank, fewer and fewer loans have been extended to peasant households. The RCCs, the main official financial institution issuing loans to peasant households, find it difficult to meet the requirements of the majority of those wanting loans. This is due to the tedious formalities of loan procedures, serious problems with the "official businessman" style of working, backward ideas concerning operations and understaffing (Song, 2002). This has resulted in the repeated recurrence of difficulties with loans. It can be seen that a lack of innovation and insufficient supply in the institutions have seriously constrained the demand by peasant households for funds from official financial institutions.

Fourthly, unofficial financial organisations are squeezing out official financial institutions. In the Chinese countryside, since unofficial financial organisations have advantages such as freedom of investment orientation, flexible time limits for loans and simple procedures, they have gradually become the mainstay of borrowing by peasant households. With a shortage in supply of loans by official financial institutions, unofficial financial organisations have already begun to fill the gap in the credit market left by the official institutions. However, current non-governmental loans are not legal, organisational conduct is not standardised, interest rates are too high and all of these have also reduced the scale of demand for capital by peasant households.

3. Conclusions and policy recommendations

At present the "Three Nong" (agriculture, countryside and farmers) problem impedes further development of the national economy and the comprehensive implementation of the strategic goal of a moderately well-off society. An important bottleneck impeding the resolution of the "Three Nong" problem lies in the provision of rural finance. Hence, the elimination of financial constraints would be an important contribution to solving the "Three Nong" problem. Improvements can be achieved on the demand and supply sides: supply of funds can be expanded and effective demand stimulated, thus the gaps in investment and consumption in rural areas could be filled up. In this way, overall growth of supply and demand in agriculture could be promoted, which would give impetus to an increase in employment and income.

The policy thinking for the next round of reform of rural finance is to expand the level of marketisation in rural finance in order to remove supply related financial constrains and to activate the constrained demand for finance. The key to the implementation of market reforms in the rural financial system is to resolve the problems of peasant loans. Specific policy proposals are as follows.

Firstly, mechanisms for rewards and penalties in the reform of rural finance should be completed, and public awareness of the reform of rural finance increased. Although the stability of rural finance industry influences external society widely, there is no need to be excessively terrified by the bankruptcy, liquidation or merger of a particular financial enterprise. While financial enterprises possess their own characteristics, they should however abide by the laws for existence and development of ordinary enterprises. The life or death of a particular financial enterprise cannot by

any means influence the safety of the whole rural finance. Even with the severe Asian financial crisis when the financial industry of the countries involved suffered heavy losses, political power in those countries did not disintegrate as a result. Therefore, strategic financial authorities should be encouraged to explore all sorts of reformist plan for the adoption of market principles by rural finance. In the programme design and implementation process, it is necessary to fully evaluate and forecast all possible consequences of reform and reduce the negative effects of reform to the minimum. At the same time, the public should be correctly informed of the hardness, complexity and possible deviation of rural finance reform in order to strengthen public acceptance of the reform results.

Secondly, a pluralistic system of rural financial institutions should be refined.

- Urban banks should be encouraged to extend their financial networks into countryside. A differentiated interest rate policy could be implemented between cities and the countryside with a relatively higher rate in rural market than in cities, so as to make up for losses and higher costs of rural financial operations.
- Foreign-capital banks should be encouraged to develop rural financial business. Pilot experiments should start from the east and coastal areas to get sufficient experiences, and then spread gradually to central and western areas. However, their share in the rural financial market should be controlled to avoid excessive impact on domestic financial institutions.
- With the premise that there should be a strict system of market access and strengthened financial supervision, the establishment of non-governmental financial institutions should be encouraged. Historically, non-governmental financial institutions in China have existed for a long time and have a favourable tradition of industrial self-regulation. Therefore, the government needs to be confident in the market and peasants, and non-governmental financial institutions do not mean a great disaster or a need to discriminate between urban and rural systems of ownership. On the contrary, they provide important, reliable driving forces for breaking the constraints of the bottleneck in the supply of rural finance. Non-governmental financial institutions may be popularly-run banks, co-operative banks, credit co-operatives or co-operative foundations. In particular, after the opening-up of the rural financial market, peasants should be allowed to establish their own co-operative financial institutions. These may be new models of credit co-operatives or co-operative foundations with comprehensive legal supervision and internal supervision and control, with a complete end to administrative interference in any form by government at grass-roots level. In the domain of co-operative finance, a reform through innovation in financial organisations should be used to force RCCs to improve their capacity.
- Where non-governmental financial institutions are concerned, there should be strict conditions for market access and the rates of capital reserve and sufficiency of funds should be increased. A combination of compulsory and voluntary methods should be adopted in pressing financial institutions to provide deposit insurance. An open system in which responsibility should be taken for one's own risks should be implemented with deposit holders or shareholders explicitly notified in writing. Final responsibility for the financial risks that occur in non-governmental financial institutions should not lye with the state but with the institution's investors and depositors. Since the risks are high, increased interest on deposits should be permitted.
- The ADBC should be reformed. There are two plans for this. One is to merge the ADBC with the China Grain Reserves Corporations with particular responsibility for the implementation of policies dealing with savings and price support. Other policy functions

should be delegated to the ABC with the state subsidising the agency charges on the basis of its success in implementing policies. The other plan is to retain the ADBC and expand the range of its policy functions while rescinding the present policy functions from the ABC.

The third is the gradual correction of the current tendency to "constrain agriculture" in financial policy arrangements. Because the ABC agriculture-related loans have higher risks compared to other types of loans, the current regulations on penalties for issuing credit should be changed. The scope for investigating and determining the responsibility of those dealing with rural loans should be reduced. In this case, the severity of penalties should be eased and the time period for investigations should be shortened. Saving deposits being transferred by rural Post Office Savings to the PBC can be transferred in the form of reloans to RCCs, which can issue funds to rural economic organisations, peasant households and agricultural enterprises. Government budget funds should be provided to gradually write off bad debts of RCCs which were created historically as a result of policy adjustments. Considering the huge amount of institutional operational costs for the creation of policy insurance organisations, an agricultural insurance agency system could be established, with invitations to tender for agricultural insurance and one or more commercial insurance companies could be permitted to act as agents. With regard to the agricultural policy insurance business, a method of subsidising fees, operating costs and reduced income tax should be adopted to encourage commercial insurance companies to handle agricultural insurance. In addition, peasant households should be given long term, comprehensive and independent contractual land rights, permitting the mortgaging, share purchase, exchange and inheritance of these rights. At the same time, property right titles to such fixed assets as the peasant's houses and vehicles should be acknowledged by law, permitting peasant households to mortgage these fixed assets for loans.

Fourthly, the process of rural commercialisation, the adoption of market principles and monetisation should be accelerated. In rural China, and in central and western areas in particular, on the basis of the structural adjustment of agriculture and the establishment of demonstration zones, government should guide peasant households to reduce the self-sufficiency production and to increase specialised and commercialised crop production and animal husbandry. Through such measures as the supply of information, technical support and training in marketing, peasant households could get help to understand the market and take part in competition, strengthening the ability of peasants to withstand risk. On the one hand, the off-farm employment should be fostered, assistance should be provided to rural migrants to find jobs in the cities. On the other hand, rural migrants should be also encouraged to return back to their hometown with the capital to set up businesses.

Fifthly, rural financial institutions should be encouraged to develop consumer credit activities. With the background of a current surplus in production capacity, together with a low rate of return on investments in agriculture, industry and commerce and the high risks in agriculture, the impetus to economic growth by consumption credit for peasant households is much greater than that for production credit. Since the stimulation of consumer credit can give impetus to rural market demand and expand the scale of the market, it can stimulate peasant households to undertake production credit. Hence, in the first place a policy of subsidised loans should be implemented for collective house building and the education of farmers' children. Collective house building would economise land. Investment in the education of children is a national human capital investment with great social externality. The granting of subsidised loans can alleviate the peasants' educational burden, reduce the rate of illiteracy and increase the quality of the population. Next, the loans for durable consumer goods and for the treatment of serious illness can be established with flexibility, encouraging peasants to access loans. For consumer durables such as household electrical equipment, normal dealers or factories can act for peasant households to apply for loans to banks or RCCs. The peasants can choose a fixed loan term and pay the loan annually. For the treatment of serious illness, hospitals can also act

for peasant households to apply for loans from such financial institutions as banks or RCCs with peasants making annual repayments in stages.

Sixthly, the reform of the RCCs is needed. First, the assets of RCCs from state investment should be checked. If there are net assets, they should be brought into the state reserve fund for writing off bad debts. Secondly, both central and local financial administrations should each undertake one part of the RCCs bad debts produced by the successive policy adjustments and write off them year by year. Thirdly, state share funds should no longer be established, putting an end to all administrative interference. Fourthly, RCCs should be reformed again primarily in accordance with the principles of the co-operative system complemented by the shareholding system, allowing peasants to become the mainstay of the RCCs with the "three meetings system" strictly implemented and with genuine democratisation, standardisation and systemisation of operational management. Fifthly, the RCCs system should be established in accordance with the pyramid-type equity participation method, namely with share participation from the bottom upwards and with layer upon layer of financial services from up to bottom. First of all, grass-roots credit co-operatives should be set up by peasants and individual privately-owned enterprises. Such bodies would be owned by members and shareholders. Next, joint county unions would be set up by share purchase on the part of the grass-roots level unions and the county union would hold shares to constitute provincial unions. Finally, provincial-level unions will constitute national credit co-operative federation by share purchase. Credit unions at each level would be independent legal persons with the lower-level unions exercising shareholder control over the higher-level unions while, at the same time, being their customers. The higher-level credit unions would have no administrative powers over the lower-level ones, simply providing such services as capital circulation, settlement and payments. By transforming RCCs into true co-operative financial institutions through the series of reform measures above, the difficulty encountered by peasant households for loans from RCCs will be basically resolved.

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DEVELOPMENT OF SUSTAINABLE CREDIT CO-OPERATIVES IN CHINA

By Gerard van Empel and Lissy Smit¹

Abstract

This paper deals with the development of an effective rural banking system in China, through the restructuring of the 35 622 existing Rural Credit Co-operatives (RCCs). The establishment of an effective rural banking system is a pre-requisite for the development of a diversified rural economy. The elements which play a role in rural financing and a possible strategy for the reform of Chinese rural financing are discussed in this paper. Applicable lessons learned are drawn from the European Co-operative banking experience. In terms of rural finance there is no real alternative, at least at any scale for the RCCs, as they are the backbone of Chinese rural finance. To develop the RCCs into full-fledged sustainable, private rural banks, economies of scales must be realised by further consolidating the fragmented and small-scale institutions, into network organisations. In this paper only a general approach for restructuring of RCCs is given as in each province the situation is different and detailed analyses need to be carried out before the appropriate model and time frame can be determined.

Background

This paper on the development of sustainable credit co-operatives in China is based on the experience of the authors in rural finance and rural development projects in many transition economies, such as: China, Russia, South Africa, India, Brazil, Poland, Hungary, Ukraine, Kazakhstan, Kyrgyz Republic, Egypt, Yemen and also in the European Co-operative Banking development.

Rabobank developed as a co-operative bank from a small credit institutions one hundred years ago to a full fledged "all finance' concept co-operative financial organisation. In the agricultural market where the organisation has its roots, the Rabobank Group accounts for 87% of all bank lending. Furthermore Rabobank has a market share of 37% in small and medium enterprise (SME) financing, 39% of the savings market and 22% of the home mortgage market. Rabobank owns an insurance company, a leasing and factoring company, and a private asset management company, three private banking companies. Internationally, through more than 140 offices abroad, Rabobank is mainly focussed on providing financial services to food and agri-companies worldwide. It is the only major private financial institution with a triple A rating from the major credit rating institutions.

This background is given to show that properly organised and institutionalised rural banking systems can develop into strong financial institutions.

^{1.} Mr. Van Empel is Director of Rabo International Advisory Services (RIAS), a full subsidiary of Rabobank that was especially created to transfer knowledge and experience of the Rabobank organisation for the development of rural banking systems in countries in transition and emerging markets. Ms. Smit is Project Manager at RIAS.

Introduction

The financial system in China's rural areas has become weaker in recent years despite efforts to reform it. The development of a market economy with Chinese characteristics is going relatively rapid, without a clear strategy to reform the RCCs. After the initial de-link from the Agricultural Bank of China (ABC), the RCCs were directly placed under the responsibility of the People's Bank of China (PBC). However through this de-link, their access to financial markets and other support functions in terms of payment systems, product and IT support was reduced. Until today there is still no clear policy with respect to the RCCs in terms of structure, capitalisation mechanism, how to solve non-performing loans (NPLs), etc. Parallel to this move, China's four largest banks, including ABC have largely withdrawn financial services from semi peripheral and rural areas to refocus on more profitable operations in the urban areas under the influence of increasingly fierce competition both from foreign banks and from newly established local commercial banks. This has left the burden of servicing financing needs in the rural areas with RCCs, who have not been up-graded to meet this task in a satisfactory manner.

Access to financial services in rural areas involves many aspects. Most important is that financial intermediaries feel comfortable about financing different rural sector and local initiatives and that they are able to develop both sides of their balance sheet (assets and liabilities, independently from large credit lines). The Chinese government recognises that creating an effective rural banking system through the RCCs is a pre-requisite for the development of a diversified rural economy. Which in turn is important to create sufficient employment for the rural population to avoid an un-controllable move to the cities.

Market environment

On a land area only slightly smaller than the USA, China houses the largest population in the world of around 1.3 billion people. An even more striking feature that shows high intensity land-use is the fact that about 90% of the Chinese population lives on 1/3 of the land surface (east and south east as well as the northeast). Over the last decade the Chinese economy has shown persistently high economic growth, average 8% per annum between 1992 and 2002. One of the main driving forces behind these high growth rates is the move from a centrally planned to a more market-oriented system. This entails increasingly more room for individual and non-state activity, especially in small and medium sized enterprises (SMEs). Furthermore, the more market-oriented approach results in drastic trade liberalisation underpinned by entry to the World Trade Organisation (WTO) in December 2001. In addition to this, sustainable public and a large amount of foreign direct investments (FDI) contributed to the economic expansion.

Table 1. Economic growth (% volume change)

	2001	2002	2003	2004
Gross domestic expenditures	7	8	8	8
Private consumption	7	7	7	9
Public sector consumption	10	8	8	6
Gross fixed investments	10	15	10	10
Exports of goods and services	3	14	12	10
Imports of goods and services	2	16	15	12

Source: EIU, May 2003.

As a result of the high economic growth China has become the sixth largest economy of the world with a nominal GDP of USD 1 307 billion in 2002. Based on official figures, China's economy

will continue to grow by 7-8% per annum for the coming years. China has experienced a rise of GDP per capita from USD 336 in 1990 to USD 1 018 in 2002.

Rural sector

For many agricultural products, like grain, potatoes and pig meat, China is one of world's largest producers. Although over 40% of the Chinese population work in agriculture, the agricultural sector contributes only 15% to GDP. Around 60% of the added value of the agricultural sector stems from arable farming, followed by animal husbandry (24%), fisheries (9%) and horticulture and forestry (both 4%).

The structure of Chinese agriculture

By far the largest part of the Chinese agricultural production is based on small scale family farming units. There are only a few large-scale (mostly state owned) farms operating in the agricultural sector. An exception is the poultry sector where half of the broiler production originates from large-scale enterprises. Because of the small scale, most farms show limited borrowing capacity, although many families have also non-farm income sources.

Given the current trends in domestic and international markets, China is moving towards the import of more land-extensive grains and the export of more labour-intensive agricultural products. For most of the potential import grains China is (still) largely self-supporting. This could however change in the future as the consumption (=demand) for grains will rise faster than the production. Many arable farmers are switching from grains to higher added value crops. Also increasingly good agricultural land in the highly populated areas is used for non-agricultural purposes, like housing, industry, recreation and infrastructure. Agricultural land resources are limited to only about 130 million hectares.

This could lead to the need to import grains by 2005. It is anticipated taking into account increased consumer demand due to economic growth that China will be a relatively high net food importer.

Although Chinese agriculture shows at primary level a relatively high production level, especially in terms of output per unit area, supplies chains are is still relatively in-efficient both in terms of input supplies and marketing and processing structures. This combined with the fragmented primary production leads to relatively high transaction costs in each agricultural supply chain. Ultimately these costs are paid by the farmer, like everywhere else.

With a clear focus on efficiency and quality throughout the supply chains, China can further improve the competitiveness of its agricultural production and increase farm income and through that borrowing capacity. Consolidation of primary production however can be only achieved through job creation in other sectors. Ultimately China does not need more than 5% of its working population to be active in agriculture, similar to mature markets.

Agricultural policy

While substantial liberalisation has taken place in China's grain system since 1978, a significant degree of government intervention remains, covering grain production, distribution and trade. In practice, a number of intervention measures exist, such as procurement price protection, export subsidy and non-tariff barriers.

In its tenth five-year plan (2001-2005), the Chinese government gives agriculture and rural development a prominent place. The government emphasises the importance to increase the standard of living for farmers and stimulate the overall rural development. To achieve this, measures are considered to increase the income of farmers through tax relief, increased subsidies, and protection of the agricultural sector.

On March 1, 2003 a new Rural Land Contract Law came into effect. While land remains state-owned, the Law enables farmers to secure land for 30 years under a contract, similar to a long-term lease. The Law implies that farmers can use land rights as collateral to obtain bank credits.

Financial sector

Financial sector reform began in the late 1970s. In 1978 the PBC, was separated from the Ministry of Finance. Three new banks were founded to diversify the PBC's former monopoly (Agricultural Bank of China, Bank of China, and the China Construction Bank). In 1982 the PBC was converted into China's Central Bank. Its deposit and lending activities were taken over by the newly formed Industrial and Commercial Bank. Presently Chinese banking system is based on a four-tier system as described in table 2.

Table 2. Chinese Banking System

1 st	Four state-owned commercial banks (67% market share); Agricultural Bank of China, Bank of China,	
	China Construction Bank, and Industrial and Commercial Bank of China	
2^{nd}	Three policy banks or specialised banks, established by the government in 1993 to take over the policy	
	lending function of the 1 st tier banks (10% market share); Export-Import Bank, Agricultural	
	Development Bank of China, and China Development Bank.	
$3^{\rm rd}$	Ten nation-wide joint-stock commercial banks (JSCBs) and commercial banks. Equity ownerships are	
	distributed among the state and corporate enterprises (one exception is Minsheng Bank with 100%	
	private capital)	
4 th	Large number of city commercial banks, urban credit co-operatives, rural credit co-operatives, foreign	
	financial institutions, trust and investment companies, finance companies, and leasing companies.	

China's banking system and interest rates are regulated by the central government. The financial system was originally designed to serve the State-Owned Enterprises (SOEs) and the banks borrowed money to the SOE sector at below-market rates. The four 1st tier public banks, which hold together two-third of all deposits in the Chinese banking system, suffer heavily from a large portfolio of NPLs. According to official figures, NPLs account for around 25% of all outstanding loans. In 1999, four asset management companies (AMC) were established to manage and dispose of NPLs. Furthermore, the authorities try to reduce the existing NPL portfolio by intensified recovery efforts, and the sale of NPLs to foreign banks at a discount. Despite the relatively high rate of NPLs, Chinese banks are not illiquid. A sharp increase in household savings over the last 20 years has pushed up the national savings rate to over 40% of GDP.

The four 1st tier public banks play a small role in the financing of private firms, especially of the SMEs. The underdeveloped capital market rules out an optimal allocation of the high Chinese savings, thereby reducing the potential of (private) investments.

Accession to the WTO has major implications for China's banking and financial sectors. Under the terms of accession to the WTO, financial sector services will be gradually opened to foreign entrants. Ultimately by 2007, foreign banks will be allowed to execute the same operations as domestic banks. In line with WTO regulations, small banks are now allowed to establish ties with

foreign investors. Moreover, the PBC recently announced plans to deregulate interest rates on a trial basis to ease the access to bank loans for private companies. However currently Chinese banks have still only little room to set interest rates independently. To improve the supervision of the Chinese banking industry, the Chinese government recently established the Chinese Banking Regulatory Commission (CBRC), which will operate independently from the Central Bank.

Rural credit co-operatives

As China's four 1st tier banks have withdrawn from most counties and rural areas to refocus on more profitable operations in the cities the burden of financing agricultural needs is predominantly with the RCCs.

Background

The reform of the financial sector and opening to the outside world in the late 1970s brought large changes to the Chinese rural economy. The RCCs which were part of the people's commune systems integrated with the Agricultural Bank of China (ABC). The RCCs were put under the management direction of ABC, which allowed the RCCs to conduct and develop their businesses in a more centralised fashion and enable them to provide better financial support to the rural economy. However due to the policy driven lending practices conducted by China's state-owned banks in the early days, RCCs also had become somehow attached department of ABC.

In 1997, the RCCs were separated from ABC and began their own commercial efforts under the direct guidance of the PBC. Table 3 describes the key indicators of the RCCs as they are today.

Table 3. Rural Credit Co-operatives - Key Indicators

Total number of RCC nation wide	35 622
Number of County level RCC Unions	2 439
Number of Municipal/District level of RCC Unions	67
Number Province level RCC Unions	6
Deposit outstanding	RMB 1 730 billion
Loan o/s	RMB 1 197 billion
Loans to agricultural sector	RMB 441.7 billion

September 2002.

RCCs provide RMB 441.7 billion to the agricultural sector, which equals 77.4% of the total financing to the agricultural sector. Many RCCs have encountering serious lending problems as their combined NPLs stood at 515 billion Yuan (USD 62 billion) at the end of last year, a staggering 37% of their total outstanding loans. It has to be noted however that NPLs vary from county to county, province to province.

Besides the issue of NPLs, the RCCs are faced with problems on the funding side. For historical reasons widely scattered postal savings outlets have the privilege of re-depositing funds with the central bank for an above average rate of interest. Also they enjoy an implicit guarantee on deposits. Due to this they are able to withdraw a huge chunk of rural savings away from the countryside making it difficult for the RCCs to attract funding. Furthermore, because most RCCs lack a regional or national network, clients of one RCC are unable to withdraw money from any other RCC. More and more migrant workers and tradesman from rural areas therefore choose to use the services of nation wide financial institutions. In addition to this the lack of a broad spectrum of financial services (*e.g.* money transfer, credit cards, etc) limits RCCs potential on savings.

Compared with other financial institutions RCCs in general have not been active in the providing potentially profitable consumer loans for housing and durable goods. RCCs have also limited scope in terms of pricing in extra risks of lending to private companies because the interest rate is fixed at a level determined by the Central Bank. This means that private companies and individuals that have few assets available to use as collateral have trouble getting loans.

The CBRC has given top priority to rebuilding the rural financial system. CBRC has issued a guideline for RCC reform nation wide in early July 2003. The central government has taken steps to remodel the RCCs, reorganising them into bigger co-operatives or into banks, by establishing clear responsibilities between PBC/CBRC and local governments. Under the current round of RCC restructuring, five more Provinces will be chosen as reform demonstration, based on local government's application and support. In fact, such trials began from the establishment in April 2003 of the first rural co-operative bank in East China's Zhejiang Province, a combination of a joint-stock structure and co-operative mechanisms. In Jiangsu province three county based RCCs have been transferred into Rural Commercial Banks (RCBs) as joint stock companies at the end of 2001.

Basic principles for rural finance

In order to formulate an integrated approach and action plan to rebuild China's rural financial system through the restructuring of the existing rural credit co-operatives, it is worthwhile to study the lessons learned from European Co-operative banking experience. The following aspects can be mentioned, which are not time and place dependent:

• Co-operative banks and similar institutions have played an important role in the development of a diversified European rural economy.

Essential factors were:

- Proximity to clients.
- Peer pressure.
- Knowledge of local circumstances.
- High recovery rate.
- Large degree of self governance.
- Good and transparent governance structure is and was essential.
- Institutions need to have the ability to adapt their services according to the development of clients.
- Provision of all financial services also to non-members based on financial services needs
 within geographical area (all-finance) was essential for the European Credit Co-operative to
 compete with commercial banks.
- At very early stage the European co-operative banks recognised economy of scale, including:
 - Network organisation.

- Local activities, what can be best done locally.
- Standardised products and systems.
- Central for economy of scale and more complex activities.
- Savings mobilisation was considered an important instrument for providing access to credit.
- Economic criteria and not social criteria were used to provide financial services.
- Payment capacity ratio was used as the most important criteria for assessing loans.
- A management risk scoring system is an important component in credit granting.
- Strong attention is/was given to appropriate capitalisation mechanism.

Based on experience in many different emerging and developing markets and the above mentioned lessons learned from European Co-operative banking experience, the following additional main principles and conditions can be mentioned for the establishment of effective rural finance service delivery systems:

- A State is not effective in direct credit delivery as it lacks the infrastructure and in most cases
 the expertise in providing financial services. An essential element in the credit cycle is loan
 recovery. End users in general consider State credits as a form of subsidy and the last to be
 repaid, resulting in a poor recovery rate. For the same reasons state owned retail banks like
 state owned agricultural banks have shown limited sustainability.
- Debt moratorium gives the wrong signal to the market and has a negative long term effect on loan recovery for all financial intermediaries operating in the market. Debt restructuring, foreclosure etc. can be only done on individual or specific group bases under strict conditions.
- Sector based retail financial institutions like agricultural banks show limited sustainability and continuity, due to the fact that they have a high risk exposure to one sector, show mostly high transaction costs as they use their infrastructure (branches) insufficiently.
- If one considers a retail-banking outlet as a "grocery shop" for financial services, it does not make sense to sell only to one particular client group, while other similar clients are in the vicinity.
- A financial intermediary involved in rural retail financial services delivery should preferably be based on an "all finance" concept. In other words it should be able to provide all the financial services that this type of clients requires: credits, savings, current accounts, insurance (possibly selling these on fee base from other suppliers), etc. This will enable the financial intermediary to carry out effectively client risk management and using the infrastructure in an optimum way.
- Agriculture, although with specific characteristics and risks, is an economic activity.
 Therefore also economic principles have to be applied by the financial intermediaries when financing farmers. In practice this means that a farmer has to generate sufficient payment

capacity when a loan is given. Poverty elevation which requires partly grant elements need to be separately funded.

- Government financial policy instruments should be only used to ensure and/or improve access to financial services, like credit to farmers and other rural entrepreneurs. These instruments should be based on cost (like transaction cost subsidy) or risk (like credit guarantee fund) sharing arrangements with financial intermediaries. Policy instruments should never take over all the risks from a financial intermediary as this gives insufficient incentives for full loan recovery. These instruments, based on the principle of obtaining desired development goals, need to be specific and clear with respect to eligibility criteria, target grouping, indicators to be monitored, etc.
- High loan recovery rate is more important than low transaction costs in rural retail banking. In cases where the transaction cost within the interest spread is higher (of course with limits) than the provisioning costs, sustainability of the financial intermediary is normally greater than when the reverse is the case.
- Clients with insufficient payment capacity must be considered "non-bankable" and therefore should not be served with credit products from a rural bank. This category needs a form of income support. Mixing social and economical criteria within a financial institution leads to poor loan recovery rates.
- A rural bank should have preferably a full banking license in order to have the flexibility to grow, in terms of products, etc. with the development of its clients. This will also enable it, to carry out effective client risk management.
- Stand-alone local retail banks have little chance to survive on their own as they lack critical mass in areas like product development, payment services, access to financial markets, etc.
- Far too many donor and subsidy driven rural finance initiatives are taken in many developing and emerging markets on a stand-alone basis. Much better results in terms of institutional viability and continuity can be obtained if these initiatives are combined in creating a larger scale rural finance structure.
- Successful rural based banks are de-linked from direct government involvement and/or interference.
- International development banks have had limited success in creating viable rural financial institutions due to their multi- (some times conflictive) objectives. Like poverty reduction objective on the one hand, credit push (on time disbursement of allocated credit line) objective and creation of a sustainable financial institution objective on the other hand.
- Co-operative banks and similar institutions have historically played a very important role in the development of a diversified rural economy in Western Europe, more so than any state institution or policy instrument.
- Policy instruments facilitated only the development of specific target groups in the improvement of access to credit but were not leading nor replacing an effective private based financial service delivery system. Proximity to clients, peer pressure, knowledge of local

conditions and a large degree of self-governance of a local entity within the network, were important factors in the development of an effective rural finance delivery system.

• The ability to tap the savings market also from non-members has been a very important factor in the development of co-operative/rural banks in Europe. Using local savings for local credits has been of great importance, together with the sense of ownership to ensure a high recovery rate on credits.

The above given lessons learned are not all, to the same degree applicable to China, especially in terms of short-term actions. However many can be applied with some adaptation towards the long-term strategy development of RCCs in China.

Approach to restructuring and development of rural credit co-operatives and rural credit banks

In terms of rural finance there is no real alternative, at least at any scale for the RCCs, as they are the backbone of Chinese rural finance. To develop the RCCs into full-fledged sustainable, private rural banks, economies of scales must be realised by further consolidating the 35 622 fragmented and small-scale institutions, into network organisations.

In this chapter it is only possible to develop an approach or general plan of action for restructuring RCCs as in each province the situation is different and detailed analyses need to be carried out before the appropriate model and time frame can be determined. However the following direction is recommended:

Structure and governance of the RCCs

- Initial restructuring of RCCs should be carried out on a provincial basis, as at this stage Government support will be needed and the province is a formal administrative structure and has sufficient scale.
- The best approach appears to be to establish a two tier consolidated network structure in the province, with a central RCC bank and local branches or local banks. Whether they are branches or local entities, will depend very much on the chosen capitalisation structure, efficient back office support structures, etc.
- Any RCC that will be consolidated into the structure will need to have a cleaned up balance sheet in terms of NPL and a pre-set minimum capitalisation. Before that period an RCC can be associated to be able to make use of the services supplied by the top tier.
- Each RCC should have sufficient scale meaning that at county level there should be only one more or less independent RCC/Branch. In order to bring financial services closer to the client sub-branches or small retail offices can be used, subordinated to the county RCC/Branch.
- Important is also the choice of the capitalisation model, this can be based on:
 - Member/shareholders possibly obligatory for credit takers and voluntary for depositors
 with an internal trading mechanism. This can be even combined with a form of
 subordinated loans in the form of member certificates.
 - Or a joint stock company with freely external tradable shares. Although optimum return on equity will be the guiding factor in this case, important is to make as many as possible

clients also shareholders, to ensure that they have something at stake within the institution.

- Or a mixture of the above. The preferred option in this mixture is that the external participation is based on a subordinated loan with a fixed return if the institution is profitable. Another form could be that external shareholders only participate in the second tier structure of the co-operative bank.
- Depending on the chosen model aspects like cross guarantees, transfer pricing for funding etc. will need to be built in.
- In all cases it means that the credit co-operative associations currently active as a representative/lobby organisation in many provinces will be replaced by a second tier bank.
- On all chosen models, a new governance structure will need to be designed, based on transparency, reflecting shareholders involvement and to ensure local commitment/responsibility.
- Whether the one tier model with local branches or the two tier model with local banks that own the second tier is chosen, in both cases it is important that there will be a sufficient mandate at the county level to operate in their respective market. Members or shareholders need to be linked as much as possible to the local entity to ensure commitment and to be able to practise issues like peer pressure, etc.
- This will need to be combined with a strong internal audit and credit inspection system to ensure transparency in the operations.

In broad terms the main responsibilities between centre and local can be described as follows:

On a local level this should translate into:

- A certain autonomy concerning credits.
- An autonomy related to performance.
- A limited back office.
- A clear focus on market development and the delivery of standardised products.

At central level the following main task are:

- Control and inspection of local offices/banks.
- Service function towards local banks/branches with respect to issues like product development, IT, HR policies, payment services, etc.
- Own income-generating function like, corporate banking, corporate finance, project-finance, treasury, etc.

In other words do locally what can be done best locally and do at the central level where scale and expertise advantages are apparent.

Table 4 shows the suggested division between local and central level.

Table 4. Division between Local Level and Central Level

- •Provide services to local level institutions (product development, manuals, management information systems, audit and credit inspection)
- •Operate treasury and payment systems for local level institutions, operate in capital market •Serve larger clients / corporate banking

Role of the government

- As stated earlier one of the lessons learned from European Co-operative banking experience, is that a State is not effective in direct credit delivery as it lacks the infrastructure and in most cases the expertise in providing financial services. Successful rural based banks are de-linked from direct government involvement and/or interference. Therefore, both state and local government should have no direct involvement and/or interference in RCCs credit decision making process and other management decisions.
- In some cases it might be necessary that the State will have some stake in the institution, however from the start there should be clear agreed time schedule for weaning out the State as stakeholder both in term of capital and governance.
- The supervision on financial institutions, including the RCCs, needs to be carried out by either PBC or CBRC not by other government institutions such as local government.
- Government financial policy instruments should only be used to ensure and/or improve access to financial services, like credit to farmers and other rural entrepreneurs. These instruments should be based on cost or risk sharing arrangement with financial intermediaries.

In conclusion, above are given only some ingredients, which can play an important role in the restructuring of RCCs. The final recipe needs to be designed based on the specific conditions within each province and the financial resources made available to assist in the restructuring process. These recommendations are based on the authors' conviction that there is no alternative solution for providing a broad access to financial services in China, than to restructure the RCCs into viable sustainable rural banks.

Potential useful instruments to improve access to credit

In broad term financial instruments need to be based on risk or cost sharing, with a sufficient incentive for financial intermediaries to perform. Below one example of a risk sharing instrument guarantee fund) and cost sharing instrument (transaction subsidy) are given. Both can have a large multiplier effect.

Credit Guarantee Fund

As described previously one of the problems facing the Chinese rural finance is that RCCs are reluctant to lend to private SMEs and small agri-businesses because of the lack of securities/collateral offered. A Credit Guarantee Fund (risk sharing instrument) can be an effective instrument to improve access to credit for the rural sector. The following minimum requirements should be taken into account:

- Eligibility criteria should include maximum loan amount, minimum payment capacity ratio required, (suggestion at least 110%). Other aspects that can be included are specific types of investments, criteria with respect to the lender, etc.
- A guarantee fund should cover with the guarantee only about 50% of the non-recoverable part of the loan. This will ensure that there are sufficient incentives for the RCCs to try to recover the full loan amount.
- A guarantee fund should preferably only be used for medium and long-term investments and not for production loans. The reason is that the costs for monitoring and control for the fund will increase substantially, if also short tern loans are eligible. Under normal circumstances there are sufficient possibilities to use pledges as a security for a short term loan.

Transaction Cost Subsidy Fund

Another instrument to improve access to credit could be a Transaction Cost Subsidy Fund (cost sharing instrument). Many potential bankable farmers and other rural entrepreneurs have no access to formal credit because the loans they require are small with relatively high transaction cost in order to be able to supplying these loans. Transaction costs involved in a loan transaction, relates to all the costs made by the RCC with respect to application, evaluation, agreement, disbursement, monitoring, and collection. In order to supply this target-group, the RCC should charge much higher interest rates or fees than for larger clients, however this is not possible with regulated interest rates. A transaction cost subsidy, which provides a small subsidy for every small loan delivered, can be an important instrument to improve access to credit for small producers, as it gives a cost reduction for RCCs, without taking over the risk. Such a fund will require criteria with respect to eligible institutions and with respect to target groups, etc. Essential is that the criteria can be easily monitored and controlled to avoid bureaucracy.

Most of the risks involved in operating in the rural sector are not the responsibility of the government. However, the Chinese government can take action to mitigate some of the risks.

- State needs to be reliable partner in terms of tax system, legalisation, hygiene and sanitation standards, policy etc.
- Proper land legislation and creation of mortgage system.

- Adequate legislation and registration of movable goods and inventory to be used as collateral.
- Appropriate environment for enforcement of contracts.
- Reduce market risk by ensuring fair competition, adequate anti trust legislation and enforcement.
- Weather related risks by establishment of crop insurance system.
- Creation of an effective rural banking system.

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RURAL BANKING IN EMERGING ASIAN MARKETS: LESSONS FOR CHINA

By Paul M. Dickie*

Abstract

Microfinance techniques allow the rural banking needs of poor clientele to be met in cost efficient ways that also contribute to poverty reduction. Microfinance offers approaches to resolve information asymmetries in credit decisions, incentives for loan repayments imbedded in low cost supervision, and a focus on savings promotion that provides not only a sustainable pool of loanable funds, but also major benefits for the savers. While these microfinance approaches are powerful, their informal sponsoring organizations have often been characterized by opaque governance arrangements that restrict their ability to be self financing and so limit their future. Utilizing microfinance approaches to reduce the risks and costs of providing financial services to the rural poor within sustainable governance arrangements has been a challenge with mixed results in emerging Asian markets. In response, a growing number of microfinance institutions are gradually evolving into banks so as to provide a basis for their further growth and development.

Introduction

There is no doubt that rural poverty in Asia is a major problem with up to 500 million of rural population categorized as poor. Of these, China constitutes only about 50 million, with most of those in the central and western regions of the country. As China has only utilized microfinance to an informal extent, it seems reasonable to look at the experience in emerging Asia for its implication in designing microfinance programmes for China.

Governance and information asymmetries are the principal hurdles that make the operations of rural credit institutions so problematic. The first section looks at the experience from emerging Asia with non-government rural credit institutions and this is followed in Section II by the experience with government owned rural credit institutions. Section III then looks at the lessons for China from emerging Asia. Section IV puts this in perspective by reviewing the governance issues in credit systems and institutions affected by the Asian crisis while Section V reviews what we know about the effectiveness of microfinance programmes. Section VI provides some conclusions.

^{*} Victoria Management School, Victoria University, Wellington. The suggestions and comments of Bruce Carrad, Brett Coleman, Rainer Hartel, Anella Munro, Bruce Murray, John Samy, and David Sobel are gratefully acknowledged.

^{1.} Based on national assessments; see Key Indicators 2002, Asian Development Bank. While the Asian total from available statistic and estimates based on 2001 populations amounts to 446 million, this excludes Myanmar and Afghanistan where there are substantial numbers of rural poor.

^{2.} The poverty population in the fragile areas of the 135 poverty counties (within the provinces of Sichuan, Guizhou, Yunnan, Shaanxi, Gansu, Qinghai, and Ningxia) amounted to 53.2 million in 1999 as estimated by the Chinese Academy of Social Sciences (quoted in Asian Development Bank, 2002, p. 11).

I. Emerging Asia experience with non-government rural credit institutions

The absence of government ownership in rural credit institutions does not eliminate governance as an issue. The non-government sector has had significant governance ambiguities and issues associated with the vague ownership and control arrangements of many of the non-government organizations (NGOs) and co-operatives. However, governments can go some way in resolving most of these governance issues with an appropriate policy and regulatory framework that sets out acceptable governance structures for these non-governmental organizations.

Microfinance actually has a long history, despite its recent resurgence. In the early 1900s the Government of Madras promoted cooperatives based upon the German model that helped low income households save and get credit. By 1912, over 400 000 belonged to these credit co-operatives and by 1946 they had mushroomed to over 9 million (Morduch, 1999). The co-operatives took hold in the State of Bengal that became East Pakistan after the partition and subsequently Bangladesh.

The Grameen Bank, which was started in 1974, evolved from this early experience. The Grameen Bank uses group-lending approaches that serve to substantially reduce lending risks, and is now almost solely addressed to woman (about 95%). To be eligible to join, each member cannot own more than 0.5 acre of land or have assets equivalent to more than one acre of land. Under the group approach, each member of a group of five is held responsible for loan repayments of borrowers from within the group, although the actual application of this rule is flexibly implemented at the village level. Within each village there must be a minimum of 8 such groups to keep supervisory costs low. The philosophy is simple: if poor people have access to credit, they can change their lives without any further interventions in areas such as skill training or marketing. This keeps costs down while the self screening in the formation of the groups ensures low risks of loan defaults. As of March 2003, Grameen Bank was serving 2.6 million members in 42 000 villages with 11 000 employees working out of 1 160 branches. Total loans disbursed in 2001 amounted to USD 287 million or USD 569 per group (Yunus 2003a). Loan interest rates are 20% for income generating loans, calculated on a declining balance basis³ or approximately 17% in real terms.

Most member savings are in the form of group savings which are built up through a 5% tax on each loan and mandatory weekly deposits of 2 Taka (about USD 0.03) per week. These funds are at the discretion of the members of the group for interest free emergency loans to members to cover for example, a health crisis. Under pressure the restriction on savings withdrawals have been relaxed to allow withdrawal of savings after 10 years of participation with accumulated interest (8.5% per annum).

Grameen indicates a very low loan overdue rate of 1.3% (Yunus, 2003a). However the reported overdue rates only include those loans overdue greater than one year, divided by the current value of the loan portfolio. Given the rapid growth of the loan portfolio, this calculated rate of overdue loans is understated. For example, over the 1985-1996 period, Morduch (1999) calculates that even accepting the one year basis, that loan overdue averaged 7.8% of the historical portfolio. This overdue loan rate while reasonably good, results in operations that are not financially sustainable, even with a high subsidy rate equivalent to over 10% of each loan extended.

Nevertheless the Grameen model has been extended to almost 100 countries, and Yunus (2003b) estimates that such microfinance services now reach about 35 million poor families, relative to the 2005 target of 100 million as set by the Microcredit Summit in Washington, DC in 1997.

^{3.} In addition, housing loans are available at 8% per annum and education loans are available at 5% per annum (Yunus, 2003a).

The Grameen model of group participation effectively lowers the loan default rates as the bank does not take collateral and is not able to discern the riskiness of borrowers' projects. In effect, group participation mitigates adverse selection by providing incentives for similar types to group together. To see this, and following the general approach of Varian (1990), it is assumed that while investors can have very good knowledge about each other, the bank cannot discern between risky and safe investors. If the risky investors invest in a project, they will have a probability of success of p_r and a cash flow stream of C_r while the safe investors will have a corresponding probability of success of p_s and a cash flow stream of C_s , where $p_{s} > p_r$ but $C_r > Cs$. Since the bank cannot distinguish between these investors and will receive no income when a project fails, it must charge an interest rate, r, based upon its cost of capital, σ, adjusted for the average probability of success of such projects, namely p_a, so that $r = \varpi/p_a$. If for the moment, it is unrealistically assumed that the expected returns of the risky and safe investors are equal (after all higher risks should equate with higher returns), then $p_r \cdot C_r = p_s \cdot C_s = C_a$. On this basis, and with the banks not able to discriminate between the risky and safe projects, the Net Present Value for the risky investors will be $(C_a - p_r.r)/\varpi$ which will be greater than the Net Present Value achieved by the safe investors, namely (Ca - ps.r)/v. Safe investors will only invest if their NPV exceeds their alternative piece work income, x, over this period. If the safe investors enter, then obviously so too will the risky investors.

However if the safe types determine that the expected NPV of the project is less than their piece work income over the period, the only investors will be the risky types. In this case, the implicit cross-subsidization from the safe types will no longer be present so that the interest rate charged by the bank will rise to ϖ/p_r . The risky types will then drive out any remaining safe investors and this will lead to suboptimal investment levels.

The group lending scheme leads to a solution only if it brings the safe types back into the market. Since everyone in one group in effect funds joint liability insurance, no safe members would wish to be in the same group as a risky member who would increase the risk premiums under joint liability. As a result, safe members self select into uniformly safe groups as do risky members. While the risk premiums in the risky group, i_r , will be higher than in the safe group, i_s , their higher costs of insurance should be accommodated within their higher expected returns. As the bank can then charge a uniform rate based upon full repayments under the joint liability insurance, the return for the risky projects will be: NPV = C_r .pr - r - i_r and the return for the safe projects will be NPV = C_s .p_s - r - i_s and from the bank's perspective, the increased costs of lending to the risky groups is incorporated within the cost structure of the groups through group insurance. Thus group lending as practiced by the Grameen model of microfinance results in significant risk reduction for the lending institution and resolves the difficulties with asymmetric information that prevents the bank from discriminating between projects relative to their risks.

Another significant movement has been the Association for Social Advancement (ASA) that began in 1978 as an NGO and specialized in microfinance in 1991. Gradually ASA developed a McDonalds's model of financial services with limited and uniform products provided through a standardized, low-cost, delivery system. There is a standardized loan product, basic voluntary deposit services, uniform, low-cost delivery systems to provide these simple financial products supported by a zero tolerance of late repayments on loan instalments.

Under the credit programmes, poor women get an initial loan of Taka 4 000 to Taka 6 000 (USD 69 to 103) from ASA to start income generating activities. The loan is to be repaid in one year

4. Fernando and Myers (2002) characterize this standardized model as the Ford Motor model of microfinance.

113

in 46 instalments, beginning 15 days after loan drawdown (a total of 6 weeks grace period is offered within the year) with 15% flat service fees. At the end of 2002, ASA had over 2 million borrowers with an average loan size of Taka 7 500 (ASA, 2002).

ASA's delivery system consists of 3 room offices/residences in the village with one manager, 4-5 credit staff and one support staff. The branch manager is authorized to make all operational decisions including all loan approvals (maximum delegation within a limited amount of discretion as defined by the detailed operations manual). ASA branches are profit centres and are expected to cover all costs within 9-12 months of opening. Costs are tightly controlled through using rented facilities that also serve as living accommodation for the staff. Accounting systems are simple and are run by the branch managers. There is no group liability but the incentives of continued access to even larger loan amounts in conjunction with close monitoring of the small and frequent loan repayments under existing loans serves to ensure a very high repayment record, reportedly in the order of 98% (Fernando and Myers 2002). There can be a problem with the end game as participants' incentive for receiving ever larger loans is eliminated with their prospective graduation. Of course, establishing a conditional transition to the next level of financing for graduates can provide effective continuity of repayment discipline.

It is interesting that both of these approaches for risk and cost reductions were developed in Bangladesh. The competitive market for rural financial services in Bangladesh may have something to do with this. As noted by Rutherford (2000), these NGOs are simply new players in an already dense network of financial services in the villages involving rotating savings and credit associations (ROSCAs), accumulating savings and credit associations (ASCAs), village savings clubs of all sorts, credit from shopkeepers and suppliers, moneylenders and, where available, villagers often join NGOs or poor friendly insurance schemes. To be of interest, new financial products must fill a niche such as the Grameen model of risk reduction or as ASA's low cost standard financial service with escalating loan incentives and close monitoring to ensure high repayment records. A more recent example is that of SafeSave which provides very flexible financial services in that a variable level of deposits or loan repayments can be accommodated on a daily basis in line with fluctuations in daily incomes. Such flexible financial services are particularly relevant for urban workers in the informal sector.

Comparative statistics on microfinance institutions have not been generally available but this void is gradually being filled by the Microfinance Information Exchange⁵ which now has 147 participating microfinance institutions worldwide providing their income and balance sheets for peer review. The 39 participating microfinance institutions in Asia (not including the Grameen Bank) cover 7.5 million active borrowers with USD 1 118 million in outstanding gross loan portfolio (56% of the world total). In contrast with other regions, the microfinance institutions in Asia concentrated on savings so that the number of savers outnumbered the borrowers by a ratio of over 3 to 1. The total number of savers in Asia was 27.9 million (97% of the world total) and the total amount of savings amounted to USD 2 022 million (84% of the world total). This concentration on savers in Asia is generally believed to be an important key to financial self-sustaining operations. Moreover, it is likely that the poor have gained more from market-based micro-savings that from micro-loans in emerging Asian markets.⁶

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^{5.} See the Microfinance Information Exchange (MIX) web site: www.themix.org

^{6.} This was pointed out to me by Brett Coleman.

The more reliable financial statistics are from these financial self-sustaining microfinance institutions as selected from all regions and shown in Table 1 that focuses on the costs of lending operations. The Asian group is the most profitable with an average return on assets of 6.1%. This relatively high degree of profitability is achieved through the use of low cost personnel (8.9% of the loan portfolio, LP). The Asian salaries are lower in relation to per capita income levels and while this cost advantage is partly offset by lower levels of productivity, the resulting cost per borrower in Asia is still the lowest at USD 44 (see Table 1). Outreach or depth of lending, in terms of average loan size to GNP per capita is 72%, second only to Latin America at 59%. The lessons from emerging Asia relative to the operations of microfinance institutions appear to be their focus on savings and their low cost loan supervision personnel that in turn underlines the importance of training and standardized systems and procedures.

Table 1. Efficiency indicators for financially self sufficient microfinance institutions per region

	Total	Personnel	Average	Depth	Staff	Cost per	Average
	Administrative	Expense/LP	Salary		Productivity	Borrower	Return on
	Expense/LP		(multiple of				Assets
	%	%	GNP/capita)	%	(no.)	(USD)	(AROA, %)
FSS MFIs (n=62)	23.5%	13.1%	7.0	83.0%	145	101	5.5%
Africa (n=8)	37.9%	18.3%	13.2	116.5%	172	64	3.9%
Asia (n=18)	15.2%	8.9%	3.2	71.6%	114	44	6.1%
Eastern Europe (n=6)	28.0%	18.0%	9.1	116.3%	80	193	2.0%
Latin America (n=29)	23.4%	13.0%	6.1	58.9%	167	125	4.8%

Source: The MicroBanking Bulletin, No. 8 (November 2002).

II. Emerging Asian experience with government owned rural credit institutions

In the last two decades, microfinance has increasingly been accepted as an approach to improve the status and incomes of very poor people. This acceptance has induced governments to either add such facilities to existing state-owned credit institutions or to create new institutions to implement microfinance. The fact that one of the leading microfinance institutions, Bank Rakyat Indonesia (BRI), is government owned has provided a clear symbol for the potential of such institutions. However, the clear lesson is that public ownership of rural credit institutions, with the one conspicuous exception of BRI, has been a monumental failure not just in emerging Asia but also world-wide (Rock, Otera and Saltzman, 1998). It has proved almost impossible to separate the bank from the political processes. According to Mukherjee (1997) of the Consultative Group to Assist the Poorest (CGAP):

The well-intentioned objective of state-owned development finance institutions – reaching the neediest people—is too often subjected to political influences. Politicized mandates place undue emphasis on credit outflows over recovery. Poor lending practices such as, weak borrower selection criteria, little or no monitoring, and subsidized interest rates weaken the state-owned institutions financially and make them continually dependent on government or external donor funds.

BRI was not historically the success that it is today. In fact BRI was well on its way towards insolvency based upon its lending programmes in association with the Bimbigan Massal (BIMAS) or the mass guidance programme involving the provision of inputs to promote rice self-sufficiency in the

^{7.} Financial self-sufficiency is defined by adjusted operating revenues being at least equal to the adjusted financial expenses plus loan loss provision expense plus operating expense. Adjustments are made to reflect the value of subsidies, full loan provisions (50% for any loan over 90 days and 100% for any loan over 180 days) including reversal of interest income, and the erosion of capital due to inflation.

1970-1985 period. The lessons from BRI's near death and resurrection in the financial deregulation measures of 1983 are noteworthy.

Under the BIMAS programme, BRI had little control over the selection and control of borrowers as Department of Agriculture official parcelled out the credit in accordance with the inputs for each farmer involved under the programme. Moreover, as the credits were at subsidized rates of interest, the demand from wealthier farmers was high and often these credits did not reach the poorer farmers. The lack of credit controls and the absence of adequate loan administration in conjunction with mandated output targets led to high levels of loan arrears that became very severe after a series of rice crop failures. Over the entire BIMAS programme (1970-1985), the default rate on loans was 55%.

BRI had no incentives to mobilize savings. Government regulation required a lending rate of 12%, while the rate paid on most deposits was 15%. Since every deposit represented a loss to the bank, BRI justifiably made no effort to mobilize savings. Compounding this problem, the unit desas (the retail windows at the village level) had to forward all the saving deposits to the branches without any compensation while, at the same time, the unit desas were required to meet their customer's interest payments from loan proceeds. However these savings programme deficiencies were not felt to be major impediments that needed to be resolved as it was assumed there was a low propensity to save in rural areas, in any case.

BRI did not have the organization, the human resources, the accounting systems or the motivation to manage the unit desas. These deficiencies were compounded by the compounding subsidies for both the BIMAS portfolio and for the unit desas administrative expenses. Based upon an assessment of all these areas of subsidization, Yaron, Benjamin and Charitonenko (1998) determined that the average yield on the loan portfolio of BRI in 1985 had to be increased by over 30% to offset all of the subsidies provided to BRI. In short, the system created no incentives for sustainable operations.

In 1983, the Indonesian government undertook a financial deregulation programme that involved the establishment of market based interest rates through the removal of controls on interest rates. The decontrol of interest rates throughout the unit desas in 1984 was the beginning of Kredit Umum Pedesan (KUPEDES) or general rural credit system. Under the programme, loans were provided to all creditworthy customers for productive purposes. ¹⁰ The focus on savings mobilization meant that there was always adequate funding for creditworthy loans from the local community. ¹¹ KUPEDES played a

^{8.} The default rate was based upon all loans more than 90 days overdue at the end of the program (see Robinson 2002, p. 185).

^{9.} More formally, Yaron, Benjamin and Charitonenko (1998) estimated a subsidy dependence index of 32.2 for BRI in 1985 which indicates the needed percentage increase in the average yield on the loan portfolio to compensate for the elimination of all the subsidies provided to BRI in that year.

^{10.} Under KUPEDAS there were initially two loan products: working capital loans for up to 2 years; and capital loans for up to 3 years. Interest rates were initially differentiated but these were made uniform in 1990 at 1.5 % flat a month (32% on a declining balance basis). There was also a penalty rate of 0.5% per month on any overdue loan repayments. For a detailed description of the evolution of the KUPEDES loan products see Robinson (2002), pp. 239-244. These relatively high interest rates on loans also served to screen out wealthier farmers who could obtain cheaper loans at the commercial banks (Mukherjee, 1997)

^{11.} In fact, looking at the funding of loans across BRI, in 1996 for example, 42% of BRI's funds came from the units while only 15% of the outstanding loans were from the units so that much of the unit's liquidity was channeled into large corporate loans that have a history of poor repayments in Indonesia, profits from the unit desas were used to subsidize the losses of other BRI divisions. Yaron, Benjamin and Charitonenko (1998) indicate that the unit desas had a negative subsidy dependence index of

key role in the transformation of the unit desas system supported by a number of important internal reforms as follows:

- 1. Each unit desa is treated as a separate financial unit that constitutes a profit centre with its own balance sheet and profit and loss account.
- 2. The management of the unit desas are given authority over credit and operational decisions and are held accountable for their performance. They are given a high level of training and provided with financial incentives based upon the performance of their unit desa. 12
- 3. Simple and transparent loan portfolio accounting and reporting allows frequent assessment of each unit's loan portfolio and a basis for expedited follow-up of problem loans. Unit desa staff receive substantial training and are regularly supervised by their responsible branch official.
- 4. A position of President-Director, solely responsible for the unit desa network, was created in the BRI head office which allowed independent decision making, free from political influence.

The establishment of the KUPEDES programme received substantial support from the Indonesian government. The system was designed by the Ministry of Finance with donor assistance that importantly involved the work of the Harvard Institute for International Development (HIID) over an extended period from 1979 to 1983. The Government also underwrote the very considerable costs associated with the start-up and training of staff at each of the unit desas. The success of the KUPEDES programme reflected substantial investments over an extended period by the Government (the subsidy to end subsidies) together with the Government's commitment to protect the system from political influence. The unit desas system experienced strong loan demand and was profitable by 1986 and operated free from subsidies from 1987 (Yaron and Benjamin 1997).

The lesson to be drawn from the BRI experience, the sole successful government owned microfinance institution in emerging Asia, appears to be that while there is nothing inherently wrong with government ownership of rural credit institutions, it simply is very difficult to make it work given political pressures. The likelihood is that an independent governance structure cannot be put in place initially or, if it is, it cannot be maintained to protect sound credit decisions from political influence. The amount of investment in staff training and the commitment of government officials over an extended period to BRI's independence relative to credit and interest rate decisions implies that it will likely be difficult for other governments to succeed in such an approach. The one exception of BRI as

44.5% in 1995, that is, they could have reduced their yield on their loan portfolio from 31.6% to 17.5% and still remained free of subsidies. The Unit Desa principal deposit rate in 1995 was 17% (Baydas, Graham and Valenzuela 1997).

- 12. Ten per cent of each unit's annual profits were given as a bonus to all the unit's employees, up to 1.5% of an employee's monthly salary (Robinson 2002, p. 316).
- 13. Other observers would argue that the Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand has also been a very successful government owned rural bank, particularly in light of its impressive performance in outreach, savings mobilization, and efficiency. BAAC is also unique in Asia given the large share of longer term lending in its loan portfolio. While some of its branches have become self-financing and profitable, overall BAAC is still dependent on substantial subsidies. While it is not included for this reason, its areas of success have much to recommend. For a case study of BAAC's performance see Myers and Nagarajan (1999).

a successful government owned microfinance institution in emerging Asia is a cautionary lesson for governments in designing future interventions to promote rural credit. However it is noteworthy that another such transformation utilizing the lessons from BRI is now underway at the Agriculture Promotion Bank in Lao, PDR with long term support from the Asian Development Bank.

III. Lessons for China from emerging Asia

Microfinance is of course not new in China. It has been recently estimated that there are over 250 pilot microfinance projects now operating in China with perhaps 90% funded by external donors (Asian Development Bank 2002). These microfinance projects are tiny relative to the government subsidized poverty alleviation loan programmes that, according to the White Paper on Poverty Reduction, provided 3 billion Yuan (USD 362 million) in loans to over 2.4 million poor households by 1999 (China 2001). Moreover it is important to design any interventions against the background that there are already vibrant and evolving rural financial markets in China. For example Zhu, Jiang and von Braun (1996) report that two-thirds of farm loans in poor areas of China in 1992 were from informal lenders. Perhaps the main issue is the extent of advantages that the recent informal microfinance projects can offer to augment these rural financial markets. If, as expected, there are microfinance programmes that can contribute to off-farm poverty alleviation programmes, the task will then be to support the transition of such programmes into financially sustainable microfinance institutions.

It seems that three steps are needed:

- 1. <u>Establish</u> a legal framework so that these informal NGO and collective organizations can operate legally, initially through the provision of loans and then, with regulatory safeguards in place, through the raising of deposits.
- 2. <u>Deregulate</u> the interest rates for lending and subsequently for deposits for the institutions under this legal framework and who subsequently have the regulatory safeguards in place for deposit taking, so that financially sustainable microfinance operations are feasible.
- 3. <u>Establish</u> staff training programme and operational support programmes to upgrade those institutions wishing, for example, to begin deposit taking. These capacity building efforts could be part of an outreach programme on a grant basis by the regulator, perhaps the Peoples' Bank of China (PBC), in addition to being supported by the donors.

In discussion of these proposals, the logical alternatives for China and the experience from emerging Asian markets will be noted.

The first recommendation of establishing a separate legal framework for the range of microfinance institutions has an easy alternative, namely requiring all such institutions to work in conjunction with a legally established banking institution. The logical candidates for such as sponsorship roles in China are the Agriculture Bank of China (ABC) or the Rural Credit Co-operatives (RCCs). The difficulty with these alternatives is that ABC and the RCCs are now struggling with the process of becoming commercial financial institutions. ¹⁴ They are in the process of

structure of a policy bank (the Agriculture Development Bank of China, ADBC) a commercial bank (the Agriculture Bank of China, ABC) and a cooperative system (the Rural Credit Co-operatives, RCCs). The RCCs achieved separation from the ABC in 1996 and came under the supervision of the

In addition, the governance of the RCCs has not been resolved. The overall framework for the rural financial system was set by the State Council in September 1996 which established a tripartite

building up a healthy credit culture in their own institutions as well as building a base of modern banking systems beginning with international accounting and financial information systems that permit appropriate internal controls. With the establishment of these credit and loan supervision procedures, the focus will be able to shift to developing modern asset/liability management to ensure sustainable earnings, appropriate liquidity and ongoing capital adequacy. At the same time major efforts need to be exerted to address their current high levels of non-performing assets. There is also the adaptation to the gradual de-regulation of interest rates and the expected increases in competition from the entrance of foreign banking institutions under the World Trade Organization (WTO) liberalizations. These institutional and competitive pressures constitute major challenges for ABC and the RCCs extending over the medium term.

In addition to these challenges, the BRI experience in Indonesia indicates that sustainable microfinance requires an entirely different mindset from commercial banking. The typical microfinance employees do not mix easily with commercial bankers as they generally come from the local villages, with perhaps high school education. Extensive training in the standardized products and service delivery is necessary for these villagers to become effective microfinance officers. Supervisory systems are also at odds with commercial banking approaches as the loan approval process, for example, is not based upon documentation and collateral but rather is founded on the loan officer's judgment based on appearances during a visit to the loan applicant's home and business location. Often loan decisions are made on the spot as there is no documentation that senior management or a loan committee can review to effectively add to the decision-making.

In summary, the experience from emerging Asia is that it is difficult for an existing financial institution to sponsor or create effective microfinance programmes. While such approaches can be encouraged and may well be beneficial, they are likely to represent a diversion for the concerned bank and be limited in scope. As such, the establishment of a legal and regulatory framework for microfinance institutions seems to be an important basis for the evolution of microfinance programmes into fully functioning rural banks.

At present some of the microfinance programmes in China appear to have greater flexibility than the formal financial institutions in getting exemptions to the interest rates set by PBC. Nevertheless, the Qinghai Microcredit Project, a Grameen model scheme, sponsored by AusAID was only allowed to charge 1% per month on the outstanding loan balances and failed to establish deposit facilities (McLean, 2003). However, it is not clear that it was only the rate structure that resulted in the failure to achieve financial sustainability before the end of AusAid's assistance. Nevertheless, as the experience in Indonesia underlines, sustainable microfinance must be allowed to set competitive interest rates in line with the rural market where they are operating. The norm for microfinance lending rates is in the order of 20% real with deposit rates in the order of 5-10% real. The interest rate spread must be adequate to cover the high administration costs of microfinance operations. If a legal and regulatory framework could be set up for microfinance, it would be desirable to provide an

new Rural Cooperative Finance Administration Bureau of the People's Bank of China (PBC). Despite the experimental reform of the RCC in Jiangsu, initiated in April 2000, to test a more centralized model, the complexity of the tensions between the pressures for the RCCs to become an integrated bank and a national legal person to help resolve the governance issues vs. the pressures for the RCCs to act as cooperatives serving their local members appears to have delayed major reforms in this regard (Watson, 2002).

exemption to the current controls on interest rates as the liberalization of this segment would not represent a significant challenge to any of the established financial institutions. ¹⁵

In general, central banks are not generally volunteering to supervise microfinance. The same logic as to why commercial banks make poor partners for microfinance applies also to central banks. The loans are simply too small and there are too many of them for traditional supervisory approaches to be effective. As microfinance lending decisions are not based on traditional collateral or other formal documentation, such as audited financial statements, bank examiners will find little of interest in microfinance loan files besides basic information about the borrower together with the loan officer's judgments about the borrower's past and prospective cash flows. While the traditional audit approaches are not productive, a top down, risk-based examination procedure can be very productive. The key aspects of the microfinance institution would be checked (the adequacy of capital, liquidity, and compliance with regulations) followed by a review of the loan portfolio, asset/liability management, liquidity management and the adequacy of earnings. Any risk factors would be evaluated and systems and management procedures would be assessed with suggestions for modifications where needed. As such risk based supervision is fully applicable to microfinance operations and is increasingly being used by central banks in assessing commercial banks. As most of the NGOs and co-operatives find that they have to evolve into banks in order to get adequate financing, ¹⁶ the central banks appear to be the top candidates for an effective regulatory body. Moreover, PBC has recently established a division to supervise the RCCs and has experience supervising a wide variety of financial operations.

The establishment of a legal and regulatory framework provides a much needed focus for the coordination of information and advice. Meyers and Nagarajan (1999), note that the high demand for finance in China has meant that microfinance loans were being used to finance crop based activities as opposed to the more appropriate off-farm activities that can support the frequent repayment requirements. In addition, group lending practices were being sought after in sparely populated mountainous regions where they may be too costly to implement. Certainly, not all the microfinance approaches that have been developed in Bangladesh or Indonesia may be suitable for China. Local experimentation and development of best practices for China appears to be warranted. A regulatory agency such as PBC could be very effective in the dissemination of best practices in connection with their reviews.

^{15.} This interest rate liberalization proposal appears to fit into the ongoing program of interest rate deregulation priorities, namely rural before urban. However, it would require exceptions to the preferences on the lending side of large before small and long term before short term as well as relative to the preference to deregulate the interest rates on loans before the interest rates on deposits.

A recent example of such a transformation was the ACLEDA microfinance institution in Cambodia which converted from its NGO status to a registered bank in October 2000 with the assistance of the International Finance Corporation (IFC) in co-operation with Dutch and German banks that combined to provide a capital injection of USD 2 million (for a review of ACLEDA see Channy, 2002). As further noted by Stauffenberg (2002), only a few years ago microfinance was dominated by NGOs. Unregulated NGOs found it hard to borrow. In Latin American Microfinance, unregulated microfinance institutions (mainly NGOs) were only able to borrow 1.3 times their equity while those microfinance institutions that were regulated as banks were able to borrow 4.5 times their equity. According to Stauffenberg, rapid growth generally confronts NGOs with a choice of either formalizing or stagnating.

IV. Asian crisis

The lessons for China's development of rural credit systems and institutions from emerging Asian experiences must surely also include those from the Asian crisis. In addition to the macroeconomic imbalances in the adversely affected economies, ¹⁷ the performances of the banks and the private sector certainly contributed to the non-performing loan problem. The development of those projects and their financing structures contributed importantly to the external creditor's withdrawal of their credit lines that precipitated the crisis. Maturity and currency mismatches were the key problems that resulted in the escalation of these non-performing loans into a banking and foreign exchange crisis as experienced in Thailand, Indonesia, and Korea and to a lesser extent in Malaysia, the Philippines, and Taiwan. As Dornbusch (2001) noted, the basic principle of "good balance sheets, no crisis" helps to explain, for example, why Singapore and Hong Kong did not have a crisis. Strong macroeconomic performance in terms of fiscal and monetary policies and high levels of external reserves also clearly protected China which was relatively unaffected by the crisis.

The Asian crisis was not felt to the same extent in the rural areas of Asia. Impacts in terms of the returning urban unemployed were important and although domestic demand reversals were unprecedented, the sharp depreciation of the currencies of the adversely affected economies also meant that export crops commanded high prices and were in strong demand. While the impacts on the rural areas were mixed, important carryovers from the Asian crisis are noteworthy. Banks, including rural credit institutions by association, suffered from a backlog of non-performing loans that have hampered the extension of new credits. These impacts were even noticeable in the largely agricultural Mekong countries of Vietnam, Cambodia and Lao, PDR.

The principal focus in the post Asian-crisis period has been to improve regulatory structures so that financial institutions would be unable to employ such risk-prone approaches for project financing in the future. These approaches are generally well understood based upon the detailed guidelines concerning best practices in all the important areas of banking, including the Core Principles of Effective Banking Supervision, as issued by the Bank for International Settlements (BIS) Banking Committee. These banking best practices are augmented by securities and insurance industry guidelines and together, the implementation of these best practices were supported by regional institutions such as the Asia Pacific Economic Cooperation (APEC), the Association of South East Asian Nations (ASEAN) and the Executives' Meeting of East Asia and Pacific Central Banks (EMEAP) as well as being supported in county programmes by the International Monetary Fund (IMF), the World Bank and the Asian Development Bank (ADB).

What tended to be less well emphasized, however, is the role of the market¹⁹ and the role of institutional governance in both the banking and the corporate sector in improving the resilience of these economies relative to future crisis.²⁰

^{17.} For example, despite the generally sound fiscal and monetary policies within the region, there were large current account deficits in Thailand and exchange rate polices were inappropriately targeted to the US dollar, given capital mobility and the utilization of monetary policy to address domestic issues. This inappropriate policy combination led the private sector to rely on the relatively fixed exchange rates while borrowing uncovered internationally at low interest rates, often incurring both currency and maturity mismatches. For a review of the Asian crisis see Corestti, Pesenti and Roubini (1998) and for some of the implications for strengthening the financial sector see Dickie (1999).

^{18.} See http://www.bis.org/publ/bcbsc001.htm

^{19.} Shleifer and Vishney (1997) argue that corporate governance mechanisms are the legal and economic institutions that ensure shareholder's rights are held to be paramount. As such, corporate governance

Asia has been noted for the effectiveness of its relationship based governance approaches that contributed greatly to the Asian miracle as enunciated by the World Bank (1993) of outward looking rapid growth in the two decades preceding the Asian crisis. However, as the economies of Asia became more complex and increasingly required transactions between entities that had no prior knowledge of each other, the importance of structuring enforceable arms-length exchange systems has been highlighted. These new arms-length exchange systems require legally defined property rights, full documentation of contracts and access to a responsive judiciary that can resolve disputes in a timely, equitable and efficient manner. This is characterized as the "rule of law" approach. While rural credit institutions in China are currently largely managed with relationship-based systems, it seems important based upon the Asian crisis experiences, that a framework be put in place to allow the evolution of governance towards a more arms-length basis over time.²¹

The governance systems put in place for rural financial institutions are also very important for sustainability over the transition from relationship based to arms length transactions. In essence the governance structure must be conducive to arms length transactions so that as informal systems give way to "the rule of law" systems, the structures are in place to support that evolution. ²² Even at this juncture, it may appear reasonable that the desirable emphasis on the application of formal governance rules can be derived from the fiduciary responsibilities of rural credit institutions to both their depositors and lenders and could be based upon the strict application of current banking supervision regulations. Coming under this framework would be the designated roles, responsibilities and composition of the board of directors for these banking institutions (Macey and O'Hara 2003). While government ownership may alter the strategies and objectives of the bank, such ownership does not alter the general principles or the need for good governance (BIS, 1999). In addition, the transparency of the financial services being offered and their costs would need to be ensured through publicly and readily available publications. The financial condition of the rural financial institution would also need to be made publicly available to customers and local residents on a regular basis through mandated information releases prior to meetings of the stakeholders on, at least an annual basis. Asymmetric information between insiders and outsiders must be effectively combated through this provision of audited information to all concerned stakeholders. Of course such information could also serve the needs of the supervisory agencies. While there may be no expectation that such rules can be complied with in many rural areas, setting such goals in conjunction with the provision of staff training

mechanisms can be altered through a political process involving legal and regulatory changes. Within the economic arena, product market competition will force firms to minimize costs and, as part of that cost minimization, to adopt supportive corporate governance mechanisms. While important, these mechanisms cannot yield a complete corporate governance system.

- 20. Of course it is not likely that the market in financial services in rural areas can play much of a role in reducing the moral hazards of banking. However the role of disclosure to all stakeholders can however equally serve this objective and, together with maintaining uninsured liabilities, can make an important contribution to reducing moral hazard (Nier and Baumann 2003).
- 21. Peerenboom (2003) argues that after the Asian crisis, the relationship based approaches are not an adequate substitute for formal law and the rule of law, and that the latter is necessary for sustainable economic development in China.
- 22. This argument is made in the full realization that even a fully developed legal system would probably never be formally utilized relative to microfinance loans due to the small amounts involved. However, the holding of collateral in the form of a land title can effectively prevent the borrower from selling the land or using it to secure another loan and mobile collateral can often be seized without going to court. Nevertheless acting in conformity with fully developed property rights provides a strong legal basis for such operations.

programmes and a timetable for future compliance would provide a very useful framework emphasizing the intended transition to "rule of law" approaches.

V. Evaluation of microfinance programmes

Microfinance programme evaluation is not a simple exercise. Coleman (2001) outlines the approaches that have been utilized noting that positive impacts could be reasonably expected in the poor's incomes and wealth simply because of the substitution effect as moderate interest rates used by sustainable microfinance programmes, generally in the range of 20-30%, replace the rates utilized by moneylenders, namely in the order of 100%. These financial benefits may be augmented by the availability of remunerative savings facilities. In addition there may be some more complex socio-economic impacts relating to fertility, the increased use of discretionary health care, and enlarged educational opportunities for the children of the borrowing family.

The most straight-forward approach to evaluation is to simply ask the participants for their views on the effectiveness of the microfinance programme. Unfortunately to survey microfinance participants amounts to inviting positive responses. While not true in all circumstances, this response bias can be expected in most of the environments where microfinance is being established.

The main problem confronting evaluation of microfinance programmes is the selection bias. Most programmes utilize self-selection procedures. For example, in the Grameen model of microfinance it is essential to allow self-selection to ensure that the membership groups are homogenous in terms of either safe or risky types. In a large scale study in Bangladesh, Pitt and Khandker (1998) attempt to eliminate selection bias and found major benefits from the microfinance programmes, including helping the poor in consumption smoothing as well as in building assets. Their findings also supported claims that microfinance programmes promote schooling and contribute to an awareness of reproductive health. However in reanalyzing the same data, Morduch (1998) found selection bias (relative to the limit of 0.5 acre in land holdings that were not enforced in the Grameen Bank selections of participants but was used as an instrument variable to establish control groups) and concludes that almost all of the differences can be accounted for by who gets the loans. Loan recipients tend to be wealthier and work harder than the control group. Once adjustments are made for this self-selection bias, there was no impact on consumption and the children in the programme areas actually do worse than those in the control areas.²³

Coleman (1999) has attempted to eliminate the selection bias through the assessment of the difference of the differences in his Northeast Thailand study as follows:

$$Impact = (Y_{Mt+1} - Y_{Nt+1}) - (Y_{Mt} - Y_{Nt})$$

where Y_{Mt+1} , Y_{Nt+1} , Y_{Mt} and Y_{Nt} are average outcomes for eligible households in programme villages over t+1 months, ineligible households in programme villages over t+1 months, eligible households in nonprogramme villages for t months and ineligible households in programme villages for t months. This study takes advantage of the planned expansion of the programme to new villages where participants had already been self selected but where the programme has not yet been initiated. As a result the old programme participants in 8 villages could be compared with the new programme participants in the six control villages. Crucially it has to be assumed that there are no spillovers in programme villages from participants to non-participants.

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^{23.} Pitts further rejoinder can be seen at http://www.pstc.brown.edu/~mp/

Coleman's results showed substantial naïve benefits in the form overall wealth, land holdings, non-land farm assets, savings, and various kinds of income. However once corrections for selection bias were made, there was a virtual absence of any significant impacts from the microfinance programme. Participants tended to be wealthier than non-participants so that failure to correct for the selection bias attributes this wealth to the programme impacts. In an extension of this study in Coleman (2001) further refined these results by showing that there were some positive impacts affecting household welfare for the wealthier participants while the poorer participants showed no positive impacts.

In a use of panel data, Khandker (2003) reports on the results of a follow-up survey in Bangladesh relative to the earlier survey reported in Pitt and Khandker (1998). Using panel data comparing the household surveys of 1991/92 to 1998/99, Khandker finds that programme participation, net of dropouts, has increased, itself a sign of programme effectiveness. Moreover despite only having two time periods, Khandker uses linear probability models to estimate the direction of change. While the moderate poverty of programme participants was found to have declined by 8.5%, that of extreme poverty dropped by 18.2%. In addition, spillover effects were found in the programme villages so that overall village welfare increased. According to this panel data reassessment, microfinance is important for very poor borrowers and also for the village economy.

The evaluation of microfinance programme benefits is not simple and there is no doubt that evaluation approaches should be carefully considered when designing new programmes. Certainly it would be counter intuitive to argue that there are no benefits from a lower cost of financing, especially given the growth of these programmes would lead one to believe that they were filling an important need. Hopefully in the future there will be opportunities to develop panel data on participating and non-participating households over a number of years so that more in-depth evidence of the impacts of microfinance programmes can be assessed.

VI. Conclusions

It is naive to assume that microfinance offers a panacea for rural poverty. Financial products and markets abound in rural areas. The benefits from microfinance should be looked at in terms of the benefits that these new forms of lending permit in terms of access to credit or in terms of a lower cost of credit. The Grameen model of microfinance provides for group liability that eliminates a large part of the repayment risks and hence lower rates are available compared with those offered by moneylenders. The ASA-type of microfinance offers a standardized product with escalation of loan amounts as a strong repayment record is established. Again, the repayment risks are reduced and the standardization of the loan product means that costs of delivery can be kept low, giving this type of microfinance a clear competitive advantage. Based upon these risk and cost advantages, microfinance programmes have mushroomed in emerging Asian countries.

The governance of these programmes has been a major problem. They have often been started by non-governmental organizations (NGOs) without clear governance structures. Often, as in China, they are operating outside the formal sector. To be effective and sustainable, they need to be moved into the formal sector and made fully accountable to the stakeholders.

There needs to be a legal and regulatory basis for microfinance that could envisage a two-step evolution. All operating programmes should be required to register and demonstrate the basic structure of good governance, that is the initial capital contribution, the sponsors, the Board of Directors and the principal officers and their qualification. At this first stage, the microfinance institutions should be required to provide regular financial reports to the regulatory agency as well as fulfilling requirements that such reports have been made available to all the stakeholders. This regime should focus on

transparency with mandatory financial reports at least on an annual basis. A major element of staff training with the provision of standard accounting and banking systems will be required for most microfinance institutions.

At the second stage towards sustainable operations, microfinance institutions need to evolve into banks so that they are empowered to take deposits and borrow from other banks. In order for this to be successful, interest rates need to be deregulated as occurred in Indonesia as BRI's sustainable deposit programmes were established. As these interest rates will be market based, the poor will gain not only from the micro-loans but also from their micro-deposits. At this stage, the microfinance institutions should be treated as a bank for regulatory purposes, although supervisory approaches will need to be adapted to focus on risk-based approaches. Microfinance institutions should meet all the standards required of commercial banks.

Given the rapidly expanding microfinance presence in China, it now appears to be an appropriate time to provide a flexible legal and regulatory regime for microfinance institutions. Subsequently, the interest rate controls would need to be liberalized for this very small segment of the financial sector in order to permit sustainable financial operations. Sustainability requires a focus on market based savings mobilization coupled with large interest rate spreads to cover the costs of microfinance lending. In fact, savings mobilization in emerging Asian markets appears to provide more benefits for the poor than even microfinance lending. Training programmes for microfinance staff and the provision of standardized systems and governance approaches would also allow the current range of informal organizations to evolve more easily into full deposit taking banks and establish a new dynamic segment of sustainable rural banks.

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THE REGULATORY FRAMEWORK FOR RURAL CREDIT CO-OPERATIVES: THE ROLE OF CHINESE SUPERVISORY AUTHORITIES

By Wenjun Wang

Abstract

This paper studies the formal institutional arrangements currently in force in Chinese rural credit co-operatives (RCCs). In particular, it analyses the legal position of the RCCs, the regulations concerning property rights, the specific features of co-operatives, the disparity between formal supervisory institutional arrangements and the actual implementation process, as well as the arrangements for the self-regulatory system, all of which suffer major shortcomings. In order to promote the secure and healthy development of the RCCs while strictly controlling their operational risks, the author considers that the Chinese supervisory authorities should accelerate the establishment of a new regulatory framework, which should be based on the reappraisal of the existing regulatory framework and on RCCs' ongoing institutional reforms. To this end, the author discusses how to further the reform of property rights system of the RCCs, how to strengthen and improve the supervisory system on market access, business operations, the provision of assistance with regard to liquidity risks and withdrawal from the market, and how to clarify the relationship between supervisory authorities and the RCCs.

Rural credit co-operatives (RCCs) are very special institutions in the Chinese financial system. Since their establishment fifty years ago, the state has emphasised that the principles of the co-operative system should be the operational basis of RCCs. In the course of their development from the planned to the market economy, RCCs have imitated state banks in terms of both the concept of their operation and management. Yet, if it is generally agreed that China's RCCs need reforms, there is considerable controversy over the reform models that should be put in place. Of utmost importance for the positive evolution of China's RCCs is the development of a regulatory framework to ensure its stable operation.

The current regulatory framework of the RCCs

Regulations refer to all kinds of official institutional arrangements, which include both the statutory regulations (or laws) and the sector's self-regulated institutional arrangements. China's RCCs are currently subject to the following regulations.

Statutory regulations

Regulations of this type refer to the basic laws enacted by the National People's Congress (NPC) and its Standing Committee, as well as administrative laws and regulations enacted by the State Council. Currently, there are two types of financial laws and regulations in force. The first consists of a series of financial or finance-related laws promulgated by the NPC and its Standing Committee over the past ten years, including the Law of the People's Bank of China (PBC), the Commercial Banking Law, the Guarantee Law, and the Company Law. The second are the relevant regulations promulgated by the State Council, such as the Regulations for Dissolving Financial Institutions, Measures for Penalising Illegal Financial Actions, and Regulations for Deposit Management.

There are at present no specific laws at the statutory level regulating the RCCs. The relevant articles of the Commercial Banking Law promulgated in 1995 provide a legal basis for RCC business

such as deposits, loans and settlements. It provides a fundamental definition of RCCs' operational activities and states clearly that, while the RCCs are not commercial banking institutions, they must abide by the same financial laws as commercial banks, for instance the Regulations for Deposit Management.

Banking regulations

Banking regulations mainly refer to the rules or regulations formulated and promulgated by the ministries under the State Council, such as the PBC and the Ministry of Finance. As far as the legal effectiveness is concerned, regulations at this level cannot be compared to the laws mentioned above. However, during the transition period of the Chinese economy, banking regulations have played an important regulatory role in economic activity because the enactment of laws in some sectors has lagged far behind demand. Currently, the operational activities of the RCCs are subject mainly to the following rules or regulations promulgated by the PBC and the Ministry of Finance: the Regulations for the Management of Rural Credit Co-operatives, the Accounting System for Rural Credit Co-operatives, the General Rules for Loans, and the Financial System for Banking and Insurance Enterprises. Of these, the Regulations for the Management of Rural Credit Co-operatives, formulated by the PBC in 1997, set unequivocal provisions for the RCCs on market access, the establishment of stockholding rights, organisational structure and management modes. In addition, the PBC continues to regulate operational activities of RCCs which are not clearly defined by relevant laws and regulations. For example, the Management Methods for the Granting of Micro-finance Loans provide guidance for this type of RCC loans.

Sector's self-regulatory rules

Since the RCCs are set up at the township and town levels, small and scattered RCCs must have unified and sector-based rules to impose self-regulatory constraints. For many years, such rules were formulated by RCCs' "acting supervisor", the Agricultural Bank of China (ABC). In 1996, after the RCCs were separated from the ABC, the formulation of self-regulatory rules was transferred to the major regional branches of the PBC or "Sector Management Offices" within the sub-branches of PBC in provincial capitals (the majority of the staff in these offices had previously worked in the ABC for the RCC-related management). Although the self-regulatory rules lacked the necessary mandatory force as laws, these regulations played an indispensable role in RCCs' actual operations, such as the rules for credit management, staff management and secure safeguarding systems. Currently, as further reforms of the RCCs continue, eleven provinces have established their provincial joint RCC Unions or RCC Federations. Therefore, the formulation of self-regulatory rules for these provinces has been switched to the provincial joint RCC Unions or Federations, and the sector's management of the PBC has been terminated.

Defects in the current RCC regulations

The lack of a specific law for the RCCs and their unclear legal position

Although there are continuous calls for the formulation of a "Co-operative Finance Law" or "Regulations for the Management of Co-operative Finance", no progress has been made so far because of the long-standing indecision on the reform of the RCCs. As a result, there is no law regulating the co-operative finance and the legal position of the RCCs is only defined by the Regulations for the Management of Rural Credit Co-operatives formulated by the PBC. Since authoritative legal safeguards are lacking, the position and the role of the RCCs change from time to time within varying policy environments. As for the daily business operations of the RCCs, their "legal" role is to provide financial services for their members (including peasant households within the community). But at the

macro level, they play a dual role. On the one hand, when the state requires the RCCs to play a role in the overall macro-economic structure, they are the "main force" for supporting agriculture and as such they act as a quasi-policy financial institution. On the other hand, in order to maintain their existence and seek profits, they are forced to function as commercial banks. The combination of co-operative, commercial and policy finance in one entity inevitably results in frequent confusion with regard to the operational concepts and behaviours of the RCCs. Consequently, it is difficult to guarantee their healthy and steady development.

Unclear property rights of the RCCs

Who bears the final responsibility for the results of RCCs' operational activities? This question has long perplexed both those involved in theoretical research on RCCs and RCC staff. The Regulations for the Management of Rural Credit Co-operatives state clearly that "the RCCs are independent legal entities using all their assets to be responsible for their debts". It also stipulates that members of the RCCs "bear risks and civil liabilities limited to the amount of their capital contribution". From the legal point of view, members of the RCCs assume ultimate operational liability or enjoy profits from their share funds in the co-operative. However, in reality, the value of shares possessed by each peasant is generally only 50-100 Yuan and the purchase of shares is mainly done under administrative pressure. The amount of share capital is small, and the rights, such as the democratic management of RCCs and the priority in access to loans by members, are not guaranteed. In addition, for various reasons, a great number of the RCCs suffer from serious operational losses and the members' share capital is generally in deficit. Hence, with bonuses not obtained and no right to participate in management and supervise the operations of the RCCs, the theoretical "owners" would rather forgo their 50 Yuan of share capital and decline any economic links with the RCCs, let alone be willing to bear any responsibility for operational management. In these circumstances, RCCs' debts must be taken over by national banks or by local governments. Currently, the status of Chinese RCCs is such that their debts accumulated over past years continue to increase and there is no one responsible for their operational results. The property rights currently in force can do nothing to improve this situation.

No objective reflection of the special features of the RCCs

A series of institutional arrangements prevent the RCCs from reducing transaction costs and truly abiding by internationally recognised co-operative principles in their operations. As stated previously, the RCCs at the current stage are mainly bound by the sector's regulations. Since the RCCs existed for a long time under the ABC (actually under the strict control of the ABC), administrations, such as the Ministry of Finance and the State Administration of Taxation, know little about their real situation in recent years. Consequently, under the thinking of "equal treatment of citizens", there is no longer any difference made between the "co-operative nature" of the RCCs and the "commercial nature" of commercial banks. The institutional arrangements for commercial banks have become the reference for the RCCs, and little or no attention is paid to the special co-operative nature of the RCCs. Such institutional arrangements have limited the development of the financial business of the RCCs (especially in opening bills of exchange and bank cards operations). As a result, the room for profit is greatly reduced so that their operations tend to become difficult.

The institutional arrangements for supervising the RCCs is "divorced" from reality

It is only since 1997 that the PBC has formally begun to exercise supervisory duties over the RCCs. In recent years, many regulations have been formulated with regard to such matters as market access, examination of the qualifications of high-ranking managers, definition of the scope of business, appraisal of operational achievements, risk monitoring and assistance and on-site and off-site

inspections. These regulations have played an important role in standardising the operations of the RCCs. However, the following problems remain. The first is that the design of the supervisory indicator system puts too much emphasis on comparability with banking institutions. As a result, when regulations are actually applied, it is difficult to fully analyse and reflect the true state of the RCCs. The second is that some regulations are not operational. For example, the Regulations for the Management of Rural Credit Co-operatives stipulates that the registered capital of the RCCs must be no less than 1 000 000 Yuan. This criterion is an insurmountable threshold for the RCCs in many undeveloped, poor and remote rural areas. The level of economic development and peasant investment capacity in these areas are too low to meet this criterion. Faced with the problem of non-compliance by the RCCs, supervisory authorities cannot deal with them in accordance with existing laws or regulations. The third is a lack of provisions on how the RCCs can withdraw from the market when serious operational risks occur. An appropriate and effective system has not yet been established.

The self-regulatory institutional arrangements for the RCCs need to be improved

Before 1996, the RCCs were quasi grass-root offices of the ABC. All their institutional arrangements were designed in accordance with those of the ABC and were, relatively speaking, complete. After the RCCs were separated from the ABC and placed under the supervision of the PBC, their operational regulations became less sound and less complete. This partly results from the PBC's situation in that it is both "a player" and "a referee", but also because it lacks an institutional system that is compatible with that of RCCs. Taking settlement operations as example, the RCCs' overall scale of assets ranks third among all financial institutions, behind only the Industrial and Commercial Bank of China and the ABC, and yet RCC's settlements between different places is not allowed. In such a situation, the RCCs can only mandate the ABC or other financial institutions to act for them. The current institutional arrangement results in RCCs' multiple settlement accounts being opened in different financial institutions, long-term income losses from intermediate operations, and thus in greatly reduced competitiveness on financial markets.

The role of supervisory authorities in institutional arrangements for the RCCs

Recently, the pace of the reform of China's financial system has been accelerating. The Chinese Banking Regulatory Commission (CBRC) has been set up and, according to the Law of the People's Bank of China, will undertake full responsibility for the supervision and management of banks in China and deposit-type financial institutions. At the same time, structural reform of the RCCs is also underway.

The formulation of financial regulations and the maintenance of financial order are the main responsibilities of the CBRC. More specifically, studying and promoting structural reform of the RCCs while formulating supervision rules for the RCCs is one of its important responsibilities. At the beginning of 2003, the Chinese State Council put forward the overall requirements for accelerating the structural reform of the RCCs, namely to "make property rights clear, strengthen the regulatory mechanisms, enhance service functions, provide appropriate state support through local governments". This marks the beginning of the structural reform of the RCCs which is very comprehensive and its scope exceeds any previous reform. If successful, there will be major changes in the management structure and operational mechanisms of Chinese RCCs.

Reform implies the removal of outdated and irrational elements in current arrangements so that they become rational, complete and more suited to real requirements. The essence of the structural reform of the RCCs is that, on the basis of a reappraisal of all key regulatory factors such as the property rights system, transaction and competition systems, a comprehensive and new regulatory framework should be established through constant revisions and improvement. This framework should

be fair and impartial, corresponding to the development of a market economy and effectively limiting the operational risks. To this end, the CBRC should make efforts in following areas in restructuring the regulatory framework of the RCCs.

Speed up the reform of the property rights system of the RCCs in accordance with the developmental requirements of the market economy

With all-round development of the market economy in China, the RCCs must also accelerate the transition to become a market-oriented institution. The key points in the current reform of the RCCs are how to adapt to the requirements of the market economy and how to establish a modern company property rights system so that the RCCs possess independent property rights, can make own policy decisions, and can assume full responsibility for their operations.

Regulations pertaining to property rights are the basis of all institutional arrangements for the RCCs. Their mode of organisation determines the operational concepts and standards of conduct. Currently, there are two different views on how to reform property rights. The first is that the RCCs should continue to adhere to the co-operative system, but that these should be reorganised in accordance with the internationally recognised principles of co-operative systems so that they will be transformed into genuine "co-operative" organisations. The other view is that the basic conditions for the existence of the co-operative system have never been met in China over the past fifty years. Nor is it feasible for the RCCs which are government-controlled or commercially oriented to make the transition to a true co-operative system. Hence, the reform of current RCCs must be in accordance with the requirements of the modern company system model, namely the shareholding system.

The author considers that it would be inappropriate to adopt a non-co-operative system in the reform of the RCCs; in other words, simply through share-holding oriented reform. In the course of almost fifty years of development, the main role of the RCCs has been to provide a credit service to peasants for their production and livelihood. The existence and development of the RCCs is inextricably linked to the development of the local rural economy. China is a vast country and there are enormous disparities in local conditions, particularly in rural areas. In eastern China, where development of the market economy is more advanced and the economic base is relatively good, the proportion of share-holding economy in the economic structure is increasing and the fundamental conditions for a share-holding economy are basically mature. In such places, the RCCs can be reformed as share-holding financial institutions. However, in the economically underdeveloped central and western regions, in particular in the remote and impoverished areas, peasant livelihoods are still based on the principle of self-sufficiency. Their demand for funds is very small, primarily for maintaining simple reproduction, and they do not have the ability to bear the risks brought by commercialised operations of the RCCs. Therefore, the actual requirement for funds by peasants in such areas is for mutual aid and co-operation. For these reasons, the orientation of the reforms of China's RCC can only be chosen in light of local conditions and the actual requirements of the peasants. That is to say, in the areas where the conditions for share-holding type of reform are met and the peasants are willing, the RCCs can be changed into rural commercial banks with clearly-defined property rights. In places where the peasants really need credit co-operatives, the RCCs should be handed over to the peasants themselves. Reforms should be conducted truly in accordance with the principles of the co-operative system, with no profit making and no liabilities as the basic preconditions (any debt created previously must be repaid by the state). Based on the above analysis, the property rights system of the RCCs should be multiple and diverse.

Establish and improve supervisory regulations for the RCCs with control of risk at the core objective

Over many years of operation, the business scale of RCCs has increased but their risks have also accumulated because of such objective factors as the low profitability of agriculture compared to other industries. However, it is beyond doubt that the shortcomings and imperfections in all supervisory and management systems concerning the RCCs operations (including self-regulatory systems) are important factors contributing to high risks. The countermeasures lie mainly in establishing and improving the supervisory regulations for the RCCs, including passing the legislative process as quickly as possible to promulgate special law for the RCCs so that the interest and rights of depositors, RCC members and the RCCs can be effectively protected. Currently, preventing risks and accelerating development should be the principal goals of formulating and improving supervisory regulations.

Regulations on market access

Regulations on market access refer to the standards or code of conduct for the credit organisations and their various activities being introduced onto market. Currently, the issues for which research is needed are as follows. First, the minimum registered capital for an organisation. The author considers that, as far as the RCCs are concerned, the state should abolish the fixed amount of registered capital and adopt another indicator - ratio of registered capital to the total amount of assets. With this change, the co-operative nature of the RCCs can be fully reflected and the high entry threshold for existing co-operative financial institutions can be removed. A second problem is access to intermediate profit-oriented businesses. Intermediate business refers to such activities as arranging payments, providing guarantees for customers and other authorised actions for which the financial institution charges fees. Currently, intermediate business has provided important space for financial institutions expanding their activities and increasing their profits. The RCCs have basically not been involved in these kinds of activities because of excessive restrictions imposed on them. In terms of the quality of RCC staff and their capacity to control risks, the RCCs have completely met the conditions for undertaking such activities. Therefore, all restrictions for the RCCs should be removed. Thirdly, the employment conditions for high-ranking managers in the RCCs should be improved so as to encourage the RCCs to establish the mechanism for recruiting high quality managers.

Supervisory regulations for business operations

The supervision of RCC business operations include the rate of capital endowment, the quality of assets, the capacity for making profits, internal controls, and conformity with the rules. The central point is the assessment and control of operational risks. Since the RCCs are essentially different from commercial banks in terms of organisation, service targets and management structure, they deserve special consideration in designing their institutional arrangements. First, supervising indicators must be adjusted. For example, most RCCs have insufficient capital. Therefore, the rate of capital endowment for RCCs cannot be at 8% as it is applied for commercial banks. Otherwise, the majority of the RCCs will not meet the required standard. Secondly, the overall institutional arrangements for business operations by all financial institutions in the countryside (ABC, Post Office Saving, etc.) should be considered. On the one hand, appropriate competition should be maintained, but, on the other hand, the operations should be regulated or standardised. Thirdly, through the formulation of regulations such as Guidelines for the Internal Control of the RCCs, the RCCs can strengthen their self-regulatory arrangements. The internal control system should be established for operations such as capital transactions, accounting, authorisation and credit extension so that operational risks can be effectively controlled. Fourthly, the use of credit funds by the RCCs should be monitored and controlled. On the basis of abiding by the "prudence" principle, the loan targets must be strictly limited to the members of the RCCs or the farmer households and relevant economic organisations

within the community. Currently, loans for "non agricultural activities" and big loans issued to certain economic entities should be avoided. Fifthly, the transparency of supervisory regulations should be increased. A better understanding of the RCCs by society, in particular by RCC members, should be enhanced. In this way, the supervision of the RCCs by society can be strengthened.

Regulations for assistance in case of liquidity risks

A large number of RCCs are now at high risk. Because the members are unable or not willing to contribute further capital for improving RCCs' operational performance, their liquidity could be broken at any time with uncertain factors involved. Therefore, how to provide urgent assistance for the RCCs suffering from sudden liquidity risks is a real and unavoidable issue for the supervisory authorities. In accordance with current methods for providing assistance, only when liquidity risks happen in an RCC can relevant authorities activate rescue procedures. First, the RCCs should help themselves by drawing on the deposited reserve funds held in the PBC. Secondly, mutual assistance is implemented by the county RCCs Unions through funds from other RCCs in the same administrative area. Finally, the PBC provides emergency rescue loans. In the current rescue system arrangements, mutual assistance between RCCs is organised by the county RCCs Unions. Although this measure can be of some use at certain times and within certain limits, it may also trigger off even greater regional risks if the operations are not well handled. Moreover, emergency rescue loans from the PBC have to pass different levels for approval and cannot be used in a timely fashion for emergency situations (after the separation of the CBRC from PBC, timeliness will become even more of a concern).

For this reason, the author considers that the current rescue mechanisms for the RCCs should be thoroughly examined and then relevant institutional arrangements should be considered. The first is that rescue procedures should be set up in advance. The RCCs are scattered and the vertical transmission of information is by no means unimpeded. When liquidity risks occur suddenly, if not dealt with promptly, the best opportunity for rescue is frequently lost. In daily supervision, therefore, full consideration should be given to early warnings of a sudden occurrence of liquidity risk and to the proper institutional arrangements for dealing with it. The rescue procedure should be enacted before the risk actually occurs (raising funds for the rescue, including the issuing of emergency rescue loans in advance by the PBC). Secondly, the insurance system for RCCs deposit should be established. Such a system is one of the three major factors in safeguarding financial security (the other two factors are careful supervision by the supervisory authorities and the function of the Central Bank as the final creditor). Its establishment will play an important role in safeguarding the interests of deposit holders, in enhancing public confidence in financial institutions and in dealing with financial risks in a rational manner. The RCCs should establish a deposit insurance system for themselves with the province as the basic unit. Third is the establishment of a state rescue fund. The state can raise this fund by using methods such as drawing a fixed amount of funds from public finance and reducing or exempting RCCs' tax payment. This will ensure that the RCCs in difficulty or with liquidity risks will receive prompt assistance and the stable function of the national financial safeguard system can be actually realised.

Rules for withdrawal from the market

When a RCC cannot pay its debt in time because of heavy loss resulting from illegal operations or poor management, it should be forced to withdraw from the market. In the current institutional arrangements, the main forms of the withdrawals are mergers, dissolution, closure and bankruptcy. However, in reality very few RCCs have been dissolved or closed. Most frequently, the RCC in difficulty is taken over by (or merged with) the neighbouring well-performing RCC. Bankruptcy has never happened in practice. Therefore, "soft" methods of withdrawal dominate, mainly because of the vague property rights, unclear responsibilities and government's concerns about safeguarding the

interests of deposit holders and RCCs members. Mergers mean in essence a retransfer of risks and, if not handled well, merged RCCs can be also dragged into risk.

By adopting a soft policy towards the RCCs, the inevitable result is the occurrence of moral hazards. In the current situation, the only effective means for preventing risks is to strengthen the supervisory management of the RCCs. In the long-term perspective, for RCCs with high risks, withdrawal from the market by closure and bankruptcy should be used as a powerful means for disciplining both owners and managers.

Rationalising relations between the supervisory authorities and the RCCs and increasing RCCs' market presence and competitiveness

Problems of positioning supervisory authorities

For historical reasons, while PBC exercises supervision over the RCCs, its branch bureaux at the provincial level or below also assume the responsibility for their direct management. There are some public misgivings about PBC's double role as "a player" and "a referee". In order to truly exercise standardised supervision over the RCCs and reform their management structure in accordance with the requirements of a market economy, it is necessary to clarify the position of the supervisory authorities, define their responsibilities on the basis of relevant financial laws, and formulate adequate implementation procedures. In this way, the secure, highly effective and stable operation of the RCCs could be guaranteed. The management functions undertaken by the PBC branches at provincial level and below should be transferred as quickly as possible to local governments or capital providers.

Increasing the market presence and competitiveness of the RCCs

Two problems exist in this respect. The first is fair competition in the market and the second, the provision of support to weak organisations. Competition is the companion of the market and a necessary condition for its orderly and efficient operation. No matter what sort of enterprise the RCCs become (co-operative or shareholding), it is inevitable for them to act as independent market agents taking responsibility for their own risks and face the competition in the macro environment of the market economy. Only by mastering competition can RCCs find ways for their development. However, the RCCs are small and scattered legal entities. Amongst all the financial institutions in China, they are extremely weak. The supervisory authorities treat equally the RCCs and commercial banks in terms of various regulations such as market access, operational standards, evaluation of performance, and control of risks. This practice may seem to be fair but actually is not. The author considers that the principle of "strict supervision together with support" should be adopted with respect to the RCCs. While the operational behaviour of the RCCs should be regulated and standardised, some support should also be made available to them due to their special situation. As RCCs are community-based financial institutions, their means of service and service functions are inherently weak. In addition, the object of their services is generally financially weak and the RCCs can only "break even in their operations". Finally, for many years the RCCs have been charged with a heavy policy burden. Of course, the support for the RCCs should abide by the principle of moderation, otherwise excessive support would be bound to encourage inertia and would result in operational risks.

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FROM OLD TO NEW ROLES OF GOVERNMENT IN ESTABLISHING SOUND RURAL FINANCIAL INSTITUTIONS

By Jacob Yaron

Abstract

This paper elaborates on the new paradigm of the role of the state in promoting rural financial markets and institutions. It focuses on the shift from the old to the new paradigm and suggests that primary assessment criteria be used to evaluate the performance of rural finance institutions that benefit from access to scarce public funds. The paper underscores that when political economy considerations are taken into account, it is more instrumental to evaluate the cost, subsidies and "products" delivered by the supported rural financial institutions, rather than debate their right to exist. The paper further provides a succinct description how an extremely poor-performing, agricultural credit profit centre in a state-owned Asian bank emerged as the flagship of the rural micro-finance industry. It details how this profit centre, after drastically altering its modes of operations, now provides efficient financial intermediation services to millions of rural borrowers and savers while obtaining very high return on assets with no subsidy. What stands behind this success is a framework shift from narrowly directed, subsidized agricultural credit to financing all income-generating rural activities at a price intended to fully cover financial, administrative and risk costs, thus eliminating the need for subsidy dependence.

Background

Providing financial services to the rural population has always constituted a challenge to governments due to the inherent difficulties associated with providing such services to rural clientele, often characterized by low population density, isolated markets, seasonality, and highly covariant risk such as widespread regional crop failures and commodity price fluctuations. Servicing this clientele results in high transaction costs, and limited opportunities for risk diversification. Lack of adequate rural physical and human infrastructures (e.g. roads, electricity, health and education), and asymmetric information, more prevalent in rural than in urban areas, often dissuade for-profit formal financial institutions from entering these markets. Inadequate policies with respect to the real goods sector of agriculture and financial markets further scare away formal, private sector entrepreneurs from taking a larger share in rural financial intermediation leaving the arena to money lenders.

Direct interventions in rural financial markets - to stimulate growth and reduce poverty - through a blend of targeted credit programmes, interest subsidies, and other government instruments became widespread in the 1950s, when many governments designed and implemented fiscal interventions at the macroeconomic level. But these direct interventions have generally been disappointing and have tended to retard, rather than promote efficient rural financial intermediation. One explanation for this outcome is that these policies were based on serious misconceptions about the real challenges facing rural communities and were directed more toward the symptoms rather than the causes of inadequate rural financial intermediation (Yaron, 1992).

More recent developments in the provision of rural financial services have demonstrated that proper institutional design and adherence to appropriate policies have the potential to generate substantial achievements, both in terms of self-sustainability and greater institutional outreach. Although the new approach focuses on the same objectives, that is, income expansion and poverty

reduction, the perceived challenges and techniques of addressing them are strikingly different. The principal change involves a new role for the state, namely promoting deep and efficient rural financial markets by creating a favourable policy environment, improving the legal and regulatory support framework and addressing specific market failures through well-designed, self-sustaining interventions.

The traditional approach to rural finance

Governments worldwide have intervened extensively in financial markets, rural financial markets in particular. The extent of these interventions has varied from indirect measures aimed at improving the policy environment (e.g. by addressing incentive problems and regulating financial intermediaries), to direct steps to increase or supplement credit provided by private lenders. Many countries, eager to channel funds to farmers, directed private banks to make concessionary agricultural loans or to establish and support state-owned agricultural credit institutions.

Traditionally, the case for subsidized agricultural credit programmes has been based on the following arguments:

- Governments should focus on agriculture to promote rural development;
- Agriculture is undercapitalized;
- Farmers need cheap credit to encourage them to adopt modern technology and to compensate them for policies that are biased in favour of urban dwellers;
- Farmers are too poor to save; and
- Private banks provide little or no credit, forcing small borrowers to use moneylenders who charge usurious interest rates.

However, these programmes have generally had a limited outreach and resulted in huge costs, with little identifiable impact at the farm level. Furthermore, government-sponsored rural credit programmes and institutions from Peru to Malawi to Indonesia have collapsed under the weight of losses generated by traditional directed credit strategies. It is quite common in many developing countries to find that the majority of the rural households still have no access to formal financial services or credit, despite the enormous resources directed at subsidized credit interventions and frequent bail-outs of state-owned agricultural credit institutions (SACI).

These failures are largely explained by the pursuit of short-term objectives framed in terms of agricultural production gains rather than long-term objectives aimed at the sustained expansion of rural incomes. The excessive focus on disbursing inexpensive agricultural credit has typically resulted in programmes with poor credit culture manifested by subsidy dependence, low recovery rates, inadequately diversified portfolios, inadequate credit targeting (Khan 1977), and rent-seeking by credit officials and influential farmers (Ladman and Tinnermeier 1984). Private, for-profit, financial institutions have been crowded out of the market by state-owned rural financial institutions and in some developing countries the rural population is even deprived of access to saving services, forcing them to save in cash or in kind, which entails high transaction costs and risks.

Although directed credit has been heavily criticized (Von Pischke, Adams, and Donald 1983), and more market-friendly approaches have been proposed for some time, many countries have resisted changing the rules under which state-owned financial institutions operate.

The new approach to rural finance

The new approach to rural finance continues to focus on income expansion and poverty reduction but makes the case for cost-effective alternatives, such as increased investment in rural infrastructure or in human development, to reach these goals. Advocates of this approach propose that governments play a much more limited and efficient role in the direct provision of rural financial services, concentrated on establishing a favourable policy environment that facilitates the smooth functioning of rural financial markets.

Creating a conducive policy environment

The factors that prevent rural financial markets from operating efficiently are recognized to be broader and include macroeconomic policies, weakly regulated financial sectors, institutional features (legal and regulatory), and specific constraints related to financial intermediation in rural areas. Typically, there are weaknesses in the policy environment, which hamper the development of rural financial markets, and limit poverty reduction efforts. In particular, attention should be given to:

- Unsound macroeconomic policies that result in volatility and high real interest rates, can adversely affect all financial intermediaries, while misaligned exchange rates distort price signals and lead financial markets to channel excessive resources to inefficient sectors.
- Development policies biased toward urban areas reduce the profitability of agriculture and non-farm rural enterprises and devastate rural financial markets. Countries with the highest degree of discrimination against agriculture have traditionally had the lowest rates of economic growth (Schiff and Valdés 1992).
- Inadequate regulatory oversight, inappropriate financial market interventions, and financial repression increase the risks and restrict the development of financial markets.

Governments can promote financial market development by strengthening the supervision and prudential regulations of financial institutions, deregulating interest rates, reducing excessively high reserve requirements, and relaxing credit controls. Governments can also adjust the regulatory framework to facilitate operations in rural areas through community-based, deposit-taking intermediaries. Such policies would combine lower capital requirements with higher capital-asset ratios.

The legal and regulatory framework

Too often the institutional foundations for financial markets in rural areas are absent. Lenders need a system that provides formal procedures for claims against property and enforcement of financial contracts. The more uncertain and expensive this process, the less willing lenders are to lend. In many countries, deficiencies in laws, regulations, and institutions prevent the formal sector from delivering credit to farmers, rural businesses or even non-bank creditors.

The required changes needed to expand access to credit in rural areas include titling and registering land or land use, reforming the law of secured transactions, related to legally acceptable forms of collateral; establishing legal registries and expanding the scope for private operation; lowering the costs of registration and foreclosure; drafting specific, clear, and limited homestead provisions; and removing interest rate ceilings. The latter can be done on a gradual basis so as to ensure that scarcity of capital is well priced and credit finances investments with high financial rates of return. However, there is a need to ensure that unskilled credit managers and banks with no

competition or a negative net worth would not be lured to engage in opportunistic behaviour, seeking high returns by financing disproportionably risky investments.

The costs of implementing such legal reform programmes are usually remarkably low. Well-designed programmes to reform secured-transaction legislation have increased the supply of credit and lowered interest rates, producing gains that over time have been estimated at several percentage points of gross domestic product GDP (Fleisig and de la Peña 1996).

Designing and justifying direct interventions in rural financial markets

What role should government play in rural finance and development? There is growing recognition that governments should first and foremost facilitate the workings of the market so that private participants can allocate resources efficiently in response to price and profit signals. At the same time, markets may fail for several reasons, because the assumptions that, in theory, are required for efficient market-based resource allocation may not hold true in practice. For example, individuals may not bear the full benefits or costs of their actions. Or externalities may arise because investors cannot capture the full benefits of their investments if they cannot exclude others from free-riding. Alternatively, individuals may fail to take into account the costs they impose on others when undertaking a given activity.

Rural financial markets, particularly in developing economies, generally have shortcomings. A market may not have sufficient buyers and sellers or permit sufficient ease of entry and exit to ensure an efficient allocation of resources. In many countries, market participants may not be able to easily enter into enforceable contracts or ensure against certain contingencies, because efficient markets for pricing and exchanging risks required for optimal resource allocations are missing.

The critical factor that explains the externalities, missing markets, and local monopolies in rural financial markets is imperfect information (Stiglitz 1996; Virmani 1982). Financial transactions in a given currency by their very nature involve a contractual exchange of cash for a promise of a future stream of payments, rather than a simultaneous exchange of cash, goods, or both – for goods. The promissory feature of financial transactions makes it essential for participants to be well informed about their counterparts' ability and willingness to honour contractual obligations. The absence of such information will constrain a lender's (or depositor's) ability, not only to discern the creditworthiness of potential borrowers (or banks), but also to enforce contracts. These constraints point to an important role for government in regulating financial intermediaries, for instance to limit excessive risk-taking by banks using other people's money, and in providing a sound legal and regulatory framework for enforcing contracts.

Rethinking the role of the state with respect to direct interventions

Information constraints do not immediately justify direct government interventions in the market, because markets may be efficient constrained, that is, they maximize incomes subject to the information and other barriers that participants face. For example, in rural areas, poverty, low population density, isolated markets, seasonality, and highly covariant risk such as widespread crop failures often result in high transaction costs, a lack of traditional collateral, variable incomes, and limited opportunities for diversifying risk. These features differentiate rural financial markets from urban ones and often scare off traditional for-profit financial intermediaries. They do not, however, present market failures, because these features result in high real costs to society also faced by government interventions.

The case for direct interventions depends on whether the objective is general rural income expansion or targeted poverty reduction. Careful analyses that identify market failures and specify their causes should precede appropriate interventions to expand rural incomes. Even if a market failure is identified, direct interventions (through subsidies, credit programmes, or institutions) are warranted only if the market failure can be addressed cost effectively; thus, the benefits must exceed the costs. Although policy and regulatory reforms that promote growth are often the most promising way to reduce rural poverty as well, special interventions may be required if economic growth is not appropriately shared. These interventions are justified based on social norms rather than on market failures and target optimal income distribution or guarantee a minimum standard of living to the underprivileged.

Therefore, interventions in rural financial markets through means of subsidies to priority clients, the institutions and programmes that serve them, are still warranted only if they are the most cost-effective means of reducing poverty. Obviously that approach entails serious measurement difficulties that are embedded in evaluating the impact of having access to credit compared to other means earmarked to increase rural growth and standards of living of the population concerned. In direct intervention that provides support to rural finance institutions it is essential for the Government to adopt an assessment framework that would routinely evaluate the costs, subsidies and "products" that are delivered by the supported rural finance institutions. Two primary assessment criteria should be used, the first is the outreach to the target clientele and the second is the subsidy dependence of the rural financial institution involved. This framework and derived tools should be used not only to analyze ex-post performance but also to plan better use of scarce public funds to achieve expanded outreach with less or no subsidies.

Box 1. How imperfect information can generate market failures

It is widely – incorrectly – assumed that if a given activity were profitable, someone in the private sector would have done it already. As Besley (1994) notes, "An inefficiency might develop if individuals hang back waiting for others to try things out. The slow diffusion of certain agricultural technologies has often been attributed to a reluctance to be the first user. An obvious role for government intervention is to subsidize early innovators. Thus experiments in institutional design, such as the Grameen Bank in Bangladesh, might serve as prime candidates for subsidization. Such arguments appear only to justify subsidizing new ventures, however, and subsidies should be phased-out along the way."

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A good example of the role of the state in direct intervention is to support pilot experiments in rural finance, particularly those that have proved successful in other countries and could be adjusted to the country's socio-economic and cultural values. The justification for such support is that these pilot efforts entail levels of high risk and the entrepreneur faces asymmetric prospects, namely, if he succeeds he will face immediate competition, because his best clients will try to get better lending terms from new competitors by indicating their lower risk level - based on their prior repayment records. The entrepreneur that took the risk of piloting the initiative would be left to absorb the full costs of screening and evaluating the creditworthiness of prospective borrowers. Therefore, he will not fully benefit from his initiative, the fruits of which other free riders would share. If the pilot fails, however, he would have to assume all the losses. This situation is likely to generate a sub-optimal supply of innovations and sound governments would support such piloting similar to their support granted to research and development in other areas (e.g. agricultural or medical research and development).

In respect to these efforts, the government of China has achieved unprecedented results in rural income growth and poverty reduction over the past few decades. However, there is a crucial need to

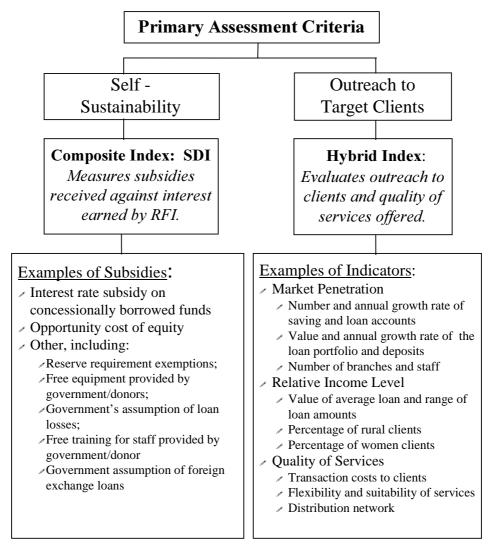
continue progress on these fronts. In recent years, rural income growth has almost stagnated and the gap between rural and urban income has widened. Therefore, finding the most cost-effective tools that generate the highest returns for scarce public funds, earmarked to address rural growth and poverty reduction, should be a concern among policy makers. Well-functioning rural financial markets and the improved financial performance and efficiency of rural financial institutions, in particularly rural credit cooperatives (RCCs) are imperative to achieving these objectives. It is unlikely that there will be one single, uniform solution for the ownership and management issues of the RCCs. Yet, there are important lessons to be learned both from international restructuring experiences and best practices in rural micro-finance that contributed significantly to rural development. There is a need to institute comprehensive reforms to address the issues of RCC ownership, outreach to target clientele, interest rates, subsidies, credit rationing, and targeted lending practices in rural China.

The current rural financial system in China operates under the belief that low interest rates are an essential and effective tool in achieving rural development and poverty reduction. However, international experience has demonstrated that restrictions on-lending interest rates inhibit efficient rural finance intermediation by misallocating resources and creating dependence on subsidies, resulting in frequent bail-outs of the intermediaries involved. Interest rate restrictions do not allow for sufficient coverage of the risks nor the financial and administrative costs associated with lending small-denominated loans to low-income households.

Substantial improvement in resource allocation in China can be obtained if the Government would shift its support to the rural sector from subsidizing lending rates to the ultimate clients to do instead what Governments are supposed to do, along the lines of the new paradigm, namely to create enabling environment for rural financial intermediation and to increasingly rely on private agents who are motivated by pursuing profits to carry out the direct rural finance intermediation and lending.

State support is also warranted when it focuses on institution building and promoting measures to overcome asymmetric information, such as credit bureaus and credit scoring. Such measures increase returns on financial intermediation by cutting screening costs and reducing lending risks, thereby contributing to increased access to credit, particularly for small scale, low-income rural clients. In sum, the new rural finance paradigm requires the state to provide primarily public goods and reduce substantially its direct intervention in and subsidization of state owned rural financial institutions (RFIs) that crowd out private intermediaries.

Figure 1. Primary assessment criteria



Source: Jacob Yaron, McDonald Benjamin, and Gerda Piprek: "Rural Finance: Issues, Design, and Best Practices". No. 14, Environmentally and Socially Sustainable Development Studies and Monographs Series. The World Bank. 1997.

The table below elaborates on differences between the old and the new paradigm regarding operations in rural financial markets, covering primary objectives, working assumptions, the role of the Government, mechanism of Government intervention and policy variables and outcomes.

Table 1. Characteristics of old and new approaches to rural finance

Old	New
Primary Goa	
* Growth and income expansion (pursued by introducing modern technologies with concessionary credit).	* Growth and income expansion.
* Poverty reduction.	* Poverty reduction.
Working Assum	
* Accelerated economic development requires controlled commodity and financial markets (such as control of food prices and interest rates).	* Accelerated economic development requires enhanced competition in goods and financial markets (through applying flexible prices).
* Small farmers and rural entrepreneurs cannot pay commercial interest rates.	* Small farmers and rural entrepreneurs can pay commercial, market rates of interest.
* Small farmers and rural entrepreneurs cannot save.	* Small farmers and rural entrepreneurs can and want to save.
* Access to concessionary credit is essential to growth and poverty reduction.	* Access to non-subsidized financial services is essential to growth and poverty reduction.
Role of Govern	
* To directly intervene in and control the agricultural sector and agricultural credit.	* To create a favourable policy environment, while minimizing direct intervention in and control of the agricultural sector and agricultural credit.
Mechanisms of Governme	
Policy Environment	Policy Environment
Rely on the six pillars of urban-biased policies:	Introduce and maintain a policy environment to promote rural financial markets:
* Maintain an overvalued exchange rate to ensure a cheap supply of agricultural produce.	* Support macroeconomic stability through market-determined exchange rates.
* Control prices of agricultural products.	* Maintain a level playing field among economic sub-sectors and enhance competition.
* Levy excessive taxes on agricultural exports.	* Deregulate the financial sector and support a competitive environment.
* Over protect domestic industries whose outputs are used as agricultural inputs.	* Introduce legal, regulatory, and enforcement mechanisms that address the specific requirements of the rural population.
* Enforce usury laws that hamper the provision of financial services to the rural poor.	* Eliminate urban-biased policies that discourage rural development and impede the rural financial markets.
* Enforce laws and regulations that do not take into account the unique features and requirements of the rural economy.	
Direct rural financial interventions	Direct rural financial interventions
* Introduce a legal ceiling on deposit and on-lending interest rates.	* Remove ceilings on deposit and on-lending interest rates; encourage market-determined rates.
* Establish state-owned RFIs, primarily specialized agricultural credit institutions (SACIs): which provide most formal financial services to rural communities.	* Provide financial services through various RFIs (and not exclusively through SACIs).
* Provide financial services primarily to the agricultural sector, thus discriminating against rural non-agricultural entrepreneurs.	* Provide financial services to all rural entrepreneurs (not only to agriculture-related activities).
* Focus on providing (agricultural) credit; savings in monetary instruments is discouraged in rural areas.	* Encourage domestic savings mobilization by providing savings facilities with positive interest rates.
* Provide special benefits and concessionary funds to state-owned RFIs; subsidize on-lending interest rates to RFI clientele to compensate for urban-biased policies.	* Revitalize and restructure SACIs and other RFIs to encourage sound management principles; transform SACIs to RFIs to serve a broader rural clientele.
* Cover loan losses of RFIs and frequently bailout loss-making institutions.	* Privatize RFIs (or segments thereof) where appropriate and shut down inefficient and unsalvageable RFIs.

Table 1. Characteristics of old and new approaches to rural finance (cont')

Old	New
* Support poorly administered crop insurance and credit	* Support early innovators; provide seed capital
guarantee schemes.	subsidies to new (pilot) or existing credit unions,
	NGOs, and other RFIs that meet strict eligibility
	criteria and are capable of providing efficient rural
	financial services; partially cover start-up costs.
	* Support institution building; assist in staff training,
	develop management information systems, research,
	and dissemination of information on successful
	institutions or practices in specific socioeconomic
	and cultural settings.
	* Extend limited subsidies to RFIs to compensate for
	distorted; cap and gradually phase out subsidies.
	* Introduce adequately priced and well administered
	crop insurance and review effectiveness of
	credit-guarantee schemes.
Policy Variables and	
* Under investment in rural public infrastructure (e.g., roads and	* Improved rural infrastructure and educational and
water supply) and in rural human resources (e.g., education and	health facilities are necessary.
health) is acceptable.	
* Subsidized interest rates are used primarily as compensatory	* Positive real interest rates serve as a resource
mechanisms rather than for resource allocation.	allocation mechanism.
* Subsidies mostly benefit the agricultural sector, and mainly	* Interest rates are sufficiently high to ensure sound
well-to-do, influential farmers.	spreads between lending and deposit rates.
* Non-agricultural rural entrepreneurs have limited access to	* All rural entrepreneurs have access to financial
financial services, causing rural development to slow.	services.
* Insufficient provision of savings facilities and artificially low	* RFIs' dependence on borrowed funds from donors
deposit interest rates (due to interest rate ceilings) result in	and governments is reduced as domestic savings
limited savings mobilization.	mobilization becomes the main source of finance,
	improving financial self-sustainability.
* RFIs depend on rediscounting facilities and donor and budget	* RFIs enjoy autonomy in introducing efficient
funds to back their (subsidized) loan portfolios.	operating methods.
* SACIs and other RFIs do not enjoy autonomy; most	* No special privileges are extended to state-owned
operational decisions (such as on-lending interest rates, cost of	RFIs; a level playing field is maintained and
borrowed funds and staff policies) are dictated.	competition among RFIs is encouraged; access to
	subsidies (when warranted) is not contingent on an
* C	RFI's ownership.
* Special privileges are often extended to SACIs, resulting in	* Institution building and financial discipline is
dependence on concessional funds, lack of competition, and no	encouraged through management's accountability for
incentives to improve performance; SACIs are often perceived as	RFI performance; poor loan collection is not
disbursement windows.	tolerated.
* No commercial imperatives exist for (state-owned) RFIs;	* Improved performance and productivity by RFI
management is not accountable for RFI performance; financial	staff is encouraged; staff is motivated by advanced
undiscipline and poor loan collection prevail.	performance incentive systems.
* Lack of staff incentives result in poor performance.	* DEL
* RFI performance is evaluated in terms of traditional financial	* RFI performance is evaluated in terms of outreach
profitability ratios (return on equity and assets), ignoring the cost	to its target clientele and financial self-sustainability
of subsidies; the real cost to society of maintaining an RFI is not	(as measured by the subsidy dependence index):
known.	these criteria make it possible to better assess the real
Source: Adented from Toble 2.1: I Varon M Ponismin and C Dis	cost and "products" of an RFI.

Source: Adapted from Table 3.1: J. Yaron, M. Benjamin and G. Piprek. Rural Finance: Issues, Designs, and Best Practice. Washington, DC: World Bank. 1997.

The transformation of a rural, micro-finance institution in Indonesia provides potential lessons for restructuring of rural financial institutions in China

The Indonesian experience in transforming the BIMAS into BUD

The Indonesian experience in transforming the BIMAS, a directed and heavily subsidized agricultural credit programme into BRI-Unit Desa (BUD) could provide many lessons to countries that seek to improve outreach and self-sustainability of RFIs. The transformation started in 1984, when it became clear to the Indonesian authorities that they could not afford to continue supporting the ailing agricultural credit bank. Falling oil revenue on one hand and deteriorating loans collection on the other, made the BUD's dependence on subsidy too great for the Government of Indonesia (GOI) to finance. The GOI instructed the BRI (Bank Rakyat Indonesia), the state owned bank that hosted BIMAS, to change drastically the "rules of the game" or to shut down all operations. An initial, one time, subsidy of about USD 70 million was given to test different modes of operation to achieve later self-sustainability.

The management of BRI with the assistance of advisors from Harvard Institution for International Development (HIID) designed a rural finance system that has become the flagship of the world rural micro finance industry. The BUD introduced profound changes in policies, in targeting clientele, in modes of operation, and in the lending and saving instruments used - measures aimed at achieving self-sustainability. The BUD, against all odds succeeded in achieving full coverage of its costs two years later in 1986. Since then it has generated profits that are unprecedented in rural finance operations, yielding return on assets of 6%, with a minor decline after the crisis of 1997 when the ROA fell for one year to 5% but later rose again to 6% and in the first nine months of 2002 reached 7.3%. (Robinson, 2001)

Reasons for the success of BUD

The achievements of BUD is remarkable when contrasted with the performance of most of the State-Owned Agriculture Credit Institutions (SACIs) that remain a hallmark of traditional, supply-led government attempts to promote rural development. The performance of most of these SACIs in terms of outreach and self-sustainability—the two primary assessment criteria used to evaluate state and donors interventions in rural finance, has generally been disappointing due to a variety of external and internal factors. The key features of BUD that explain its success in shifting the paradigm from traditional agricultural credit to rural financial intermediary are detailed below:

- 1. <u>Borrower Eligibility Requirements</u>. Client targeting was broad to include funding of any profitable enterprise rather than narrowly focusing on farmers. The main criteria for loan approval by BUDs are the projected cash flow from use of the loan funds and repayment capacity.
- 2. <u>Mandatory Savings</u>. BUD does not have obligatory saving programmes. In addition to the negative effect of forced saving in obscuring both the cost of credit to the borrower and the actual net credit outstanding, BUD regards this practice as a particularly inefficient form of financial intermediation. BUD has built its success on mobilizing voluntary savings from people who want to save excess funds and lends that money to creditworthy people who wish to borrow.
- 3. <u>Collateral Requirements</u>. BUD was legally required to take collateral, but was flexible in doing so. For example, BUD would take a pledge of anything the borrower owned such as chairs, beds, etc. The documentation of collateral for each loan, however, was more for the

purpose of establishing the borrower's serious intent to repay than to provide basis for legal action or an alternative source of loan repayment.

- 4. <u>Loan Maturity and Repayment Terms</u>. There were many possible maturities and repayment schedules to match the cash flow of the enterprise for which the loan was made, and the index was transparent. For ease of understanding, standardized loan tables were prepared and provided to the client, which gave the amount of the loan payment, broken down into interest and principal.
- 5. Maximum and Minimum Loan Sizes. The maximum loan size initially set by BUD was important as it determined whether the system could reach the low-income clientele and eventually achieve break-even. The maximum loan size of the sole loan product was set at Rp 1 million (about USD 1 000 in 1984) initially and was gradually increased to Rp 25 million (about USD 13 500) by May 1990. Based on average salary levels, a loan the size of about Rp 120 000 covers the staff time to approve a loan, collect instalments, and pursue borrowers in default. The minimum loan size remains at Rp 25 000 (about USD 10 in 1996), although since 1987 few loans of less than Rp 100 000 have been made. The average outstanding loan size was about USD 500 in 1996 and is now about USD 700.
- 6. Lending Interest Rates. Based on the assumptions outlined earlier, the interest rate charge on loans was set so that BUD could break-even within two years. It was estimated that a monthly interest rate of 1.5% calculated on the original loan balance (flat basis) could accomplish this. No charges were levied other than interest (no fees), because culturally such charges would represent corruption. There was an "Incentive to Pay on Time" (IPTW) scheme whereby each six months, borrowers who had made all payments on time were refunded a sum equal to a flat interest rate of half a per cent per month (about 12% per annum measured against a declining loan balances).

Differences between BIMAS and BUD

Listed below is a summary of the main differences between BIMAS and BUD.

(1) The daunting Dilemma – Access vs. Interest Rate Subsidization

The BUD management faced a daunting dilemma. Subject to budget constraint, there was a need to choose between supporting the provision of financial services to a large number of clients in a sustainable fashion or providing subsidized financial services only to a limited few clients. The BUD decided not to be engaged in subsidizing "priority" clients or sectors. This approach required increasing interest rates from 6% p.a. to about 32% p.a., or 22%, when adjusted for inflation. Saving interest rates were adjusted too and were fixed based on the liquidity of the account and its size, to reflect the transaction cost associated with the servicing of the saving accounts concerned. Saving interest rates were set within a range of 0 to 16% p.a.

To overcome a political resistance to interest rate hike, the interest rate was announced in terms of percentage paid over the original amount of the loan, while the loan was paid in twelve monthly repayments. The spread was increased substantially as the average cost of funds was about 9% only. The "lucrative" spread of about 20% enabled coverage of high administrative costs associated with building up the new system and servicing low income clients who borrow and deposit small amounts of money and engage in frequent transactions derived from one year maturity loans that are paid in twelve monthly repayments.

Table 2. Indonesia: BRI's village units before and after their transformation

Attribute	BIMAS Credit Programme	BUD
	1970-84	1984-present
Institutional objective	Disbursement conduit for subsidized credit	Profit-making, full-service rural bank
Financial autonomy	BIMAS windows in BRI branches, with accounts subsumed in the financial statements of BRI's branches. Lending interest rates are government-imposed	Distinct profit centres, with separate financial accounting. Lending interest rates are decided on independently, in light of self-sustainability considerations
Operational autonomy	Limited—borrowers chosen in practice by extension workers of the Ministry of Agriculture, which certified BIMAS participants	Full—borrowers selected on the basis of the financial viability of their farm or off-farm enterprise
Staff evaluation and accountability	Primarily based on the volume of disbursements or on hectares covered	Primarily based on the profitability of individual BRI-UD units
Staff incentives	Civil service-like flat salary structure, promotions were seniority based	Profit-related bonus incentives, promotions
Target market	Rice farmers	Any income-generating enterprises
Client incentives	Timely payment incentive: effectively none	Timely payment incentive: substantial interest rebate, larger follow-on loans
	Penalty for delinquency: curtailment of further loans, although not well enforced	Penalty for delinquency: curtailment of further loans; incentives well monitored and enforced
Interest rates	12% (subsidized); below both the inflation rate and the interest rate paid on small savings deposits	Around 30% (not subsidized); well above both the (pre-crisis) inflation rate and the interest rates paid on small savings deposits
Main sources of funds	Concessionary lines of credit, plus grants	Client deposits at market rates of interest
Dealing with losses	Soft budget constraint: operating losses covered by government	Hard budget constraint: loss-making operations suspended
The bottom line	Heavy losses and subsidy dependence	Exceptionally high profitability and self-sustainability since 1987

(2) Incentives

Incentives were essential to break the vicious cycle of non-repayments. Hence, substantial incentives were used to ensure high loan collection, for example, borrowers were granted a 12% interest rebate on loan that was paid promptly (all twelve monthly repayments) and borrowers who paid their current loan on time were eligible to receive a doubling of loan size in subsequent years. This is a significant incentive to clients whose alternative is borrowing from a moneylender who would charges a much higher interest rate and is likely to more drastically ration lending to this clientele than BUD.

Also, incentives to staff were introduced to ensure a better screening of clients and high loan recovery. Staff could benefit from a bonus equivalent to two months of salary if the unit (that

generally consisted of four employees) made a profit. However, profit, in contrast to the past, was measured very conservatively. Provision for doubtful loans was made against any instalment not paid on the due date, and interest income was recognized on a cash basis. Therefore when staff became aware that lax approach to screening of borrowers and loan repayments would cost them in terms of bonuses, their behaviour changed accordingly.

(3) Eligibility

Eligibility has changed and instead of rice growing that was used by BIMAS as the sole eligibility criteria, BUD decided that any income generating activity would be financed. This shift of paradigm facilitated the introduction of high lending rates (although still substantially lower than what money lenders charge) and the finance of mainly off farm activities rather than farming operations. With rising rural GDP per capita there is usually an accompanying increase in the share of off-farm operations. Therefore the shift in the borrowing eligibility also helps achieve better resource allocation.

(4) Loan recovery

Loan recovery improved dramatically and loan losses were below 2% of the outstanding loan portfolio, well covered by the relatively high spread between lending and deposit rates. Many clients have made use of their eligibility for larger loans arising from their timely loan repayments, however most of the loans were much smaller than USD 1 000.

(5) Savings

Saving became very popular and within three years of the transformation, outstanding saving started to exceed the outstanding loan portfolio, although the latter also grew at an annual rate that exceeded 25%. As a result the BUD became financially independent, as there was no need to borrow from the other profit centres of BRI. A few years later savings reached twice the value of the outstanding loan portfolio, and after the crisis of 1997 the figure stabilized at a ratio of 3 to 1 and was further reduced to a ratio of 2 to 1 by September 2002. Saving accounts were small and in view of the (pre-crisis) annual inflation rates, real depositing interest rates of below nominal rates of 7 to 8% were sometimes slightly negative or zero.

(6) Operating cost

The operating cost of servicing low income clients are substantially higher than the standard practiced in commercial banking given the small denomination of transactions and the frequent repayments of loans and withdrawals of deposits.

(7) The Subsidy Dependence Index (SDI) of BUD

The SDI of BUD reflects its remarkable financial performance. The SDI of BUD was about –44% before the financial crisis in 1997 and has not changed much after the crisis. The SDI of –44% means that BUD could have reduced the yield obtained on its loan portfolio by 44% (from about 32% p.a. to about only 18% p.a. and still obtain sound profitability as measured by return to equity and return to assets).

BUD achieved self-sustainability (SDI of zero) for the first time in 1986, only two years after commencing its operations. This achievement is also attributed to the fact that BUD was operating as a separate profit centre within a large bank and consequently could benefit from economics of scale and

scope including daily clearance of surplus liquidity that was usually generated by BUD. Presently BUD serves more than 20 million depositors and about 2 million borrowers with a variety of financial services generating a substantial favourable impact on rural development, yet with no need for any support from the GOI or local governments. It was important to rely heavily on rural saving and to price such saving appropriately. This allowed BUD to built long lasting lending relationships with low income, collateral lacking clientele and efficiently serve them while fully covering the related cost involved.

The BUD experience proved that low-income people can benefit from financial intermediation services that are well priced. Moreover, scarce public funds could better serve the rural population by contributing to "institution building" of self-sustainable rural finance institution rather than by subsidizing loans to "priority sectors" or frequently bailing-out SDFIs that suffer from poor financial discipline and do not apply appropriate incentives to motivate staff and clients. Introducing "best practices" in an established institutional framework requires vision and long-term commitment at the highest managerial level to ensure the intended goals are met. In contrast, creating a new institution to achieve the same objectives would likely require a much longer implementation period.

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SESSION III. COMPLEMENTARY COMMERCIAL CREDIT SCHEMES AND INSTITUTIONS IN RURAL AREAS

ECONOMIC AND FINANCIAL TRANSFORMATION OF RURAL CHINA AND DIVERSIFICATION OF RURAL FINANCIAL INSTITUTIONS

By Guangwen He

Abstract

Transformation of Chinese agriculture and the overall development and growth of the rural economy have raised the demand for the diversification of rural finance. However, since the early 1980s when reform of the Chinese finance system began with organisational diversification as the main premise, it has been impossible to substantially improve the structure of rural finance. Therefore, the diversification of financial organisations is still advocated from all sides and remains the main way to improve the organisational structure of rural finance in China.

1. Posing the question

Since the 1950s, Chinese agriculture and the rural economy have continued to grow. Agricultural production capacity has increased substantially and it has been possible to guarantee the overall balance of supply and demand for major agricultural products. Nevertheless, after the entry into the 21st century, the Chinese rural economy is still in the transition stage from the planned to the market economy. At this time of change, new features have emerged both in the development of agriculture and the rural economy, but also in the demand for rural finance. Although there remains considerable controversy on the relationship between the economy and finance, the important role of financial development in economic growth cannot be ignored. A World Bank report has pointed out that in countries with relatively developed financial systems during the early 1960s, the rate of *per capita* economic growth (1960–1995) was more than double than in countries with an undeveloped financial system. On the basis of research by Schumpeter (1912), Gurley and Shaw (1955), Goldsmith (1969) and McKinnon (1973), different methods were used by researchers to analyse from a quantitative perspective the role of the financial sector in stimulating economic growth.

As understood by Goldsmith (1969), changes in the financial structure are important factors in bringing about economic growth and development. The financial structure is determined jointly by financial instruments and financial institutions. The number and types of financial institutions are mainly embodied in the financial progress. If the financial structure is deficient or its growth is insufficient, this is also an important feature of financial restraint for a country. Goldsmith also points out that financial development in every country is via change in the financial structure, from simple to complex and from rudimentary to advanced, and all countries are advancing along a common road. Gurley and Shaw (1955) emphasise that there is a significant difference between the financial systems of developed and developing countries. When compared with developing countries, the financial system of industrialised countries is both complex and complete and, as a result, there is a higher degree of convenience for intermediaries. In the Gurley and Shaw (1955) model, the highs and lows of per capita income depend to a large extent on the impact of financial intermediaries on the allocation of resources. Levine (2003) confirms that there is a positive relationship between the level of per capita income and the degree of financial complexity.

In order to improve the structure of rural finance in China and to stimulate the growth of the rural economy, the diversification of financial institutions has been promoted since the 1980s. At present,

the framework for a rural financial market has been developed with the establishment of the basic operating standards for financial bodies. A rural policy-related banking system has been established and there has been some progress in the process of commercialisation of the Agricultural Bank of China (ABC). A mechanism for issuing loans to peasant households is also gradually being established. However, the foundation and operation of these financial institutions are still in line with the model of the planned economy and with the concept of finance controlled by the state. Therefore, no consideration was given to the proper arrangements of property rights for financial institutions. Moreover, their financial system basically continues to use the accounting methods of a planned economy.

After China's WTO accession, when the Chinese finance system was faced with the need for comprehensive reform, some difficulties appeared in the supply and demand structure of Chinese rural finance. It is still difficult to establish "hard credit constraints" for rural enterprises. Rural financial institutions are still unable to become fully independent market entities. They suffer from heavy non-performing loans (NPLs), lack efficient corporate governance structure and enjoy implicit guarantees from the government. There is no effective competition policy. These problems are similar to difficulties encountered by central and east European countries and the former Soviet Union during their transition period (Davis and Hare, 1997).

The aim of this paper is to propose some measures to improve the structure of rural finance. Suggestions will be based on the analysis of the Chinese rural economy and of the characteristics of the Chinese rural finance undergoing transition, as well as the reasons for the inadequacy of the rural financial structure for meeting rural demand for finance.

2. The rural economy in transition and its financial characteristics

After the entry into the 21st Century and, in particular, after China's accession to the WTO, Chinese agriculture and rural economic development entered a new historical phase. Agriculture and the rural economy are faced with a comprehensive transformation. With supply and demand in the domestic market for agricultural products basically balanced, China will also face competition from the international market. Currently, the Chinese rural economy and rural financial development show a series of new characteristics.

i) The strategic structural adjustment of agriculture has become the main strategy in Chinese agricultural development and has put new demands on the supply of rural finance

With accession to the WTO, the Chinese agricultural markets will gradually open up and agriculture will face competitive pressure from abroad. In order to face this challenge, Chinese agriculture must undertake a strategic structural adjustment. It involves the application of new technologies, improvements in crop varieties, adjustment and change of conventional practices in crop and livestock production, and the diffusion of biotechnological progress. It also includes further enhancement of the marketisation level, a search for new areas for investment, the support for the urbanisation of rural areas, including the provision of guidance for the rural labour migration and the development of small towns. These tasks need a huge amount of capital. The capital accumulated within the "Three Nong" (agriculture, countryside and peasants) alone cannot satisfy this demand. In addition, even for conventional banking institutions, it is difficult for them to provide sufficient investment funds since the investment risks in agriculture are relatively high. Therefore, to meet the demand for financial services induced by the strategic readjustment of Chinese agriculture, new methods and innovative financial services are needed.

ii) The promotion of rural industrialisation and rural urbanisation is the main task of rural economic development in China in the new era

As measured by conventional indices, China is in the process of transition from the early industrialisation stage to the intermediate stages of industrialisation. The urbanisation rate in 2002 was only 38% and it is difficult for industry to provide substantial support to agriculture. Rural industrialisation and rural urbanisation are highly important for the transfer of surplus rural labour and enhancement of rural labour productivity. The correct path of the rural industrialisation is conducive to the development of rural urbanisation. Under the high employment pressure in cities, the ability of cities to absorb rural labour is weakening. But the social cost of rural labour employed in the countryside by increasing rural industrialisation would be very low.

However, there has been a long, intense debate with regard to the urbanisation path in China. The central issues are whether or not rural migrants should stay in big cities or in small towns and whether we should call for "urbanisation in the cities" or "urbanisation in small towns" (Chen, 2003). The very nature of the debate concerns whether peasants should be allowed to give up the land completely and make a living in cities or whether the current land tenure system, as farmers' social security, should be retained and rural migration is just the seasonal movement under the household responsibility system. Evidently, the current model of seasonal migration would make the transfer of rural labour smoother and at a lower cost. Moreover, it helps rural inhabitants to reduce the costs of entering urban areas.

During the 1980s and early 1990s, China adopted a strategy of rural industrial development which in fact did not favour the development of rural industrialisation and rural urbanisation. At that time, because of the overemphasis on the so-called rural enterprise development model with the Chinese characteristics, with rural labour "leaving the land but not leaving home", some industries which at the macro level should have been concentrated in cities were intentionally brought into the countryside. The result was almost "every village setting on fire and every household giving off smoke" with rural enterprises blossoming everywhere. This caused both rural investment and the construction of basic facilities in the countryside to be scattered, with a serious waste of rural resources. Beginning from the 1990s, another choice was made for promoting rural industrialisation, namely the centralised development of industrial parks and of science and technology parks, and the establishment of economic technological development zones. The aim was to combine rural industrialisation with rural urbanisation. If such a developmental strategy had been adopted during the early stages of rural enterprise development in China, progress in rural industrialisation and rural urbanisation would have been greater than at present. Looking back, the early strategy for rural enterprises in China was a mistake.

iii) The rural economic growth pattern changed from a supply- to quality-driven model

As a developing country, China is undergoing the transition from a developing to a developed economy. Beginning from the mid 1990s, Chinese agriculture and rural economic development entered into a new stage, with the supply of agricultural products from previous general shortage to basic overall balance with certain structural and regional surplus. At the same time, since 1994, the growth rate of the peasants' net income has continued to fall year by year (Figure 1).

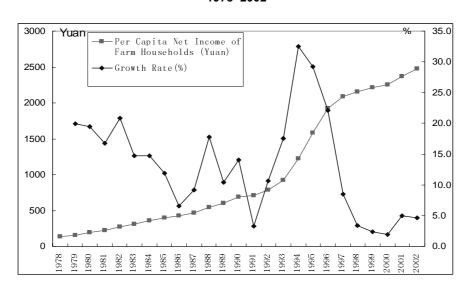


Figure 1. The changing trend of average net income of peasants in China 1978–2002

Although there was growth in peasant incomes in 2001 and 2002, relevant research shows that it originated only from 30% of peasant households and that in fact there was an absolute decline in the income of 70% of peasant households.

At present, the policy objective for Chinese agriculture has shifted from an increase in supply of major agricultural products, such as grain and cotton, to an equal emphasis on the supply of agricultural products and on increasing peasants' incomes. It is also necessary to improve the overall quality of agricultural products and to increase the share of high-quality products. To this end, rural financial institutions should provide financial services in the following areas: processing of agricultural products, improvement in the technical level of agriculture and structural adjustment of agricultural production.

iv) The rural private sector is becoming the major engine for the growth of rural economy and, as a result, the informal rural finance has developed

Having undergone more than twenty years of reform and opening-up, the economy of the majority of counties has become divorced from the development mode in which reliance is placed solely on agriculture to give impetus to economic development. Small and medium scale industry and commerce at the county level and below are gradually becoming the focus of economic development. The role of rural enterprises or small and medium-sized industry and commerce as the foundation of county economic development is not a debatable issue (Chen, 2003). At the end of 2001, the number of rural enterprises nationwide reached 21.2 million and employment in these enterprises reached 130.9 million persons. The number of rural private enterprises reached 20.5 million accounting for 96.8% of the total number of rural enterprises nationwide. In addition, 66 000 agri-business enterprises emerged, involving 59 million peasant households *i.e.* 25% of the total number of peasant households in China (Ministry of Agriculture, 2002). The development of rural enterprises has made an important contribution to the transfer of the rural population and the absorption of surplus rural labour.

Since the Asian financial crisis, the slow down in the growth of rural enterprises, playing the mainstay role in the provision of non-agricultural employment in the countryside, has diminished their capacity to absorb labour, impeded rural economic development and retarded the growth of peasant

incomes (Chen, 2003). Nevertheless, in 2000, rural enterprises contributed 37% to the growth in the national value added and their share in the value added created in rural areas increased from 54% in 1995 to 63.6% in 2000. The average wage income of peasants coming from rural enterprises provided 30% of farmer's total income in 1995, and this proportion increased to 34.5% in 2000. In the Ninth Five-Year Plan period (1996-2000), rural enterprises experienced the lowest growth rate in history. The slowdown in growth of rural enterprises has already produced harmful effects on the economy within counties and has delayed the process of rural urbanisation to some extent.

At the same time, after the realisation of the rural institutional reform with the adjustment of land tenure system at its core, rural market economy was fostered. Rural society has gradually become divided, changing its organisation from "collective life" to "individual life", but individual and collective benefits have been increased and strengthened. Peasants, village governments, town and township governments and governments at higher level have changed into different interest bodies. In the process of the policy formulation and the distribution of rights, they frequently bargain around their own interests. After the sharing power system with Chinese characteristics was basically established, the central government gradually reduced its role in the provision of funds for the economy (especially for state-owned enterprises) by continually changing the rules of the game. Local governments also increased their control over local finance. Within this framework, rural quasi-formal and informal finance institutions developed, in particular rural co-operative foundations, urban credit unions and popular financial organisations. Channels of finance for peasant households and small and medium rural enterprises diversified, leading to a significant increase in the efficiency of the supply of rural credit. The provision of loans for peasant households and small and medium rural enterprises by formal financial institutions also strongly increased. At the end of 1978, the total balance of loans for peasant households and rural enterprises was 11.6 billion Yuan. This had increased to 103.8 billion Yuan in 1990 and to 1 212.4 billion Yuan by the end of 2001¹.

Local governments' income from the right to control its financial resources is enormous. They also gained a dominant position in financing the development of rural enterprises. However, during the period of the vigorous development of rural enterprises in China in the 1980s and the first half of the 1990s, high growth rate in the non-public Chinese rural economy was also unexpectedly achieved. Moreover, local governments (especially at the town and township levels) were able to reduce budget expenditures by turning part of bank deposits into public finance². Therefore, local governments without exception showed a positive attitude towards and promoted the renewal of the rural financial system.

The industrial activities of peasant households are becoming complex, sources of income are becoming diversified, the main source in the growth of peasant income is outside the agricultural sector and the demand for finance by peasant households is becoming diversified

According to a study based on a survey of 20 000 peasant households in more than 340 villages in China for the period of 1998 to 2002 (Guan and Wei, 2003), the employment and income structure in peasant households show three main characteristics.

(1) Farmers increased their labour inputs in the activities other than crop production and animal husbandry. Their economic activities tend to be diversified (Table 1). Between 1998 and

^{1.} Source: China Financial Yearbook, various years.

^{2.} Local authorities interfered in credit operations of rural credit foundations, for example by forcing them to provide credits to selected local enterprises. Moreover, they forced them to use part of the deposits for the construction of basic rural facilities to increase supply of rural public goods.

2002, the share of labour inputs by peasant households in crop production and animal husbandry fell from 72% to 57% while the share in fishery, industry, transport and the commercial and service sectors rose from 18% to 30%.

Table 1. Total labour inputs and their structure in household activities

	1998	2002
Total labour input in household activities (days per year)	99.6	93.1
Including		
in crop production (%)	54	45
in animal husbandry (%)	18	12
in fishery (%)	2	4
in industry (%)	4	6
in transport (%)	3	4
in commerce and service sectors (%)	9	16
other (%)	10	13

- (2) The share of farmers' income from household-based activities continues to fall. Between 1998 and 2002, average gross income rose from 3 849 Yuan to 4 568 Yuan, an increase of 18.7%. Per capita net income rose from 2 414 Yuan to 2 891 Yuan, an increase of 19.8%. Over the four years, per capita income from family activities rose by 189 Yuan but its share in the gross per capita family income fell from 71.6% to 65.7%. The share of income from crop production in the income from household activities fell from 42.4% to 34.5% and the proportion from animal husbandry fell from 16.2% to 15.9%. The proportion from fishery activities and forestry rose from 4.1% and 1.3% to 5.6% and 1.5%, respectively. At the same time, the income from cash crops, industry, transport and commercial and services increased considerably.
- (3) There has been a strong increase in income from work away from home and from running businesses. In 2002, the proportion of labour employed away from home reached 23.6% of the total labour input, an increase of 8.6 percentage points over 1998. The proportion of income from employment away from home in gross family income rose from 12% to 17.1%. Over the four years, off-farm employment contributed 317 Yuan to the increased *per capita* family income so that it became a new source of growth in the peasants' increased income. The *per capita* income from enterprises run by peasant households (including share-holding, partnership, private and "three capital" enterprises) increased from 95 Yuan to 124 Yuan and its share in *per capita* gross income rose from 2.5% to 2.7%. This also reflects the fact that the restructuring of agriculture and rural industry is being continuously enhanced and that the rural market is gradually becoming prosperous.

The increased complexity of the economic and income structures of peasant households requires a more complex financing service. In addition to the deposit and loan services, there has also arisen demand for such financial services as settlement, remittances, financial consultancy, leasing, trusts, insurance, credit cards, safe deposit boxes, the issuing of negotiable securities and agency business.

3. The current system of rural financial institutions and its functional defects

i) The finance deepening in rural China is quite weak

Beginning with the reform of finance at the end of the 1970s, China has actually pursued the establishment of a "market-oriented financial system". This process has been marked by the creation of pluralistic financial institutions and financial markets with different components, different forms of organisation and different functions. The establishment of these new financial institutions has led to the suppression of the "unified and centralised" financial system structure of the planned economy era and there has been a rapid development in terms of the number of offices and the diversification of operations (Table 2).

Table 2. Pluralism of Chinese financial institutions

	1981	1999
Leasing companies		15
Urban commercial banks		90
Securities companies		*2 239
Finance companies		70
Financial trust and investment institutions		238
Urban credit unions		836
Rural credit co-operatives	55 044	41 755
Insurance companies	567	*7 845
Other commercial banks (1)		4 753
State banks (2)	47 251	140 270
Total	102 862	199 011

N.B. (1) "Other commercial banks" include the Bank of Communications, CITIC Industrial Bank, the China Everbright bank, China Huaxia Bank, China Minsheng Banking Corp., Ltd, the Guangdong Development Bank, the Shenzhen Development Bank, China Merchants Bank, the Fujian Industrial Bank, the Shanghai Pudong Development Bank, the Yantai House Savings Bank and the Bengbu House Savings Bank. (2) "State banks" include the People's Bank of China, the four major state-owned banks and the three policy-related banks. (3) * is data for 1998.

Source: Jiang Yu, 2003.

The financial system is the forerunner in the allocation of social resources. If the marketisation of the financial transaction mechanisms cannot be completed, it will inevitably delay market reforms in other areas. Zhang Jie (1995) considered that the changes brought by economic reform to the financial setup are "significant but not profound". Viewed from the ratio of the amount of broad money M2 to the GDP, this index in China has surpassed that in Australia and is basically at a similar level with Japan, showing that the monetisation in China has already become distinctly more profound (Lynch, 1996). However, the expansion of the financial sector will by no means bring about profound changes to the rural financial structure and system. There remains a considerable gap in the extent of the marketisation reform of financial transactions in China compared to the countries referred to above. Although the types of formal rural financial institution have increased with the establishment of the Agricultural Development Bank of China (ADBC), the number of branch offices decreased (Table 3).

Table 3. The diversification of formal rural financial institutions in China

	Agricultural Bank of China	Agricultural Development Bank	Rural credit co-operatives*	Total
1986	37 879		59 195	97 074
2001	44 417	2 275	39 322	86 014

N.B. The number of rural credit co-operatives = the number of rural credit co-operatives with independent accounting + the number of offices of joint credit unions.

Source: Chinese Financial Yearbook (1987) and (2002).

ii) The supply of formal rural finance is insufficient

The main problem of rural finance in China, apart from its own irrational structure, is that the allocation of the entire national financial resources is irrational. Beginning from the early 1980s, the Chinese government attempted to establish a comprehensive financial services system within the rural domain through mandatory institutional changes in order to harmonise the allocation of rural financial resources. However, this was not done.

In the first place, the four major state-owned commercial banks were placed in a monopoly position. Basically, commercial banks with the share-hold ownership are also state-controlled in nature. Urban credit unions are compulsorily merged as urban commercial banks, in reality becoming local state-owned enterprises. After all rural co-operative foundations (RCFs) were closed, the actual financing strength of rural credit co-operatives (RCCs) was also limited. The popularly-run economy and small and medium-sized enterprises (SMEs) had no corresponding financing channels. Individual and privately-run enterprises, which account for over 30% of national industrial added value, could only obtain 1% of credit funds.

The insufficiency in the supply of formal rural finance has brought about the renewal of the rural financial system. The informal rural finance has developed and some popular capital has entered the domain of rural finance. In the countryside, loans provided by banks and RCCs account for approximately 25% of rural investment funds. About 70% of funds are supplied by so-called illegal popular finance. Since state-owned finance cannot meet the demand for capital of rural economic activity, popular rural borrowing has emerged. According to a survey of 360 peasant households organised by the author (He, 1999), 60.96% of fund borrowing by peasant households occurs mainly in the form of popular lending. 93.95% of rural household loans are carried out between relatives, neighbours and friends. Other types of loans occur between rural enterprises, rural co-operative funds and rural grass-roots organisations (2.2%, 1.65% and 0.55%, respectively, with the ratio for remaining parties at 1.65%).

Next, the supply of rural policy-related finance by the government is insufficient. This is a basic characteristics of the Chinese rural financial system. In 1994, the ADBC was founded. Under the new rural financial setup, rural credit investment grew significantly. However, this growth did not last long because of the negative effects of the Asian economic crisis, slowdown of the rural enterprise development and the difficulties encountered by the county economic growth. In many underdeveloped places, not only was there no question of augmenting the level of rural credit investment, but normal credit demand could not be satisfied.

Since 1994, the thinking of the reform of rural finance in China has been first to expand rural policy-related finance (the establishment of the ADBC) and then to realise the goal of reform by reforming and cutting down policy-related finance by other banks (the commercialisation of the

ABC).³ This reforming process is deliberately taking a roundabout route. With the ABC still bearing an enormous policy-related burden and being publicly-owned, it is difficult to bring about its true commercialisation. Even though the control of the credit scale by state-owned banks has been abolished since 1998, the government and enterprises still put pressure on banks just as it was before. The operations of the ABC and the ADBC are not satisfactory.

iii) Funding for the economic development at the county level is insufficient

Financial resources are heavily concentrated in cities and state-owned enterprises (SOEs). A monitoring survey by the People's Bank of China (PBC) of 5 000 enterprises revealed that although the growth rate of bank loans to big enterprises is declining since 1998, they actually utilised a very high proportion of financial resources. In 1999, the total amount of financial resources absorbed by the SOEs was 6 104.9 billion Yuan⁴ equivalent to 73.38% of the GDP and to 592.21% of the tax revenue. In the allocation of financial resources, SOEs hold a prominent, preferential position⁵. At the same time, an analysis by the Monetary Policy Analysis Group of the PBC (1 November 2001) shows that, at the end of 2000 around 40% of the national balance of loans went to the provincial capitals and big cities accounting for 46% of newly-increased loans in that year. There was a serious tendency towards urbanisation in the credit allocation. This was also the result of the allocation of financial resources being dominated or controlled by the government, and not led by the pursuit of profit in a fully competitive market (Chen, 2003).

Rural credit within counties is being reduced and there is a serious outflow of rural capital. According to some estimates, since the reforms and opening up, the net outflow of rural capital through financial channels (including Post Office savings) has been between 800 billion and 1 000 billion Yuan (He, 2003). Moreover, the county branches of state-owned commercial banks basically are not authorised to grant loans. Since 1997, their loans to the county economic entities have increased very little. In addition, the granting of loans in the countryside by state-owned commercial banks is mainly concentrated on major projects such as large-scale basic facilities projects, national debt counterpart funding projects and ecological construction projects. In 2002, the share of rural enterprises in the overall increase in loans issued in China was less than 9%⁶.

iv) The structural withdrawal from the market of state-owned commercial banks and the entry into the market of popular rural finance were ill-matched

From the mid- to late 1990s, the four major state-owned commercial banks started to commercialise their business. The impulse to seek benefits, the implementation of international standards and preparations to enter overseas markets made them draw back from the front line and adopt another developmental strategy of "large banks, large markets and large industries", with a gradual withdrawal from markets at county-level and a reduction in their operational structure at the basic level. Between 1998 and 2001, the state-owned commercial banks shut down 44 000 of their

^{3.} Before reforms, the ABC was actually a policy-related bank and currently is still semi-policy-related.

^{4.} Including debt-equity swapping, technical transformation and discounted interest funds, listed financing and bank loans.

^{5.} According to the World Bank statistics (1996), in 1994 the state-owned enterprises utilised 73.5% of the total industrial investment while they contributed only 34% to the total output. The capital used per unit of output in these enterprises was two-fold higher than in non-state industrial enterprises. This shows that the survival of the SOEs was only possible due to huge financial resources allocated to them.

^{6. &}lt;a href="http://www.pbc.gov.cn">http://www.pbc.gov.cn.

grass-roots offices with a net reduction of 240 000 staff. Relevant data from the annual reports of commercial banks shows that, between 1998 and 2001, the Bank of China reduced 2 722 branch offices at the local level. At the same time, it also abolished and merged 246 county branches, so that their number fell by 22% compared with the end of 1997. The Construction Bank of China reduced its county branches by 3 601. From 1998 to 1999, the cumulative net reduction of their operational network was 4 000 establishments. The Industrial and Commercial Bank of China abolished and merged 8 700 branch offices. The ABC's network fell from about 60 000 establishments to 44 000. However, the mechanisms of market entry have been seriously delayed. The market has not opened up, and the market share of small and medium banks is too low and it is hard for them to survive. The capital structure of Chinese finance is as follows: 66% held by the state-owned commercial banks, 10% by policy-related banks and only 24% by small and medium-sized financial institutions (including joint-stock commercial banks, RCCs, banks with foreign finance, finance companies and financial trust companies). The small and medium-sized financial institutions are the main financing channels for popular enterprises and residents, playing an irreplaceable role in promoting local economic development, in supporting the development of all kinds of small and medium-sized enterprises and in serving the residents of cities and the countryside. Since the development of formal small and medium-sized financial institutions is lagging behind, a no-man's land has emerged in financial services at county level and below. The popular economy and small enterprises have lost their main channels of financial support and this is also an important reason why popular borrowing is so dynamic.

v) The mechanisms for financing the development of rural enterprises are unsound

Even though the development of the capital market in China has been rapid, the proportion of direct rural financing is low and indirect financing still dominates.

There is a lack of equity financing channels and the ratio of internal financing is high. In 2002, capital raised by Chinese enterprises from the domestic and foreign share market was less than 10% of the accrual of bank loans and the supply of capital still mainly depends on indirect financing. Comparatively strict conditions for listing stocks only benefit the listing of large enterprises and, in particular, SOEs. This leads to a serious imbalance between financial supply and demand structures. Up to the end of May 2003, there were more than 1 500 rural enterprises which met the conditions for being listed in the stock market but only 50 actually listed, accounting for only about 4% of the listed companies nationwide. Of 372 key national-level, leading industrialised agricultural enterprises, only 41 are listed companies. Moreover, the rural enterprises realised stock financing through ownership transformation or through funds-raising, but because of the absence of transaction market, stock owned by employees of rural enterprises lacks liquidity. On the one hand, enterprise stock owners assume unlimited risks and, on the other, the ability of an enterprise to obtain further financing by this means is also impeded. This results in the enterprise being unable to reduce its debt ratio and improve its capital structure.

There is a single channel for debt financing. With the development of the Chinese bond market lagging seriously behind, the main channel for the external financing of rural enterprises, mainly small and medium-sized, has for a long time been debt financing, but the major source of debt financing come from state-owned commercial banks.

Under such circumstances, small and medium-sized rural enterprises have to seek an assistance of informal popular financing organisations which causes their costs to rise. Their developmental

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^{7. &}lt;a href="http://www.pbc.gov.cn/news/news.html">http://www.pbc.gov.cn/news/news.html.

sustainability is seriously challenged by their inability to pay high interest rates charged by popular financing.

vi) The financing mechanisms for peasant household are not sound

If peasant households can obtain financial services, they will produce high positive economic externality to Chinese rural economic development. When policy-related finance support is inadequate, not all peasant households wishing to have access to financial services can obtain it. Therefore, it is necessary to provide a basic financial facility for all peasant households. From the perspective of public economics, the government should provide peasant households with a financial service of an average standard which will constitute policy-related financing for them. Although the PBC acts as the government's representative in the field of finance and supplies rural financial institutions with low-interest reloans, it can also be understood to some extent as a mechanism for policy-related finance. However, its activity in providing re-loans to rural financial organisations is not sustained⁸ and as a result there are no mechanisms for a continuous supply of policy-related finance for peasant households in China.

Since 1999, Chinese RCCs have improved their methods of supplying loans, issuing peasant households with micro-finance and co-insured loans. This has greatly increased the extent to which demand for loans by peasant households is met. However, RCCs have actually developed this business under administrative pressure from the Central Bank and, to some extent, it may even be considered that these types of loans are issued due to some political pressure. There are three additional factors detrimental to the development of this type of loan. The first is that the amount of single loans is small, their terms of repayment are short and the cost of extending loans is high. The second is that interest rates are lower than for industrial and commercial loans while the opportunity cost for issuing them is higher. The third is that the actual financial strength of RCCs is limited. Therefore, in their business development process, RCCs always try to avoid issuing such loans.

4. A pluralistic organisational structure is the way to optimise the rural financial organisational structure

From the standpoint of Robert C. Merton and Zvi Bodie, analysis should proceed from a functional perspective. Discussion of the optimisation of the rural financial organisational structure should not be determined by the premise of the current financial structure and organisation. It should be seen that financial function is superior to organisational structure, *i.e.* that the function of a financial institution is more important than its organisational structure. Only when there is continuous innovation of institutions and competition can stronger functions and higher performance in the financial system be finally brought into being. Therefore, from a functional standpoint, it is first necessary to determine what economic functions a financial system should possess so as to set up or establish the structure and organisation which can best perform these functions.

Rural economic development in China has strong regional features. Demand for financial commodities by different economic entities also shows strong diversity. Rural financial organisations in different places should have different functions. However, among those functions, contribution to a rise in farmers' income, and promotion of agricultural development and rural economic growth are their basic functions. Therefore, from the functional perspective, rural financial organisations should diversify in order to benefit the "Three Nong" (agriculture, countryside and farmers).

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^{8.} The number of loans provided and their terms are always changing.

On the basis of the characteristics of the Chinese rural economy and finance, together with problems in the current structure of rural finance, the objective to optimise the rural financial organisational structure can be achieved mainly through diversification of financial institutions. This diversification is realised mainly by opening up the rural financial market and establishing multiple types of financial institutions with complementary functions and with co-ordinated operating mechanisms. This will break down and eliminate the monopoly structure and will truly create an organisational structure for rural finance based on competition and efficiency. Only with the coexistence of a variety of financial institutions can the market economy be promoted, market efficiency raised and the demand for diversified rural finance better met.

i) The state–owned commercial banking system should be reformed

Mishkin (2001) was not entirely correct in maintaining the view that state-owned banks could provide credit to sectors which could hasten economic growth, unlike the private sector. However, as far as the recognition of the inevitability of the reform of Chinese state-owned commercial banking is concerned, there is no debate. In 2001, the Chinese government put forward some tentative ideas on the reform of state-owned commercial banks, planning to transform the four large state-owned banks over five years or more into "major modernised commercial banks with a good corporate governance structure, sound mode of operations, clear business goals, a good financial performance and strong international competitiveness". The specific steps of the reform are the commercialisation of banking operations, conversion of banks to company status and stock market listing. The author considers that the reform of the state-owned commercial banks can proceed along the road of development by breaking up and grouping banks. Through the establishment of a bank holding company, the overall branch structure can be transformed into a bank holding group. The operational arrangements and setup should be integrated, and the branch structure based on administrative divisions without consideration of the market should be altered. The key is the transformation of the shareholding system with the breaking up of the single property rights structure, the implementation of pluralistic, socialised and mobile property rights for the state-owned banks, and the establishment of a standard modern commercial banking system. Within the framework of a bank holding group and with breaking up and regrouping, based on the regionalization of economic development or administrative divisions, both domestic and foreign branches should be changed into subsidiary companies of the bank holding group with social capital absorbed into the subsidiaries and the liability of capital providers limited to their capital subscription. This process may not only promote ownership diversification and encourage the inflow of popular capital, it may also gradually eliminate the monopoly of the state-owned commercial banks and create a truly competitive situation in commercial banking.

ii) Small financial institutions should be developed with superior property rights structure, low transaction costs, market efficiency and information together with flexible operations and great adaptability

They should be suited to the features of rural economic entities such as miniaturisation, individualisation and also to the changes in rural economic structure while meeting the demand for multi-layered, diversified finance of micro entities in the rural economy. In particular, local popularly-run small and medium-sized commercial banks should be developed.

The peasant household and rural popular economic entities are bound by hard budgetary constraints. From the very beginning, they are market oriented and are the receivers of market interest rates. Therefore, popular small and medium-sized financial institutions governed by self-interest are more inclined to have a financial relationship with them through the market financing and obtain greater income through market interest rates. In order to maintain the higher growth rate of peasant

households and the rural popular economy, it is necessary to have a system of small and medium-sized financial institutions which are not state-owned and which operate in accordance with commercial principles.

The main operation of small and medium-sized financial institutions is to issue small amount of loans. This is beneficial to the financing of peasant households and of rural and urban SMEs, in particular to the financing of private enterprises. This point is also proved by the history of the development of small and medium-sized financial institutions in the United States. A study by the Federal Bank of New York on the US banking service in the mid-1990s showed that the smaller the scale of the bank, the greater the proportion of its small loans to its total loans, and the higher the ratio of small loans to the total amount of its assets. For the banks with assets lower than USD 100 million, small commercial loans accounted for 8.9% of the total amount of their assets while for banks with assets greater than USD 5 billion, this ratio was only 2.9% (Federal Reserve bank of New York, 1995). Goldberg and White (1997) discovered that there is a significant inverse relationship between the size of a bank and its loans to small enterprises (as a percentage of the bank's assets). Research has also shown that big banks with a complex structure rarely extend loans to small businesses (Berger and Udall, 1996). Newly-established banks extend more loans to small enterprises than existing banks of a comparable size (Shull, 1993).

Small financial institutions have the comparative advantages in terms of spatial financial structure efficiency. The development of local small and medium-sized financial institutions and increasing credit for private enterprises may better promote the growth of the private economy. Research by the World Bank shows that, if banks double the ratio of private sector credit to GDP, this will lead to the rise in long-term average economic growth by two percentage points. Moreover, the greater the credit ratio of the private sector (the more intensive the financial system becomes), the less the economy fluctuates (World Bank Policy Research Group, 2001). The importance of increasing private sector credit is clear.

Small local banks and financial institutions can be created in four ways.

- 1. They may be established by authorised popular capital which meets certain conditions. In this case, the restrictions on market access for financial institutions with domestic investment should be relaxed. A group of banks divorced from the traditional system should be established with popular enterprises as the major shareholders. These banks specialise in serving new high-technology industry and popular enterprises. Opening up domestically is a prerequisite for opening up to the outside world. Opening up to the outside world while remaining closed domestically may result in the market being sold off cheaply.
- 2. They may be established on the basis of the integration of financial institutions at county level. The branches of state-owned financial institutions⁹, RCCs and Post Office Savings offices can be integrated to establish local small and medium-sized joint-stock commercial banks.
- 3. An institutional renewal of current RCCs can be implemented to bring about model diversification. First, in developed regions, RCCs can be directly converted into local joint-stock commercial banks or co-operative banks. Secondly, they can be merged with current commercial banks. Thirdly, they can be merged with policy-related banks and, fourthly, they can continue to retain their present co-operative feature. During the process of

^{9.} Including the four state-owned commercial banks and the ADBC.

institutional renewal of the RCCs, attention must be given to clarifying property rights relationships and standardising modes of operation.

- 4. New co-operative financial organisations may be developed.
- iii) The development of foreign-funded financial institutions in China should be rationally introduced

Since China's accession to the WTO, restrictions on the access of foreign-capital banks have been abolished. According to the China WTO protocol, foreign-capital banking institutions should be able to compete on equal terms with domestic banks by 2007. As a result, there are some concerns about the impact of competition from foreign banks on Chinese banks. However, this risk has been exaggerated. In places where foreign-capital banks have been permitted to enter, they have all tended to prudently expand their business (Anderson, 2003). New entrants from foreign markets tend to occupy a certain segment of market and do not enter the sphere of traditional commercial banking on a large scale (Bush, 1998). Hence, it is necessary to provide guidance for the development of foreign-capital banks in China and, in particular, in the rural areas in order to promote the rational distribution of the Chinese rural financial organisations and further perfection of the financial system.

iv) The development of non-banking financial institutions should be emphasised

During the transition period of rural China, not only is the demand for finance a significant one but it is diversified and complex. There is demand for commercial banking, investment banking and for insurance. There is financial and also non-financial demand. As a result, while enough attention is paid to the development of banking financial institutions, it is also necessary to emphasise the development of other institutions and business dealing with insurance, trust investment, leasing, credit guarantees, consultancy, the issue of and agency dealing in negotiable securities, capital operations, and foreign exchange business.

v) Certain measures and regulations should be promulgated to encourage normal popular financial activities (conforming to the law of capital supply and demand) and put an end to illegal financial activities (such as usury and financial fraud)

In view of the inadequate supply of finance from formal channels and the high demand for rural funds, ¹⁰ Chinese popular finance is relatively active. According to an investigation by Wen Tiejun *et al.* (2001), the rate of occurrence of popular borrowing reached as high as 95% while the rate of occurrence of high interest popular borrowing reached 85%. As far as peasant households and small and medium-sized businesses in many districts are concerned, the importance of the informal financial market greatly exceeds that of the formal market. Research shows that, of the 167 000 enterprises in Wenzhou in Zhejiang Province, 60% depend on popular borrowing to raise capital, with the interest rate as high as 1–3% every month. Since popular finance lacks official laws and effective management and guidance, it is difficult for them to function normally in the credit market. In the Chinese countryside the scale of popular finance is small and popular finance activity is still considered as illegal. "Small-scale" means no economic scale and "illegal" implies higher institutional risks and transaction costs. Hence, the necessity of legalising popular finance to promote its moderate development is evident. At the same time, many people in China equate popular finance with usury

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^{10.} It has been estimated that the current annual demand for rural capital is 2 000 billion Yuan and it is increasing by a rate of 20% annually. But the balance of current loans to peasant households and rural enterprises by financial institutions is only about 1 000 billion Yuan, which means there is a shortage of capital of about 1 000 billion Yuan.

and with illegal finance. Therefore, it is necessary to demarcate rationally and clearly the dividing line between popular finance and usury, between popular finance and illegal finance. Guidance should be provided also for innovative activities in the informal financial market.

5. Conclusions

The diversification of financial institutions and the development of diversified financial institutions constitute the correct orientation of the current reform of rural finance in China. However, it should be noted that lessons and experiences have been gained from the progressive reform process of the diversification of financial organisations and institutions. These include the following:

- Diversification of financial institutions by no means guarantees good circulation and unhindered channels of fund circulation. Indeed, many financial institutions easily fall prey to confusion in the process of contending for, distributing and using social funds.
- Non-regulated financial institutions generate waste of social funds and of labour resources.
 Many financial institutions in China have not overcome this handicap with the result that such waste continues to this day.
- With regard to reform of property rights and of the organisational forms of financial institutions, no synchronised progress has been matched compared to other reforms achieved in other domains. Access to the financial market is still strictly limited. Although financial institutions are diversified, their system of property rights and organisational structural arrangements continue to use the "public ownership" model and this means that the entire operation of finance is not adapted to economic growth. Therefore, in the process of promoting pluralistic rural financial institutions in China, attention should be given first to legislation and supervision to safeguard normal financial order and then to improving the corporate governance structure of financial institutions in order to improve and renew their mode of operations.
- The development of financial institutions should not be emphasised unilaterally. Direct financing and capital market should be developed and there should be organic integration and co-ordinated development of the capital and insurance markets.
- An attention should be given to the complementary and co-ordinated development of financial reforms and the reforms in other areas. In particular, the reform of rural finance cannot lag behind other reforms in rural areas.

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CHALLENGES IN GOVERNMENT FACILITATED CROP INSURANCE

By Jerry R. Skees and Barry J. Barnett¹

Abstract

Experience to date indicates that it is extremely difficult, without massive government subsidies, to insure farm-level crop yields from losses caused by any number of natural perils. Those who seek effective, agricultural risk management tools, offered with little or no government subsidy, need to understand the underlying problems with farm-level, multiple-peril crop insurance. This chapter begins by discussing those problems. The following section presents an alternative form of insurance that makes payments based not on measures of individual farm yields, but rather on either area yields or some weather event like temperature or rainfall. This alternative form of insurance is often referred to as "index" insurance, since payments are triggered by realizations of a pre-specified index measure rather than by realized farm yields.

Index insurance holds significant promise for a number of reasons. In some situations, index insurance offers superior risk protection when compared to traditional multiple-peril crop insurance that pays indemnities based on individual farm yields. Second, index insurance provides an effective policy alternative for governments seeking to protect the agricultural production sector from widespread, positively correlated, crop yield losses (e.g., drought). Finally, when index insurance is used to shift the risk of widespread crop losses to financial and reinsurance markets, the residual idiosyncratic risk often has characteristics that make it easier for local insurance markets to absorb.

Requirements for multiple risk crop insurance

Successful insurance programmes require that the insurer have adequate information about the nature of the risks being insured. This has proven to be extremely difficult for farm-level yield insurance. Farmers will always know more about their potential crop yields than any insurer. This asymmetric information is the major problem with insuring farm yields. If an insurer cannot properly classify risk, then it is impossible to provide sustainable insurance. Those who know they have been favourably classified will buy the insurance; those who have not been favourably classified will not buy. This phenomenon, known as "adverse selection," initiates a cycle of losses (Goodwin and Smith, 1995; Ahsan, Ali, and Kurian, 1982; Skees and Reed, 1986; Quiggin, Karagiannis and Stanton, 1994). The insurer will typically respond with "across the board" premium rate increases. But this only exacerbates the problem, as only the most risky individuals will continue to purchase the insurance. The problem can only be corrected if the insurer can acquire better information to properly classify and assign premium rates to potential insured individuals.

Insurers must also be able to monitor policyholder behaviour. Moral hazard occurs when insured individuals change their behaviour in a way that increases the potential likelihood or magnitude of a

^{1.} Skees is the H.B. Price professor of agricultural economics at the University of Kentucky. He is also President of GlobalAgRisk, Inc. Barnett is associate professor of agricultural and applied economics at the University of Georgia. All views, interpretations, recommendations, and conclusions expressed in this paper are those of the author(s) and not necessarily those of the supporting or collaborating institutions. A version of this paper will also be published in an Australian book on crop insurance (forthcoming fall, 2003). Correspondence should be addressed to Skees at jkees@globalagrisk.com

loss. In crop yield insurance, moral hazard occurs when, as a result of having purchased insurance, farmers reduce fertilizer or pesticide use or simply become more lax in their management. At the extreme, moral hazard becomes fraud where policyholders actually attempt to create a loss. Again, the problem is asymmetric information. Unless the insurer can adequately monitor these changes in behaviour and penalize policyholders accordingly, the resulting increase in losses will cause premium rates to increase to the point where it becomes too expensive for all but those engaged in these practices. Insurers must also be able to identify the cause of loss and assess the magnitude of loss without relying on information provided by the insured. For automobile or fire insurance the insurer can generally identify whether or not a covered loss event has occurred and the magnitude of any resulting loss. For multiple-peril crop yield insurance this is not always the case. It is not always easy to tell whether a loss occurred due to some covered natural loss event or due to poor management. Nor is it easy to measure the magnitude of loss without relying on yield information provided by the farmer.

Another requirement for traditional insurance products is that the loss events be independent, or at least not highly positively correlated. This characteristic allows the "law of large numbers" to generate a narrow confidence interval around the expected loss for insurer's portfolio of insurance products. If risks are highly positively correlated (what some refer to as systemic risk) the law of large numbers is not relevant and the solvency of the insurer can be threatened by extremely large losses due to a single event. For multiple-peril crop insurance, losses due to perils such as drought, freeze, or excess moisture, are typically highly positively correlated across exposure units.

When considering these requirements, it is useful to compare multiple-peril crop insurance with hail insurance. For well over 100 years, the private sector has sold crop hail insurance with no government involvement. Why has hail insurance succeeded without government involvement when multi-peril crop insurance has not? There are at least four reasons: 1) farmers have no better information than the insurer regarding the likelihood of a hailstorm; 2) farmers cannot, by changing their behaviour, increase the likelihood of a hailstorm or the magnitude of damage from a hailstorm; 3) insurers can generally tell whether or not a loss was caused by hail and accurately estimate the damage without relying on information provided by the farmer; and, 4) hail risk is largely independent across exposure units.

The US federal crop insurance programme

There are a number of countries around the world that offer multiple-peril crop yield insurance on individual farm yields. Very few of these offerings are made without any government involvement. In the US, multiple-peril crop insurance is designed to protect against losses from a wide array of natural occurrences, including hail, drought, excess moisture, plant disease, insects, and wind. The intent is to insure only acts of nature and not bad management. Policyholders must follow "generally accepted farming practices." While this provision is in place to reduce the impact of moral hazard, it is difficult to enforce.

Indemnifiable losses include quality adjusted yield shortfalls, prevented planting, and in some cases, replanting costs. Contracts for annual crops must be purchased no later than approximately six weeks prior to planting. Contracts for perennial crops must be purchased in the fall of the year before the crop is harvested. These dates are set to reduce the possibility that farmers will purchase insurance only when the likelihood of, and/or magnitude of, a potential loss is greater than normal – a phenomenon known as intertemporal adverse selection.

A payable loss occurs if the *realized yield* is less than the *trigger yield* (the trigger yield is sometimes called the yield guarantee). Payable losses (in bushels, hundred weight, tonnes, etc.) for an insurance unit are calculated as:

Payable Losses = $max(0, Trigger Yield - Realized Yield) \times Insured Acreage.$

Trigger yield is based upon the coverage chosen and the insurance yield. Specifically,

 $Trigger\ Yield = Insurance\ Yield \times Coverage\ .$

The *insurance yield* is an estimate of the long-run average yield for the insurance unit. A farm may have several insurance units. *Coverage*, as the term is used in the US federal crop insurance programme, is 100% minus the per cent deductible. Available coverage levels typically range from 50% to 85% in 5% increments. Deductibles are one way to reduce the problems that emerge from adverse selection and moral hazard.

The policyholder selects an *indemnity price* that is less than or equal to a federal estimate (made prior to planting and sales closing) of the market price at harvest. The payable loss is converted into dollars as follows:

 $Indemnity = Payable\ Loss \times Indemnity\ Price$

Liability is the amount that the insurance contract would pay if the realized yield were equal to zero (*i.e.*, a 100% loss):

 $Liability = Trigger\ Yield \times Indemnity\ Price \times Insured\ Acreage.$

The gross premium is calculated as:

 $Gross\ Premium = Gross\ Premium\ Rate \times Liability$.

Gross premium increases as coverage levels increase. The farmer's premium is calculated as:

Farmer Premium = Gross Premium - Government Subsidy.

Actuarial performance of the crop insurance programmes

Performance of publicly supported multiple peril crop insurance has been poor when all costs are considered. If companies were private, the premiums collected would have to exceed the administrative cost and the indemnities paid out. Hazell quantifies the condition for sustainable insurance as follows:

(A + I)/P < 1

where A = average administrative costs

I = average indemnities paid P = average premiums paid Given this ratio, Hazell finds that in every case the value exceeds 2 (Table 1). This means that the support from government is at least 50%. However, there are cases where farmers are clearly paying only pennies on a dollar of the real cost of the crop insurance programme. A ratio of 4 means that the farmer pays 25 cents for every 1 dollar of total costs. Skees (2001) reports a ratio of 4 for the current US crop insurance programme and Mishra reports that India's I/P ratio increased to 6.1 for the period 1985-94.

Table 1 has only one case where the loss ratio of indemnities over premiums approaches 1 – Japan. In this case, the administrative costs needed to achieve this lost ratio are quite unbelievable – over 4 and ½ times higher than the farmer premium. It seems a very high price to pay to obtain 'actuarially sound' crop insurance. The other strategy in reaching this goal is to make the premium subsidy high enough that there is no adverse selection – even the low risk farmers soon learn that crop insurance is a good buy. Once lower risk farmers are in the risk pool, the actuarial performance can improve if one is measuring the unsubsidized premium against the loss experience. Obviously this is a pure numbers game and reflects little about the true performance of the programme. This is what the US has done in recent years (Skees 2001).

Table 1. Financial performance of crop insurance programmes in seven countries

Country	Period	I/P	A/P	(A+I)/P
D '1	75.01	4.20	0.20	4.57
Brazil	75-81	4.29	0.28	4.57
Costa Rica	70-89	2.26	0.54	2.80
India	85-89	5.11	n.a.	n.a.
Japan	47-77	1.48	1.17	2.60
_	85-89	0.99	3.57	4.56
Mexico	80-89	3.18	0.47	3.65
Philippines	81-89	3.94	1.80	5.74
USA	80-89	1.87	0.55	2.42

Source: Hazell, 1992.

With such poor performance one must ask if it is even possible to run an individual multiple peril crop insurance programme that is self-sustaining. Consider the information required to deliver and monitor this programme. The insurer must know the following for every individual insured unit:

Insurance yield: Estimating the expected yield for an insurance unit is a daunting task. For the US federal crop insurance programme, insurance yields are based on a simple average of the most recent 4-10 years of realized yields on the insurance unit. Farmers can establish an initial insurance yield with as little as four years of yield records (there are significant penalties if farmers cannot provide at least four years of yield records). As the farmer builds toward 10 years of yield records, realized yield in a given year is incorporated into calculation of insurance yield in subsequent years. When the farmer has built 10 years of yield records, the insurance yield is calculated as a rolling average of the most recent 10 years of realized yields. This is a rather crude method for estimating the central tendency in yields. Due to sampling error, insurance yields can either underestimate or overestimate the true central tendency depending on the random weather events over the most recent 4-10 years. The effect of sampling error is further compounded by the fact that for most multiple-peril crop insurance programmes, insurance yields are also the primary (if not the only) mechanism for relative yield risk classification. Thus, the mechanism for establishing insurance yields can lead to adverse selection where only those farmers who believe they are getting a fair or better offer will chose to participate. Farmers who think the insurance yield is too low will not participate. Also, since farmers provide the yield records on which insurance yields are based, there are opportunities for fraud.

Loss adjustment: It is complicated and expensive to measure realized yields so that payable losses can be determined. Most farmers do not like the idea of having someone come to their farm to estimate the realized yield. Nor is loss estimation a precise science. As implied by the word "estimate," measurement errors are common. Additional investment in personnel and training is required to minimize measurement errors. When losses are widespread, a very large workforce of trained individuals is needed. In the US, farmers are often allowed to self-report realized yields. Spot checks are conducted with penalties for filing false reports, yet there are opportunities for farmers to receive unwarranted payments.

Gross premium rate: For most insurance products, premium rate calculation is based on historical loss experience. However, calculating crop yield insurance premium rates is more complex. One would ideally like to know the yield distribution for each individual farm. That is, one would like to know all of the possible yield outcomes and the probability of occurrence for each of those outcomes. But as indicated above, most crop yield insurance programmes have difficulty estimating even the central tendency in yields. Estimating factors that influence the higher moments of the yield distribution is much more problematic. Further, simply knowing the yield distribution for a well-classified group of farmers may not be enough. Extra losses (beyond those represented by the yield distributions) can occur due to moral hazard.

The US government has made significant investments in attempting to address these and other informational challenges inherent in farm-level crop yield insurance. While improvements have been made, the federal crop insurance programme still suffers from problems related to inadequate or asymmetrically distributed information. Many of the more obvious and inexpensive improvements in information gathering and monitoring systems have already been made. Needed additional improvements will likely come at much higher marginal cost. That cost will be borne by taxpayers and/or policyholders. If the cost is passed on to policyholders, many will decide that the insurance is too expensive and opt out of the programme.

The index insurance alternative

Index insurance makes payments based not on shortfalls in farm yields, but rather on measures of an index that is assumed to proxy farm yields. We will consider two types of index insurance products: those that are based on area yields where the area is some unit of geographical aggregation larger than the farm, and those that are based on weather events.

Various area yield insurance products have been offered in Quebec, Sweden, India, and, since 1993, in the US (Miranda, 1997; Mishra, 1996; Skees, Black, and Barnett, 1997). Ontario, Canada currently offers an index insurance instrument based on rainfall. The Canadians are also experimenting with other index insurance plans. Alberta corn growers can use a temperature-based index to insure against yield losses in corn. Alberta is also using an index based on satellite imagery to insure against pasture losses. Our discussion of index insurance focuses on the US Group Risk Plan (GRP) area yield insurance product.

The information needed to run an index insurance programme is much less than what is needed for a farm yield insurance programme. One needs sufficient data to establish the expected value of the index and a reliable and trusted system to establish realized values. This is critical. In India the area yield insurance programme has had bad actuarial experience due to poor systems for estimating area yields (Mishra, 1996). If reliable estimates of area yields can be provided, there is no need for any farm-level information. For example, area yield insurance indemnities are based on estimates of official measurements of realized area yields relative to expected area yields. Areas are typically defined along political boundaries (e.g., counties in the US) for which historical yield databases already exist.

The logic for using index insurance is relatively simple – there is no asymmetric information (Skees and Barnett, 1999). Farmers likely have no better information than the insurer regarding the likelihood of area yield shortfalls or unusual weather events, thus, there is no adverse selection. Farmers cannot, by changing their behaviour, increase the likelihood of an area yield shortfall (if areas are defined at large enough levels of aggregation) or an unusual weather event, thus there is no moral hazard. All of the information needed for loss adjustment is available from public sources. It is easy to tell whether or not a loss has occurred and accurately measure the indemnity, without having to rely on any information provided by the policyholder. All of these factors make it much less expensive for the insurer to provide index insurance than multiple-peril crop insurance. Thus, the cost of index insurance can be significantly lower than the cost of multiple-peril crop insurance. Also, since adverse selection and moral hazard are not problems, there is no need for deductibles.

There are numerous ways to calculate payments on index contracts (Skees, 2000). For GRP, indemnity is calculated as

$$Indemnity = \max \left(0, \frac{Index\ Trigger - Realized\ Index}{Index\ Trigger}\right) \times Liability$$

where the index is the yield for the county where the farm is located (Skees, Black and Barnett, 1997). The *Index Trigger* is the product of a coverage level selected by the policyholder and the official estimate of the expected county yield per acre. Coverage levels range from 70 to 90% in 5% increments. Expected county yields are estimated using up to 45 years of historical county yield data. For GRP, liability is calculated as

Liability = Expected County Yield × Indemnity Price × Scale × Farmer's Planted Acreage

where *Expected County Revenue per Acre* is equal to the product of the official estimate of price and expected county yield per acre and *Scale* is chosen by the policyholder but is limited to between 90% and 150%.²

Of course, one could easily adapt this contract design to any number of other indexes such as aggregate rainfall measured over a stated period at a specific weather station or the number of days with temperatures above or below a specified level. The contract design used in GRP is sometimes called a "proportional contract" because the loss is measured as a percentage of the trigger. Proportional contracts contain an interesting feature called a "disappearing deductible." As the realized index approaches zero, the indemnity approaches 100% of liability, regardless of the coverage chosen.

An alternative design has been proposed for rainfall index insurance (Martin, Barnett, and Coble, 2001).³

$$Indemnity = \max \left(0, \frac{Index\ Trigger - Realized\ Index}{Index\ Trigger - Limit}\right) \times Liability$$
 if Realized Index > Limit, else
Indemnity = Liability.

Here *Limit* is a parameter selected by the policyholder and bounded by 0 < Limit < Index Trigger. The choice of *Limit* determines how fast the maximum indemnity is paid. By their selection of *Limit*, policyholders can attempt to better match indemnities with expected losses over the domain of potential realized values for the index. For example, suppose that losses would occur when realized aggregate rainfall is less than 100 mm measured over a given time period at a given weather station. Further suppose that realized rainfall less than or equal to 50 mm would cause a complete loss. The policyholder would select an *Index Trigger* of 100 mm and a *Limit* of 50 mm. If realized rainfall is less than or equal to 50 mm the *Indemnity* would be equal to the full *Liability*.

One can easily see that the GRP contract is simply a specific case of this more general contract design with *Limit* set equal to zero. At the other extreme, the closer *Limit* is set to *Index Trigger*, the

^{2.} The limitations on both *Coverage* and *Scale* were politically dictated. In principle, there is no reason that these parameters would need to be limited with index contracts. Still it is common to set some limits on how much index insurance a farmer can purchase. Some estimates of value at risk may be used for this purpose. For the GRP programme, the farmer must certify the planted acreage used to calculate liability.

^{3.} The presentation here is for index insurance that would protect against losses due to insufficient rainfall. Martin, Barnett, and Coble, 2001, present an analogous index insurance that would protect against losses due to excessive rainfall.

more the contract resembles a "zero-one" contract where *Indemnity* equals zero or the full *Liability* depending on whether or not the *Realized Index < Index Trigger*.

Interest in index insurance

In the US, GRP has been controversial for a variety of reasons. Obviously, is it quite different from traditional insurance, and this raises legitimate concerns from the insurance industry. Traditional insurers find it difficult to understand and accept an insurance product where indemnities are not based on farm-level yield losses. Farmer interest has also been mixed. Not surprisingly, most GRP policies seem to be sold in areas where crop insurance sales agents are most familiar with GRP. In 2000, about 5.6 million acres were insured under GRP. That is relatively small percentage of the total insured acreage in the US. It is very difficult for GRP to compete with subsidized farm-level insurance that is now being offered at coverage levels of up to 85%.

The Ontario rainfall insurance product was fully subscribed in the first year (2000) that it was introduced. However, this is a limited pilot test of only 150 farmers and the product was introduced following a major drought. By 2001, 235 farmers had purchased about USD 5.5 million in liability with large payments of USD 1.9 million⁴.

For many developing countries, rainfall index insurance merits consideration (Hazell, 1992; Skees, Hazell, and Miranda, 1999; Varangis, Skees, and Barnett, 2002). While basis risk may generally be lower with area yield index insurance, there are several reasons why rainfall index insurance may be preferable in a developing country context. First, while it is not common to find statistics on area crop yields in developing countries, many countries have government meteorological agencies that have collected data on rainfall over long periods of time. Second, it is less costly to set up a system to measure rainfall for specific locations than to develop a reliable yield estimation procedure for small geographical areas. Finally, there is a strong correlation between rainfall and crop performance. Drought and excess rainfall are both a major source of risk for crop losses in many regions. Drought causes low yields and excess rainfall can cause either low yields or serious losses of yield and quality during harvest (Martin, Barnett, Coble, 2001). For irrigated farms, a drought can also cause increased irrigation costs.

The World Bank Group is now studying the feasibility of rainfall index insurance in a number of countries. The International Finance Corporation (IFC) of the World Bank Group may take a financial interest in making rainfall insurance offers in developing countries. The IFC is interested in supporting these innovations so that developing countries can participate in emerging weather markets. A specially funded project was also awarded to a working group within the World Bank. This project has investigated the feasibility of developing weather-based index insurance for four countries: Nicaragua, Morocco, Ethiopia and Tunisia. Since that project began, several of the professionals involved have begun similar investigations in Mexico and Argentina at the request of those governments. The governments of Turkey, Brazil, India and Mongolia have made similar requests. There is clearly a growing international interest in weather insurance.

Index contracts for disaster relief

As an alternative to a farm-level insurance programme, developing country governments could institute an index based disaster programme to offer protection against catastrophic events. An index based disaster programme could provide reinsurance to financial institutions or could be offered to

4. Personal email communication with Mr. Paul Cudmore of Agricorp, Canada, October 23, 2001.

individuals. Having a mechanism in place to handle the risk of catastrophic losses would open the door for the development of risk management mechanisms in the private sector.

Organizations involved in disaster relief may also have an interest in index contracts. An index based relief fund would overcome existing inefficiencies associated with time delays and misallocation of aid by providing a mechanism for quick and equitable disbursement of aid. Access to monetary resources rather than material goods should also improve the flexibility and effectiveness of relief services.

Alternatively, a relief organization could write index-based insurance contracts to micro-finance institutions or cooperatives to protect these groups from catastrophic losses resulting from natural disasters. Community groups often can provide formal or informal risk sharing among individuals for idiosyncratic risks, but may have insufficient resources to adequately manage losses when the entire group experiences a natural disaster. The index contact would provide cash compensation to these groups when a disaster occurs. The recipients could then make their own decisions about how to use and distribute the money among the group or community as they can make the best assessment about their needs. There are economic advantages to circulating cash in the economy relative to the adverse effects associated with the dumping of food aid and household items.

Basis risk

The phrase "basis risk" is most commonly heard in reference to commodity futures markets. In that context, "basis" is the difference between the futures market price for the commodity and the cash market price in a given location. Basis risk is variation over time in the relationship between the local cash price and the futures price. Consider a US example where farmers, in a specific locale choose to forward price their corn using the Chicago Board of Trade (CBOT) December futures contract. By selling December futures contracts, the farmers "lock in" a price at harvest that is conditional on an anticipated relationship between the futures market price and the local cash price. For instance, they may anticipate that when they harvest and sell their crop in November, the local cash price will be 20 cents per bushel lower than the November price on the December CBOT contract. If, however, local cash prices are much lower than expected relative to the CBOT, say, 35 cents per bushel below CBOT, the farmers do not get the price risk protection that they had hoped for. Their actual realized price, from the combined cash market and futures market activities, is 15 cents per bushel less than had been expected. Conversely, the local cash price may be much higher than expected relative to the CBOT price. For instance, the local cash price may be only 5 cents per bushel lower than the CBOT price. In this case, the farmers' actual realized price, from the combined cash market and futures market activities, is 15 cents per bushel more than had been expected.

Basis risk is a common phenomenon in futures markets. While futures contracts can still be effective price risk management tools for farmers, the existence of basis risk implies that farmers will not always receive the anticipated price. Sometimes it will be higher. Sometimes it will be lower. Because of basis risk, forward pricing in the futures market does not eliminate *all* exposure to price risk.

Basis risk also occurs in insurance. It occurs when an insured has a loss and does not receive an insurance payment sufficient to cover the loss (minus any deductible). It also occurs when an insured has a loss and receives a payment that exceeds the amount of loss.

Since indemnities are triggered by area yield shortfalls or weather events, an index insurance policyholder can experience a yield loss and not receive an indemnity. The policyholder may also not experience a farm yield loss and yet, receive an indemnity. The effectiveness of index insurance as a

risk management tool depends on how positively correlated farm yield losses are with the underlying area yield or weather index. In general, the more homogeneous the area, the lower the basis risk and the more effective area yield insurance will be as a farm yield risk management tool. Similarly, the more that a given weather index actually represents weather events on the farm, the more effective the index will be as farm yield risk management tool.

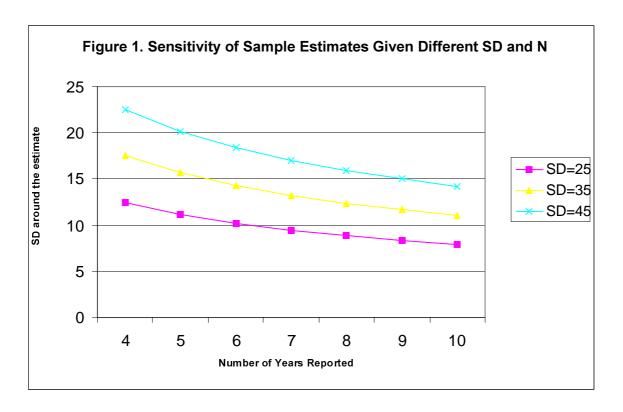
Recently, the academic literature on crop insurance has focused on basis risk that will naturally be part of any index insurance programme. But there has been little discussion of the basis risk inherent in farm-level insurance. To illustrate how basis risk is possible for farm-level multiple-peril insurance programmes, one need only consider the major underwriting mechanism used in the US to establish the insurable yields. Recall that in the US, the insurance yield (a measure of central tendency) is based on a simple 4-10 year average of historical yield data for the insurance unit. The "square root of n rule" states that, for normal distributions, an average estimates the true central tendency of the distribution with standard error calculated as:

Standard Error of the Estimate =
$$\frac{\sigma}{\sqrt{n}}$$

where σ is the standard deviation of the true distribution, and n is the size of the sample from which the average was calculated.

While crop yields are probably not normally distributed, the implications of this statistical formula would still hold for most reasonable assumptions of crop yield distributions. Namely, the higher (lower) the standard deviation of the true distribution, the higher (lower) will be the error in using an average as an estimate of central tendency. The higher (lower) the sample size, the lower (higher) will be the error in using an average as an estimate of central tendency.

Consider the error in using an average to estimate the central tendency of crop yields with a sample size of only 4 to 10 years of farm yield data. For simplicity, we assume a corn farm where yield is normally distributed with a mean of 100 bushels per acre. We consider values for σ of 25, 35, and 45 bushels per acre. Figure 1 presents the standard error of the estimate for different values of σ and n. Clearly, the higher the variability in yield, measured by σ , the higher the error in using a simple average as an estimate of central tendency. However, it is also striking how much higher the error is when using 4 years of data rather than 10 years.



If the standard deviation is 35 bushels per acre (which is a reasonable value for the US), using only 4 years of data to estimate the insurance yield will result in a standard error of 17 bushels per acre. Thus, while two thirds of the APH yields would be between 83 and 117 bushels per acre, there is a 33% chance that the calculated insurance yield will be less than 83 or more than 117 bushels per acre. Now consider a situation where, because of the error in using a simple average as an estimate of central tendency, the insurance yield is calculated as 120 bushels per acre when the true central tendency is only 100 bushels per acre. If the farmer selects an 85% coverage level (15% deductible) the trigger yield will be 102 bushels per acre, which is higher than the expected yield. While the farmer has been charged a premium rate based on a coverage level of 85%, in effect, the farmer has been given a coverage level over 100%. Due to the estimation error, this farmer could receive an insurance payment when the realized yield is at, or even slightly above, the central tendency.

Alternatively, if the insurance yield is estimated at 80 bushels per acre, 85% coverage will generate a trigger yield of 68 bushels per acre. While the farmer has been charged a premium rate based on a coverage level of 85%, in effect, the farmer has been given a coverage level of only 68%. If central tendency were estimated accurately, a yield loss in excess of 15 bushels per acre would trigger an insurance payment. Because of the estimation error, this farmer must have a yield loss in excess of 32 bushels per acre to receive an insurance payment.

Because of the error in estimating central tendency, it is possible for farmers to receive insurance payments when yield losses have not occurred. It is also possible for farmers to not receive payments when payable losses have occurred. Thus, basis risk occurs not only in index insurance but also in farm-level yield insurance.

Another type of basis risk results from the estimate of realized yield. Even with careful farm-level loss adjustment procedures, it is impossible to avoid errors in estimating the true realized yield. These errors can also result in under- and over-payments. Between the two sources of error, measuring

expected yields and measuring realized yields, farm-level crop insurance programmes also have significant basis risk.

Longer series of data are generally available for area yields or weather events than for farm yields. The standard deviation of area yields is also lower than that of farm yields. Since n is higher and σ is lower, the square root of n rule suggests that there will be less measurement error for area yield insurance than for farm yield insurance in estimating both the central tendency and the realization. Long series of weather data are also available, but it is not necessarily true that the standard deviation of weather measures will be less than that of farm yields.

Managing basis risk in index insurance contracts

Basis risk in index contracts can be dealt with through a variety of different design mechanisms. Of extreme importance is to recognize the role that well constructed index insurance contracts can play in removing much of the correlated yield risk. Once the 'big risk' is removed with effective use of index insurance contracts, any number of possibilities exists for removing the basis risk. Local groups and institutions should be able to pool independent risks and use index contracts to hedge against correlated losses from major events such as drought or earthquakes. Using index contracts to transfer the risk of correlated losses, private companies may find they can develop effective multiple peril crop insurance that pays for losses not covered by government facilitated index insurance.

Skees (2003) and Mahul (2002) press a bit harder in recognizing that index insurance contracts open the way for more effective pooling of independent risk via mutual insurance and/or rural finance entities. Weather index insurance could be sold through banks, farm cooperatives, input suppliers and micro-finance organizations, as well as being sold directly to farmers. Banks and rural finance institutions could purchase such insurance to protect their portfolios against defaults caused by severe weather events. Rural finance entities aggregate and pool risk. With index insurance contracts one can take advantage of such entities to become the means of mitigating basis risk via loans to farmers who have a loss and do not receive a payment from the index insurance. Similarly, input suppliers could be the purchasers of such insurance. Once financial institutions are able to shift correlated risk out of local areas with index insurance contracts, they would be in a better position to expand credit to farmers, at perhaps improved terms.

Summary of the relative advantages and disadvantages of index insurance

Index contracts offer numerous advantages over more traditional forms of farm-level, multiple-peril crop insurance. These advantages include:

- 1. *No moral hazard*: Moral hazard arises with traditional insurance when insured parties can alter their behaviour so as to increase the potential likelihood or magnitude of a loss. This is not possible with index insurance because the indemnity does not depend on the individual producer's realized yield.
- 2. No adverse selection: Adverse selection is misclassification problem caused by asymmetric information. If the potential insured has better information than the insurer about the potential likelihood or magnitude of a loss, the potential insured can use that information to self-select whether or not to purchase insurance. Those who are misclassified to their advantage will choose to purchase the insurance. Those who are misclassified to their disadvantage, will not. With index insurance products, insurers do not classify individual policyholders' exposures to risk. Further, the index is based on widely available information. So there are no informational asymmetries to be exploited. It is true that some will find index insurance

- products more attractive than others. However, unlike individualized insurance products, such self-selection will not affect the actuarial soundness of index insurance products.
- 3. Low administrative costs: Unlike farm-level, multiple-peril, crop insurance policies, index insurance products do not require costly on-farm inspections or claims adjustments. Nor is there a need to track individual farm yields or financial losses. Indemnities are paid solely on the realized value of the underlying index as measured by government agencies or other third parties.
- 4. Standardized and transparent structure: Index insurance policies can be sold in various denominations as simple certificates with a structure that is uniform across underlying indexes. The terms of the contracts would therefore be relatively easy for purchasers to understand.
- 5. Availability and negotiability: Since they are standardized and transparent, index insurance policies can easily be traded in secondary markets. Such markets would create liquidity and allow the policies to flow to where they are most highly valued. Individuals could buy or sell policies as the realization of the underlying index begins to unfold. Moreover, the contracts could be made available to a wide variety of parties, including farmers, agricultural lenders, traders, processors, input suppliers, shopkeepers, consumers, and agricultural workers.
- 6. Reinsurance function: Index insurance can be used to transfer the risk of widespread, correlated, agricultural production losses. Thus, it can be used as a mechanism to reinsure insurance company portfolios of farm-level insurance policies. Index insurance instruments allow farm-level insurers to transfer their exposure to undiversifiable, correlated, loss risk while retaining the residual risk that is idiosyncratic and diversifiable (Black, Barnett, Hu, 1999).

There are also challenges that must be addressed if index insurance markets are to be successful.

- 1. Basis risk: It is possible for index insurance policyholders to experience a loss and yet not receive an indemnity. Likewise, they may receive an indemnity when they have not experienced a loss. The frequency of these occurrences depends on the extent to which the insured's losses are positively correlated with the index. Without sufficient correlation, basis risk becomes too severe, and index insurance is not an effective risk management tool. Careful design of index insurance policy parameters (coverage period, trigger, measurement site, etc.) can help reduce basis risk.
- 2. Security and dissemination of measurements: The viability of index insurance depends critically on the underlying index being objectively and accurately measured. The index measurements must then be made widely available in a timely manner. Whether provided by governments or other third party sources, index measurements must be widely disseminated and secure from tampering.
- 3. *Precise actuarial modelling:* Insurers will not sell index insurance products unless they can understand the statistical properties of the underlying index. This requires both sufficient historical data on the index and actuarial models that use these data to predict the likelihood of various index measures.
- 4. *Education:* Index insurance policies are typically much simpler than traditional farm-level insurance policies. However, since the policies are significantly different than traditional

insurance policies, some education is generally required to help potential users assess whether or not index insurance instruments can provide them with effective risk management. Insurers and/or government agencies can help by providing training strategies and materials not only for farmers but also for other potential users such as bankers and agribusinesses.

- 5. *Marketing:* A marketing plan must be developed that addresses how, when, and where index insurance policies are to be sold. Also, the government and other involved institutions, must consider whether to allow secondary markets in index insurance instruments and, if so, how to facilitate and regulate those markets.
- 6. *Reinsurance*: In most transition economies, insurance companies do not have the financial resources to offer index insurance without adequate and affordable reinsurance. Effective arrangements must therefore be forged between local insurers, international reinsurers, local governments, and possibly international development organizations.

Conclusion

Index insurance is a different approach to insuring crop yields. A precondition for such insurance to work is that many farmers in the same location must be subjected to the same risk. When this is the case, index insurance has the potential to offer affordable and effective insurance for a large number of farmers. Such insurance requires a different way of thinking. It is possible to offer such contracts to anyone at risk when there is an area wide crop failure. Furthermore, unlike traditional insurance, there is no reason to place the same limits on the amount of liability an individual purchases.

As more sophisticated systems to measure events that cause widespread problems are developed (such as satellite imagery) it is possible that indexing major events will be more straight forward and accepted by the international capital markets. Under these conditions, it may become quite possible to offer insurance in countries where traditional reinsurers and primary providers would have previously never considered. Insurance is about trust. If the system to index a major event is reliable and trustworthy, there are truly new opportunities in the world to offer a wide array of index insurance products.

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PRE-CONDITIONS FOR SUCCESSFUL CONTRACT FARMING AND OTHER TRADE/CREDIT ARRANGEMENTS BETWEEN AGRIBUSINESS AND FARMERS

By Anthon Slangen

Abstract

Contract farming as a means of organising agricultural production has existed for many years. Major changes in consumption habits together with the appearance of fast-food outlets and supermarkets and the globalisation of the world trade in fresh and processed food provide today a main impetus for its rapid expansion. Moreover, interest in it continues to expand in economies that previously were governed by central planning and/or in countries where agricultural marketing has been liberalised and government commodity marketing boards have been closed down. In fact, state-administered instead of market-driven support services related with input supply, finance and marketing have mostly failed in these countries and small farmers are facing an environment that is increasingly dominated by private enterprises and international competition. This raises pressures on farm households to diversify into new agricultural commodities and ventures which exploit better their comparative advantages, while it imposes on them also a need to establish input/output linkages with agribusiness enterprises that are shaped to suit the interests of both. The Food and Agriculture Organization of the United Nations (FAO) has published a study with the purpose of providing guidance to sponsors of existing contract schemes to improve their organisation, management and operations and giving also advice to government officials who seek to promote this type of farm production. This presentation focuses on the main features and pre-conditions for successful contract farming, while it also briefly outlines other inter-linked trade/credit arrangements between agribusiness and farmers in the form commodity chains whereby vertical linkages are established between input supply, production, processing and marketing.

Introduction

Due to privatisation, market liberalisation, globalisation, and rapid expansion of multinational agribusiness there is a real danger that small-scale farmers in developing countries will find it increasingly difficult to compete in the market economy. Up to now government and donor development efforts to integrate them have not met with much success, largely because the necessary backward and forward market linkages are seldom in place. Contract farming, however, establishes these linkages by providing farm inputs and equipment, financial services as well as market outlets. It thus offers a feasible way in which smaller farmers can produce in a more efficient and competitive way by integrating them in commodity production/marketing chains. At the same time, it supplies agribusiness with a reliable source of raw materials, both in terms of quantity and quality.

Contract farming can be defined as an agreement between farmers and agribusiness firms to produce and deliver agricultural outputs under forward contracts, frequently at pre-set prices. The arrangement often involves that the agribusiness firm which purchases the commodity provides a minimum degree of production support to the farmer, for example by providing agricultural inputs such as improved seeds together with technical advisory services. On the other hand, the farmer commits himself to produce and deliver a specific commodity in defined quantities and qualities. Contract farming is widely used not only for perennial tree and other cash crops, but increasingly also for fruits and vegetables, poultry, pigs, dairy and fish products.

^{1.} Charles Eaton and Andrew W. Shepherd – "Contract farming: Partnership for growth", Rome, 2001.

Contract farming should be seen as a partnership between agribusiness and farmers and in order to be successful it requires a long-term commitment from both parties. Clear contracts and the honouring of contractual agreements are likely to produce durable relations between producers and traders and processors. Although contract farming can be beneficial for small farmers, the chosen business relationship should be always based on a commercial decision and cannot be imposed by governments and/or donor agencies as a development model. Figure 1 shows a hypothetical framework, which sets out the various aspects that must be considered when planning and implementing contract farming ventures.

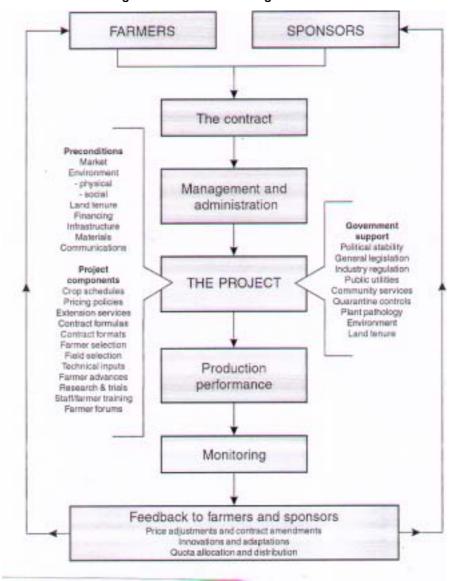


Figure 1. A contract farming framework

Source: Based on Eaton, C.S., "Contract Farming Structures and Management in Developing Nations", in D. Birch, G. Lawrence, R. Rickson and J. Goss (eds.), Australasian Food and Farming in a Globalised Economy: Recent Development and Future Prospects, Monash Publications in Geography: No. 50, Department of Geography and Environmental Science, Monash University, Melbourne, 1998.

Advantages and problems of contract farming

Although contract farming can have significant benefits both for farmers and agribusiness firms, together with these advantages come also problems. In the schematic overview below the advantages and problems of contract farming, both for farmers and sponsors, have been summarised. Sponsors can be individual agribusiness entrepreneurs, multinationals, small private traders or processors, government marketing agencies and farmer co-operatives.

Farmers

Advantages for farmers

- Inputs and production services are often supplied by the sponsor.
- This is usually done on credit whereby the sponsor provides advances in kind or cash to the farmer.
- Contract farming often introduces new technologies and enables farmers to acquire new skills.
- The price risk of farmers is often reduced as many contracts prefix prices in advance.
- Contract farming can open up new market outlets which would otherwise be unavailable to small farmers.

Problems faced by farmers

- Particularly when growing new crops, farmers face both the risks of production problems and eventual market failure.
- Inefficient management and marketing problems can mean that production quotas are manipulated so that not all contracted farm output is purchased.
- Sponsoring companies may be unreliable or even exploit their monopoly position.
- The staff of sponsoring organisations may be corrupt, particularly in the allocation of production quotas.
- Farmers may become indebted because of production problems and excessive loan advances.

Sponsors

Advantages for sponsors

- Contract farming of small producers is often politically more acceptable than, for example, estate production, while it may reduce also labour conflicts.
- Working with small farmers overcomes land constraints.
- Production is more reliable than open-market purchases and the sponsoring company faces less risk by not being responsible for the production.

• More consistent produce quality can be obtained than if purchases were made on the open market.

Problems faced by sponsors

- Contracted farmers may face land use problems due to a lack of security of tenure, thus
 jeopardising the sustainability of farm production and with that produce delivery in the
 long-term.
- Social and cultural constraints may affect the ability of the farmers to produce according to the specifications of the managers.
- Poor management and lack of consultation with farmers may lead to farmer discontent.
- Farmers may sell outside the contract (side selling or extra-contractual marketing), thereby reducing the throughput for the processing factory.
- Farmers may divert agricultural inputs supplied to them on credit to other purposes, thereby reducing the yields.

Key pre-conditions for successful contract farming

A primary pre-condition for any contract farming arrangement must be that it is likely to be profitable. Once having identified a potentially profitable market outlet, the sponsor should move on to assess whether this market can be effectively and profitably supplied by identified farmers in a specific location of a particular country. Essential pre-conditions have been classified under the following three main headings:

- A profitable market.
- An appropriate physical and social environment.
- Potential government support.

Main considerations under these headings are summarised below.

A profitable market

The sponsor

- Must have identified a market for the planned production.
- Should be sure that such a market can be supplied profitably on a long-term basis.

The farmer

- Must find potential contract returns more attractive than returns from alternative activities and consider the level of risk acceptable.
- Must have confidence in potential returns demonstrated on the basis of realistic yield estimates.

The physical and social environments

Main factors

- The physical environment must be suitable in general, and, in particular, for the commodity to be produced.
- Public utilities and communications must be appropriate both for farming, such as feeder roads, and subsequent processing activities, *e.g.* water and electricity supply.
- Land availability and tenure contracted farmers require unrestricted access to the land that they farm.
- Input availability supply of required agricultural inputs needs to be assured.
- Social considerations cultural attitudes and practices should not conflict with farmers' obligations under the contract and managers must have a full understanding of local practices.

Government support

An enabling and regulatory role

- Suitable contract law and other legislation are required as well as an effective operating legal system.
- Governments need to be aware of possible unintended consequences of regulations and should avoid the tendency to over-regulate.
- Governments should support the putting in place of essential support services such as research and agricultural extension.

The developmental role

• Governments can take steps to bring together agribusiness and small farmers, while they may want to strengthen the bargaining position of small farmers by supporting the formation of effective and autonomous farmers' organisations.

Types of contract farming

The FAO publication distinguishes five broad models of contract farming, depending on the type of commodity, the type of sponsor, and the type of relationship between farmers and sponsor.

The centralised model

- Involves a central processing unit buying and taking delivery of raw materials from a large number of small farmers.
- Is used for tree crops, annual crops, poultry, and dairy products which require a high degree of processing, such as tea or vegetables for canning or freezing.

- Presents a vertical integration with specific production quota allocations and tight quality control.
- Sponsor's involvement in the production varies from minimal agricultural input provision to the opposite extreme whereby the sponsor takes control of most production aspects.

The nucleus estate model

- Is a variation of the centralised model whereby the sponsor in addition to the production output of out-grower farmers also manages its own central estate or plantation.
- The central estate is usually used to guarantee a minimum throughput for the processing plant, but is sometimes used only for research or breeding purposes.
- Is often used in conjunction with farmer resettlement or transmigration schemes.
- Involves a significant provision of agricultural inputs and materials as well as management services.

The multipartite model

- May involve a variety of organisations, frequently including government statutory bodies.
- Can develop from the centralised or nucleus estate models, *e.g.* through the organisation of farmers into co-operatives or the involvement of a financial institution.

The informal model

- Is operated by individual entrepreneurs or small companies.
- Involves informal production contracts, usually decided on a seasonal basis.
- Often requires essential government support services such as research and extension.
- Involves greater risks of side selling or extra-contractual marketing by the farmers.

The intermediary model

- Involves sponsors who contract out their linkages with farmers to intermediaries.
- There is a danger that the sponsor loses control of the production volume and quality as well as of the prices which the sub-contractors pay to the farmers.

An example of a joint venture contract farming project is presented in Figure 2.

International company
(Responsible for technology)

Joint-venture
(Responsible for processing and manufacturing)

County branches
(Responsible for management)

THE PROJECT

Village committees
(Responsible for farmer selection)

Farmers

Figure 2. The multipartite model: A joint-venture contract farming project in China

Contracts

A main feature of contract farming is their legal framework. The FAO publication presents in its annexes a number of examples of both simple and more complicated contracts, whereby the second ones often stipulate different grade specifications and related buying prices. The summary below presents some aspects of the legal framework, the basis of the agreement (The Formula), the way the contract is presented (The Format), and detailed specifications of a contract.

The legal framework

- The contract should comply with the minimum legal requirements of the country.
- Local practices must be taken into account.
- Arrangements for arbitration must be addressed.

The formula of contracts can be based on...

- Market specifications: only quality standards are specified and input provision is often minimal.
- Resource specifications, whereby details of production, *e.g.* varieties, are specified. Agricultural input supply is often limited and income guarantees are minimal.
- Management and income specifications, which are the most detailed contracts and may involve predetermined pricing structures, farm input advances, technical support and managerial production control.
- Land ownership and land tenure specifications, which are a variation of the management and income model with additional clauses relating to land tenure. This formula is usually used when the sponsor leases land to farmers.

The format

- Formal agreements are legally endorsed contracts which closely detail the respective obligations of each party.
- Simple registrations are the most common format which the farmer signs to indicate that he/she has understood the terms of the agreement and wishes a contract to be reserved for him/her.
- Verbal agreements are frequently used in the case of the informal model, but sometimes also by corporate sponsors.

The specifications may include...

- The duration of the contract.
- The quality standards required by the sponsor/buyer.
- The farmer's production quota.
- The cultivation practices required by the sponsor.
- The arrangements for delivery of the crop.
- The way in which the price is to be calculated, using...
 - Prices fixed at the beginning of each season.

- Flexible prices based on world or local market prices.
- Spot-market prices.
- Consignment prices, when prices paid to the farmer are not known until the raw or processed product has been sold.
- Split pricing, when the farmer upon delivery receives an agreed base price followed by a final price after the sponsor has sold the product.
- Procedures for paying farmers and recovering loan advances.
- Arrangements of charging fees *e.g.* for insurance coverage.

Management of contract farming schemes

Poor management can cause that potentially promising contract farming ventures fail. Some of the aspects of main management decisions are presented below.

Production co-ordination requires advance...

- Identification of areas that are suitable for production and which have easy access to transport and other support services.
- Selection of farmers: Criteria will vary according to the crop and the specifications of the contractual relationship.
- Formation of farmer groups: While not essential, such groups can be valuable for the provision of extension services, the supply of inputs, and crop collection and delivery.
- Arrangements for the ordering and supply of inputs and provision of production credit.
- Planning of logistical support for input supply and output delivery.
- Arrangements for purchasing the product in accordance with the contract, in particular to ensure that farmers can verify weights and qualities.

Managing the agronomy involves...

- Field extension services: Staff must be familiar with the product involved and, preferably, have local knowledge.
- Transfer of technology with an awareness of adaptation problems that smallholders may face.
- The use of cropping schedules to ensure the correct timing and sequencing of all contractual cultivation practices.
- Training of extension staff and farmers, and research on suitable varieties and cultivation practices.

The FAO publication mentions an example in China of a large joint venture, involving over 23 000 farmers, which ceased to operate after seven years because of the failure of the management to organise and supervise appropriate harvesting and grading practices. It is important, therefore, that managers not only establish competent field extension teams, but also plan effective production schedules. During the production season, supervision by the extension staff of all cultivation activities is essential, in particular, to be sure that recommended practices are compatible with the farmers' ability to implement them. The deployment and number of field extension staff may vary considerably with the degree of their responsibility depending on the project's structure, whereas the ratio of extension workers to farmers mainly depends on the type of venture.

Farmer-management relations are maintained and strengthened by paying attention to...

- Establishing farmer-management forums, which provide the basis for regular dialogue between management and farmers or their representatives with the purpose of co-ordination and negotiation. It is essential to avoid serious problems caused by a lack of effective communication.
- Male-female relationships, which can be adversely affected by contract farming through...
 - Contracts with men for work that is largely carried out by women.
 - Conflict between contract requirements and priorities of women regarding subsistence farming.
- Participation in community affairs, which helps to create a positive atmosphere of partnership. This can include both participation in social events and provision by the sponsor of small-scale social infrastructure.

Contract farming may be a catalyst for antagonism between men and women, which will affect both productivity and farmer morale. In fact, contracts in many countries are automatically made with male family heads, although in practice females often do the bulk of the work. In this way, the constraints of the actual workers may not be recognised by management or the real workers may not receive a just reward for their efforts.

Monitoring produce quality and yields

Management should closely monitor the performance of contract farming arrangements to ensure that the objectives are achieved and no damaging impact occurs on the environment.

- Deterioration of quality can have far-reaching consequences for any contract farming venture, while quantity shortfalls can reduce processing efficiency and jeopardise markets.
- Quality controls should be carried out before, during and immediately after harvest.
- Remedial measures may have to be implemented prior to harvest, in case the farmer fails to carry out recommended cultivation practices.
- Selling extra-contractual production from other farmers by contracted farmers must be avoided.

- Techniques used for estimating yields should be based on visual observation or statistical analysis.
- Estimates will provide yield indicators, which will enable to identify products that are infiltrated from outside.
- Production matrices represent a way of identifying key production components and post-harvest performance.

Monitoring human resources

- The performance of human resources in contract farming schemes, *i.e.* the management and field staff of the sponsor as well as the farmers need to be closely monitored.
- The advice of extension staff should be evaluated by paying visits to farmers' fields at least twice a year, so that management can see at first hand the relationship of extension workers with farmers and their knowledge of the crop.
- Strict monitoring of the crop at all stages may lead to identification of factors that cause poor production.
- Extension staff will need to carry out routine visits to all farms, of which the frequency will be determined by the nature of the crop.
- All field activities and the dates, should be documented. Where possible, farmers should be encouraged to keep their own farm records.

Protecting the environment

- Full consultation between farmers, extension staff and management is essential in selecting suitable land in order to avoid environmental degradation.
- While management is usually interested only in the contract commodity, it must be recognised that farmers are concerned to secure their overall farming system.
- There must be a willingness on the part of managers to learn from local experience.

Environmental degeneration as a result of any form of farming can become a major problem if it is not controlled in time. The cultivation of crops on thin soils on steep terraces for instance causes high levels of erosion and the FAO publication mentions that 25% of the crops in one contract farming venture in China were grown on land totally unsuitable for intense cultivation.

Other inter-linked trade/credit arrangements

The reason for both farmers and market operators to engage themselves in potential forms of input/output linkages is that they prefer the security of input supply and output market outlets to the flexibility of spot sales and purchases. In addition, farmers expect from linkages finance and technical advice, while the extra motivations for traders and processors may be the possibility to specify in advance the produce qualifications, the access to cheaper raw materials, a lack of sufficient land, and an avoidance of problems with governments and labour. Examples of non-financial commercial

market operators who may be interested in establishing inter-linked trade/credit arrangements with small farmers are:

- Agricultural input/equipment dealers, provided that they have a strong presence in rural areas and are in close contact with farmers, may have good reasons to sell their goods on credit to farmers. Their close contacts with and good local knowledge allow them to supervise their clients at relatively low costs. In addition to seasonal production and short-term supplier credit they may provide also technical advice, after-sale maintenance and repair services as well as keep stocks of equipment spare parts. Still, however, providing credit is not their main business and normally they are not interested in getting involved in output trading. For that reason they prefer to sell their goods on cash by offering price discounts.
- Output traders and processors such as rice millers and cotton ginning firms in order to buy produce from local farmers are used to finance seasonal inputs, as long as they are able to recover their advances by deducting the loan repayments from the output sales proceeds of small farmers. These inter-linked trade/credit arrangements represent low costs of loan recovery and credit risks on the part of these market operators as compared with banks, while at the same time they reduce also the output marketing risks of small farmers. This last advantage occurs, however, often at the cost of lower output prices paid to farmers. Reliable delivery of outputs by farmers and not the provision of credit constitutes, however, the main business interest of these market operators. With increasing market liberalisation and when there exists no processing monopoly or the produce has different end uses, such arrangements are more likely to fail due to the practice of side selling by farmers and their resulting loan default. In the Philippines a private rural bank together with small-scale farmers has taken the initiative of financing a joint venture shareholding rice milling and marketing company in which farmer shareholders receive bank loans for inputs as well as for equipment and whereby loan repayments are deducted from their paddy sales receipts to the company. In this interesting model farmers have been encouraged to gradually purchase company shares and to buy out the bank, thus converting the joint venture corporation into a fully-member owned and well-managed farmers co-operative.
- Lack of finance has emerged as a significant constraint to the emergence of a dynamic private sector able to take over the bulk of trading and storage functions from earlier government agricultural marketing boards in developing countries which have liberalised their markets. Particularly, in the case of food crops, lack of finance places then the burden of storage on farmers, who are not always well equipped nor have sufficient liquidity to store their produce efficiently and for longer periods. The consequence of this has been high levels of inter-seasonal price instability, to the detriment of producers and consumers alike. Obtaining finance against stocks of a wide range of commodities in bonded warehouses is quite common in much of the world and is in itself not a new concept. So-called warehouse of inventory credit may be one way of overcoming marketing finance constraints and it is widely used for agricultural produce in Latin America and in some Asian countries such as in India and the Philippines. For countries which have little experience in commercial storekeeping the best approach may be to test out a 3-party arrangement between the borrower, an interested bank and a warehouse operator. The borrower can be a miller, a wholesaler, a trader, a large farmer or a group of small farmers. On the other hand, the warehouse operator should be an organisation which is specialised in this field and does not trade itself in the commodity stored. Inventory credit should be only set up if it presents a profitable business operation, although outside assistance may be provided in order to promote the concept, to assist with the drafting of the necessary legislation, and to support the development of essential market information and grading systems. It can be used for the

procurement and storage of durable agricultural produce, including import and export commodities as well as domestic food and feed crops, in particular grains which are subject to seasonal gluts. A borrower would negotiate a line of credit from a bank, to be made available against the presentation of a warehouse receipt. At harvest time, a trader can deposit grain at the warehouse as security for a bank loan, which in turn can be used to purchase further produce, which itself can be pledged for a further loan. When market prices during the season have sufficiently risen, the trader repays the bank as well as pays the required warehouse charges, after which the relevant quantity of stored grain can be withdrawn for subsequent sale on the market. In case the borrower does not repay the loan by the due date, the bank has the right to seize the grain and to sell it to a third party. In general, inventory credit is a significant step in the modernisation of agricultural marketing systems in a country.

Integration of credit with marketing is a powerful tool to resolve the conventional loan collateral constraints that small farmers with regard to banks. It is widely used to advance seasonal agricultural inputs in kind to farmers by traders, commodity marketing boards, marketing co-operatives as well as in contract farming schemes. Its success, however, depends on the existence of a single marketing channel system for the specific commodity. Today, with the exception of a limited number of perishable crops which require specialised processing on a large scale, increased competition as a result of market liberalisation and globalisation is, however, the general rule. This has made traditional inter-linked trade/credit arrangements less feasible, giving way to new forms of contract farming, warehouse inventory credit, and future markets.

INNOVATIONS IN MICRO-FINANCE IN SOUTH-EAST ASIA

By Gilberto M. Llanto and Ryu Fukui¹

Abstract

The recent experience in micro-finance of developing countries, e.g., Bolivia, Bangladesh, Indonesia and the Philippines to name a few, has shown its significant function in creating access to finance services by the poor. Access to finance services provides critical investment opportunities for the poor who have been traditionally shut out of financial markets. Access to finance services provide poor households the liquidity for consumption smoothing when confronted with economic and social shocks, e.g., sudden sickness in the household, crop failure. This paper describes some emerging innovations in micro-finance observed in south-east Asian micro-finance markets that make it possible for micro-finance institutions (MFIs) to reach a greater number of poor households on a sustainable basis. It discusses the nature, importance and types of innovations. Innovations help reduce the MFIs' transaction costs and risks. They also make it possible for poor households to satisfy their investment and consumption smoothing requirements. The paper draws some lessons from the experience with innovations and makes a case for government's important role in ensuring the proper functioning of markets. It points out government's pivotal role in system innovation because of the likelihood of its under-or-slow production by the private sector. MFIs have a clear advantage in process and product innovation to meet the requirements of poor clients. Thus, they should be given room in doing this. Innovations arise in competitive conditions as MFIs try to tackle the challenge of developing products and services suitable to their clientele, of expanding and maintaining market shares. This role includes the installation of an appropriate regulatory and supervisory framework for MFIs, promoting a competition policy and providing an environment conducive to the commercialization of micro-finance and to the rise of institutions that support the micro-finance industry, e.g., credit bureau, micro-finance trade associations and networks.

Introduction

The recent experience of developing countries, *e.g.*, Bolivia, Bangladesh, Indonesia and the Philippines to name a few, in micro-finance has shown its significant function in creating access to finance services by the poor. Access to finance services provides critical investment opportunities for the poor who have been traditionally shut out of financial markets. Access to finance services provide poor households the liquidity for consumption smoothing when confronted with economic and social shocks, *e.g.*, sudden sickness in the household, crop failure. Thus, micro-finance provides poor households not only opportunities to make investments; it also plays a welfare-enhancing role. Agosin (1999) asserts that finance allows economic agents to make investments that are larger than their availability of capital². In the case of poor households without neither any marketable asset nor capital, micro-finance takes on a far more crucial role than it has for non-poor households.

^{1.} Gilberto M. Llanto is Vice-President, Philippine Institute for Development Studies and Research Fellow, Rural Development Consortium, University of California, Berkeley. USA; and Ryu Fukui is Deputy Director General, Development Bank of Japan.

^{2.} Agosin (1999) provides a comprehensive analysis of the role of financial intermediation in development.

On the other hand, the Asian Development Bank (2000) stated that micro-finance institutions (MFIs) have indeed brought the poor, particularly poor women, into the formal financial system and enabled them to access credit and to accumulate small savings in financial assets, reducing the households' poverty. However, there is general agreement among researchers and practitioners that the poorest of the poor are yet to benefit from micro-finance programmes in most countries partly because most MFIs do not offer products and services that are attractive to this category³. There is a growing literature on whether micro-finance reaches the poorest of the poor (Gulli 1998; Hulme and Mosley 1996; Buckley 1997; Rogaly 1996). A recent study by Navajas and others (1998) found out that five micro-finance organizations in Bolivia most often reached not the poorest of the poor but rather those just above and just below the poverty line. Navajas and others (1998) conjecture that most micro-finance organizations will probably serve this niche. An interesting question is whether it would be possible for MFIs to reach the poorest of the poor through innovative products and services and not compromise their viability. While there is no easy answer to this question, certainly the challenge is there for the MFIs to take in the future⁴.

This paper describes some emerging innovations in micro-finance observed in south-east Asian micro-finance markets that make it possible for micro-finance institutions (MFIs) to reach a greater number of poor households on a sustainable basis. Section 2 briefly discusses the nature, importance and types of innovations. It points out government's pivotal role in system innovation because of the likelihood of its under-or-slow production by the private sector. MFIs have a clear advantage in process and product innovation to meet the requirements of poor clients. Thus, they should be given room in doing this. Section 3 discusses three innovations corresponding to the main financial products provided by MFIs to their clients, namely: (a) model credit union building and branding (Philippines); (b) micro-insurance for the poor (Philippines); and (c) innovation in savings mobilization (Indonesia). Based on available information, it seems that the innovations help reduce the MFIs' transaction costs and risks. They also make it possible for poor households to satisfy their investment and consumption smoothing requirements. The final section draws some lessons from the three innovations and makes a case for government's important role in ensuring the proper functioning of markets. Innovations arise in competitive conditions as MFIs try to tackle the challenge of developing products and services suitable to their clientele, of expanding and maintaining market shares. This role includes the installation of an appropriate regulatory and supervisory framework for MFIs, promoting a competition policy and providing an environment conducive to the commercialization of micro-finance and to the rise of institutions that support the micro-finance industry, e.g., credit bureau, micro-finance trade associations and networks.

The nature, importance and types of innovations

We may understand an innovation as a production technology developed by the MFI that produces a product or service for poor clients at the least cost possible⁵. It could be a new way of screening and lending to clients that surmount problems of information and dispersal of clients over a geographic area, *e.g.* village banking. An innovation could be a product that meets the risk-management requirement of poor people, *e.g.*, micro-insurance or that enables the poor to smooth

202

^{3.} Asian Development Bank (2000) quoting Hulme, D. and P. Mosley (1996).

^{4.} Navajas and others (1998) indicate a contrary viewpoint. They maintain that the empirical results show the limits of microcredits for the poorest of the poor and that there is a need for more scrutiny of funds allocated for loans to the poorest. Referring to the research of Mosley and Hume (1998) and Morduch (1998), they state that even when microcredit does reach the poor, it may not increase incomes as much as smooth consumption and diversify income.

^{5.} See Gonzalez-Vega.

their consumption and to create financial assets, *e.g.*, micro-savings. Lariviere and Martin (1998) characterize innovations in micro-finance by any changes in the banking technology, the type of financial services offered, the strategic behaviour of the institution, the institutional arrangement or the structure of incentives that result in improved viability and/or outreach.

It is well-known that formal financial markets are notorious for shutting out poor people from accessing much-needed finance products and services. Informal credit markets have filled the gap providing credit to small scale borrowers. The recent development of micro-finance in developing countries has, thus, spelled hope for million of poor households as they find a better alternative to the traditional moneylender and other informal sources of credit. In this light, the emergence of innovations in micro-finance markets has created the possibility of reaching poorer households that have not yet benefited from micro-finance programmes according to the ADB (2000)⁶. Innovative products and services could, thus, increase the overall impact of micro-finance on poverty reduction. However, the challenge to the MFI in the words of Lariviere and Martin (1998) is to find ways to increase access for a significant number of poor and micro-entrepreneurs to financial services without destabilizing fragile financial markets or compromising the development of viable financial institutions.

Von Pischke (1991) spells out the importance of innovations in financial markets: they create additional value because of the reduction in transaction costs of access to financial services⁷. This directly benefits clients, especially the small-scale clients who have been excluded from the traditional, mainstream financial system for a number of reasons. Buchenau (1999) pointed out that those clients would have the possibility of making larger investments that improve their income and economic capacity. Financial institutions also benefit from innovations by reducing their transaction costs and improving the institution's competitiveness⁸. Thus, innovations contribute to expand the frontiers of finance as financial institution and clients find effective ways of contracting.

Lariviere and Martin (1998) identify five categories of innovations in the area of rural micro-finance: technological innovations, product innovations, strategic innovations, institutional arrangement innovations and donor-incentive innovations. *Technological innovations* refer to improved technologies used in delivering financial services. Examples are solidarity group lending, village banking, repayment incentive schemes such as peer group monitoring, incentives for the borrower to repay through rebates and progressive lending. *Product innovations* refer to the financial services offered to individuals and groups. Examples are product mixes combining savings and credit services; farm and non-farm credit. *Strategic innovations* refer to strategies followed by MFIs to develop their clientele. Examples are risk information systems among MFIs, strategic planning for market development. *Institutional arrangement innovations* refer to changing legal status and the institutional arrangements to improve MFI performance. Examples are NGO transformation into a formal financial institution, downscaling strategy of commercial banks, developing new financial legislation adapted to the circumstances of MFIs like NGOs, credit unions. Donor incentive innovations refer to those mechanisms that are available to donors to improve the performance of MFIs. Examples are design features to improve the MFIs' outreach and viability.

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^{6.} Lariviere and Martin (1998) note that there is a substantial body of literature on both micro-finance and the theory of innovation, referring to Kuznets (1966), Ruttan and Hayami (1984) on the theory of innovation and the work of Ohio State University and CGAP on micro-finance. However, little has been said to date on rural financial innovations.

^{7.} Von Pischke (1991).

^{8.} Buchenau (1999).

Buchenau (2003) has a narrower characterization of innovations focusing on innovations in financial services. He categorizes two types of innovations in financial services: (i) completely new products which match the characteristics of intended users, and (ii) improvements or refinements in the procedures used to deliver the services, or to design contracts and to achieve their enforcement. Agosin (1999), citing work by McGuire and Conroy, distinguishes three levels of financial innovation: (i) *system innovation* where new institutions tailored to deal with unmet needs are created or allowed to emerge, (ii) *process innovation*, the creation of new technologies for providing financial services, and (iii) *product innovation*, the supply of new financial products. An important distinction made by Agosin is that governments must concentrate on the first type of innovation because of the likelihood that the private sector will under-produce these innovations. Systemic innovation may arise but this may take time; the process may be lengthy and tedious, hence, there is a role for government to foster it.

We do not wish to belabour the different distinctions or types of innovations discussed by these authors. Our interest is more simple and immediate: to direct the policy maker's and the reader's attention to the need to foster financial innovations in micro-finance markets in order to reach poorer members of society without endangering the viability of micro-finance institutions. Providing an appropriate regulatory framework for MFIs, ensuring the proper functioning of markets through competition policy and institutions that strengthen the market orientation of micro-finance - this role properly belongs to policy makers and governments.

Emerging innovations

In general, subsidized credit programmes of governments in developing countries have failed to achieve their much-flaunted objective of providing access to credit by small scale borrowers such as micro-entrepreneurs, poor households¹¹. One view is that subsidized credit programmes seem to have been addressed to the symptoms rather than the causes of inadequate rural financial intermediation.¹² Various studies have shown they are flawed attempts to address a perennial problem of small scale clients, especially the poor. Micro-finance initiated and developed by credit-granting NGOs and later on picked up by formal financial institutions such as rural banks has filled the gap to a great extent. An important element in the development of micro-finance is the prowess and skill of MFIs in innovating technologies, products, procedures and institutions. This section reports on three such innovations.

Model credit union building and branding

The potential of credit unions for micro-finance has yet to be realized. Unfortunately, this potential has been ignored because "they are seen as failed models, a legacy of the production credit programmes of the 1970s and 1980s, when international donors such as the US Agency for International Development (USAID) used credit unions as channels for credit to small farmers" (Richardson and Lennon 2001). Misguided operating policies and procedures cast borrowing as more important than saving. Dependence on external capital brought many to the verge of collapse when the donor spigot was turned off (ibid). However, efforts by the World Council of Credit

^{9.} McGuire, P. and J. Conroy (1999).

^{10.} Agosin though points out that while governments can foster financial innovations, not all of them especially those in developing countries may have the capability to do it.

^{11.} Various studies, *e.g.*, Yaron (1994); Yaron and others (1997); and Neri and Llanto (1985); Llanto and others (1999) on the Philippine experience, have documented the failure of subsidized credit programmes and the huge fiscal costs they entailed.

^{12.} Sharma (2000).

Unions (WOCCU)¹³ in the 1980s to revitalize credit unions around the globe have apparently paid off. Richardson and Lennon (ibid.) report on WOCCU's methodology that has revolutionized credit unions. The result was the transformation of credit unions into commercially viable micro-finance institutions (MFIs) that often reach many low- and middle-income clients. They offer a broader mix of financial products and services at more favourable interest rates than do many of the leading micro-finance nongovernmental organizations (NGOs) around the world.

The new methodology has ten linked components¹⁴:

- Accounting and reporting transparency.
- Financial discipline and prudential standards.
- Operating efficiency.
- Financial restructuring.
- Physical image enhancement.
- Savings mobilization.
- Product diversification.
- Aggressive market penetration and expansion of new market niches.
- PEARLS monitoring system.
- Stakeholder equilibrium.

The first five components are used to "put the house in order" so that members/clients will have trust and confidence in the MFI. Savings mobilization is mainly a function of attractive interest rates and trust. Successful savings mobilization requires the creation of trust and provision of adequate returns to savings. Aggressive market penetration and the expansion of new market niches becomes possible by providing a broad and diverse selection of competitively priced products and services that reach out to different segments of the population.

We report the successful efforts of a WOCCU project, the Credit Union Empowerment and Strengthening (CUES) Project in applying this methodology to a group of credit unions in Mindanao in Southern Philippines.

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WOCCU is the largest of several international credit union apex organizations in the world whose purpose is to provide advocacy, technology, and development services to its members. At year-end 2000, WOCCU represented more than 108 million members from 36 000 credit unions throughout 91 countries of the world with total assets exceeding USD 536 billion (Richardson and Lennon 2001).

^{14.} This draws on Richardson and Lennon (2001).

Credit Union Empowerment and Strengthening Project¹⁵

The Credit Union Empowerment and Strengthening Project is a project of the World Council of Credit Unions (WOCCU). It was implemented in 1997-2002 in Mindanao and it was so successful that it is now in its second phase (2003-2005). At present, it is working with 16 partner cooperatives in Mindanao. The Project will expand its technical assistance to 29 more cooperatives from the Visayas and cooperatives in conflict-prone areas in Mindanao. The expansion programme in the Visayas is being implemented in partnership with a cooperative network.

CUES-Philippines transfers micro-finance technologies to partner cooperatives through two approaches: (a) model credit union building and (b) savings and credit with education. The Savings and Credit with Education (SCWE) programme is an integrated financial and education delivery system¹⁶. It seeks to provide poor rural women access to financial services. It provides non-formal education on the formation of savings and credit associations, among others. Model Credit Union Building (MCUB) consists of the following: credit union institutional strengthening, savings mobilization and marketing focus, credit administration, safety and soundness and short-term technical assistance. The characteristics of a model credit union are:

- Follows good business sense in operations.
- Is a savings institution.
- Does not depend on subsidized international and government loans.
- Has adequate institutional capital.
- Offers competitive market pricing.
- Is a professional financial institution.
- Has capable and well-trained employees.

Building a model credit union means imposing financial discipline in the management and operation of the organization. Box 1 illustrates the different measures that the model building project prescribes so that a credit union may become an efficient credit intermediary.

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^{15.} This is from Llanto (2003).

^{16.} SCWE programme is a trademark of Freedom From Hunger (FFH), an international development organization promoting "self-help" to address the incidence of chronic hunger and malnutrition. It has projects in Africa, Asia, Latin America, North America and Europe. FFH is based in Davis, California.

Box 1. Financial discipline in the model credit union of CUES-Philippines

Delinquency control

- portfolio at risk method
- delinquency goal of below 5%

Control of non-earning assets

- maximize earning assets at 95%
- non-earning assets goal below 5%

Capital accumulation

- raise coop capital to 10% of total assets
- maintain adequate reserves

Provisions

- 100% loan loss provisioning for over 12 months delinquent
- 35% loan loss provisioning for 1-12 months delinquent

Earnings improvement

- establish interest rates to adequately cover all costs and provisions
- limit costs while improving collection

Liquidity

- maintain liquidity at minimum of 15% of deposits and withdrawable liabilities
- asset liability management

The actual experience with building model credit unions shows the significant impact of market-based policies and practices of CUES-Philippines. Table 1 shows the results of model credit union building among partner cooperatives in Mindanao.

Table 1. Impact of model credit union building

Measure	Dec 1998	Dec 1999	Dec 2000	Dec 2001	Dec 2002	Mar 2003
Delinquency ratio (%)	63.00	19.64	12.36	10.53	7.05	7.07
Non-earning assets (%)	20.44	28.64	18.55	12.65	9.69	9.27
Net institutional capital (%)	-16.89	2.02	4.18	7.63	10.44	11.38
Provisions for loans >12	10.32	44.76	100.00	100.00	100.00	100.00
months (%)						
Provisions for loans 1-12	0.00	60.90	100.00	83.05	99.83	100.00
months (%)						
Net income (%)	2.10	4.09	5.10	5.95	6.88	5.24
Net operating expenses (%)	8.12	9.92	10.62	10.54	9.83	9.68
Liquidity (%)	23.97	31.68	36.33	30.83	34.03	38.09
Savings (%)	35.11	47.97	54.48	57.47	57.65	58.78
External credit (%)	7.03	2.89	1.52	0.76	0.50	0.47

Source: CUES-Philippines.

Two things stand out in the CUES' approach: (i) emphasis on savings mobilization and (ii) strict credit discipline and adherence to performance standards. An innovation introduced by CUES Philippines is the cooperative branding strategy. It is the first Asian country to adopt it. The brand name is Finance Organizations Achieving Certified Credit Union Standards or FOCCUS. A coop that is certified FOCCUS means it has achieved certain international prudential financial ratios geared towards providing members the best financial service. Similar movement-wide branding strategy is implemented in the US, Poland, Australia, Central and Latin America. To achieve a FOCCUS brand, a cooperative must adhere to a set of prescribed ratios and other operational criteria. The introduction of

cooperative branding has given a big boost to the objective of maintaining the soundness of the financial condition of the cooperative, thereby generating trust and confidence in the cooperative. The key international prudential standards adopted by FOCCUS are shown in Table 2.

Table 2. Key international prudential standards in FOCCUS brand

FOCCUS Ratios	Silver	Gold	Platinum
LLP > 12 months	100%	100%	100%
LLP 1-12 months	100%	100%	100%
Solvency	-	> or = 110%	> or = 110%
Net loans	> or $= 60%$	70-80%	70-80%
Savings deposits	> or = 50%	60-80%	70-80%
Net institutional credit	> or = 4%	> or = 8%	> or = 10%
Total delinquency	< or = 15%	< or = 10%	< or = 5%
Non earning assets	Decreasing	< or = 10%	< or = 7%
Member shares	-	> or = inflation	> or = inflation
Operating expenses	< or = 12%	< or = 10%	< or = 10%
Liquidity	> or = 15%	> or = 15%	> or = 15%
Membership	> or = 5%	> or = 5%	> or = 5%
Total assets	> or = inflation	> or = inflation	> or = inflation

Source: CUES-Philippines

Note: LLP means "loan loss provision."

Micro-insurance: CARD Mutual Benefit Association

Low income clients face a range of risks such as death risks, health risks and property risks that in principle are insurable. Brown and Churchill (2000) observe that low-income households are highly vulnerable to economic shocks caused by various events, *e.g.*, the death of a family member, illness, destruction of a valuable asset or a disabling injury. The formal insurance system has developed insurance products to deal with those risks but ironically, low income clients, the majority of the population, have been excluded from that system. Various reasons explain this: the very low incomes of those types of clients, the seasonal nature of their jobs, severe information problems, high transactions costs, etc¹⁷. In a study for the International Labour Organisation (ILO), Barbin and others remarked that a major reason is that insurance is one of the most difficult of all financial services to provide. Insurers face risks getting the prices wrong, fraud, moral hazard and adverse selection. Those who provide insurance face the challenge of trying to cover their costs and make a profit through the sale of relatively low-cost insurance policies.

Thus, the development of micro-insurance products for low income clients is a very significant innovation in micro-finance markets. MFIs have developed various types of insurance products for their low income clientele and mechanisms for dealing with problems of fraud, moral hazard and adverse selection. A survey of 32 MFIs, cooperatives and private companies indicated that MFIs are increasingly recognizing that new financial services, in particular, targeted savings, emergency loans, and insurance can respond to households' needs to reduce their vulnerability while improving the results of their existing credit and savings portfolios¹⁸.

^{17.} For the same reasons, they are also excluded from the formal credit market.

^{18.} Brown and Churchill (2000).

Brown and others (2000) offer a definition of micro-insurance for clarity of discussion. There are two parts to the definition: first, 'insurance' refers to a financial service that uses risk-pooling to provide compensation to individuals or groups that are adversely affected by a specified risk or event. Risk-pooling according to Brown and others, involves collecting large groups or pools of individuals or groups to share the losses resulting from the occurrence of a risky event. Second, the 'micro' portion of the definition refers to the subset of insurance products that are designed to be beneficial to and affordable for low-income individuals or groups.

This sub-section discusses the micro-insurance developed by a Philippine NGO for its member-clients. Initially, the insurance product was a simple mutual fund called the Members Mutual Fund (MMF) introduced by the Center for Agriculture and Rural Development (CARD) NGO in Laguna, Philippines to address the problem faced by the institution upon the passing away of a member-borrower¹⁹. The primary purpose of the mutual fund is loan redemption in case of death of member-borrowers. The strong support provided by the members who benefited from the loan redemption scheme led to rapid growth of assets and membership. Thus, the MMF was later on used to cover death, disability and pension benefits. On October 29, 1999, the MMF was registered with the Securities and Exchange Commission as CARD Mutual Benefit Association (MBA). On May 29, 2001, the Office of the Insurance Commission gave CARD MBA a license to operate as a mutual benefit association for client members.

The unique feature of CARD MBA is that client-members own and manage it. Management was turned over to members in 1999. The Board of Trustees is elected from the membership of the association. Box 2 provides summary information on the association.

Box 2. Summary information on CARD MBA

- As of May 31, 2002, CARD MBA has a total membership base of 94 854 households. This compares with the membership base of 49 887 households by the end of its first year of operation in December 31, 2001.
- In terms of individuals, the CARD MBA is serving 474 270 individuals as of May 31, 2003 (at an average of five individuals per household).
- CARD MBA had total assets of Pesos 27.1 million (USD 525 292) on December 31, 2001; the assets stood at Pesos 94 million (USD 1.8 million) as of May 31, 2003;
- CARD MBA operates in 9 provinces, of which seven are poor provinces.

^{19.} The CARD Group of Companies called the CARD Mutually Reinforcing Institutions is composed of CARD NGO, the mother institution; CARD Rural Bank; CARD Training Center and CARD MBA. Ninety-eight per cent of CARD members are poor women. CARD NGO started in 1988 as a non-profit organization that provides assistance to landless coconut farmers. It experimented on using a Grameen type credit operation in 1990. The successful experiment led to the establishment of CARD Rural Bank in 1997 to provide both savings and credit services to members and to the general public. CARD Rural Bank is a licensed MFI regulated and supervised by the Bangko Sentral ng Pilipinas (Philippine Central Bank).

The basic infrastructure of CARD's Mutual Benefit Association²⁰ is the prevalent practice of *damayan*, a local custom in the Philippine rural areas where the members of the community, relatives contribute cash to the family of an individual who passed away. The practice is "mutual" since everybody expects to be treated the same when a death occurs in the family. Ingrained in this custom is the feeling of oneness and solidarity with the bereaved. CARD used locally available information and the advantage of informal monitoring and enforcement system to build a solid mass of client-members united in the vision that they would someday be co-owners of an insurance company. Thus, CARD introduced the MBA to address a particular market niche that is not served by traditional insurance companies. Ninety-eight per cent of CARD clients are poor women, a large number of which are landless coconut workers. As mentioned above, *vis-à-vis* this segment of the population, traditional insurance companies face problems of high transaction costs, the perception of lack of capacity of poor households to afford the regular insurance premiums; the perception that the poor are not creditworthy; and information problems that work to exclude the Philippine poor from the formal financial systems²¹.

CARD MBA has three major products: life insurance programme with total and permanent disability cover; a provident fund/retirement savings fund; and an all-loans insurance package. It has successfully metamorphosed from the simple loan redemption insurance provided under the Members' Mutual Fund. CARD MBA serves to protect CARD Rural Bank and CARD NGO from loss in the event of the death of the member-client. It also protects the dependents of the member who has passed away from being saddled with an outstanding loan with CARD Rural Bank. The loan redemption insurance is compulsory and the premium equivalent to 2.5% of loans above 10 000 pesos is automatically deducted from the loan. All borrowing members are included in the scheme. An actuary computes the premiums, benefits and policies of the members. Not more than 20% of total premium collections are used for administrative, maintenance and operating expenses. As well, the borrowing members have benefited from the different insurance products offered by CARD MBA.

It is noteworthy to point out the ingenuity of using a credit-insurance link to protect a lending institution and also a savings-insurance link to provide members a range of financial instruments for their surplus. CARD NGO has several thousand clients, a strong information base on clients organized into cohesive solidarity groups and regular and stable savings from members before it conceived of establishing the MMF and later on the MBA. The savings history was important in providing a good track record for clients. Today, the MBA members have savings accounts with CARD Rural Bank and this helps in loan evaluation and establishing their creditworthiness.

Innovations on savings mobilization: Bank Rakyat Unit Desa

Robinson (2002) entitled Chapter 11 of Volume 2 of her monumental work, *The Micro-finance Revolution*, "How to Fail in Financing the Poor: Bank Rakyat Indonesia's Unit Desa System, 1970-83". The reason is simple. She wanted to highlight the unwanted results of a subsidized credit financing system and the long and difficult process of the organizational restructuring of the Unit Desa system in Bank Rakyat Indonesia (BRI) that turned around the floundering state-owned bank. Robinson documented the change of the Unit Desa system in 1984 "from a loss-making channelling

21. Philippine poverty is mainly a rural phenomenon. Rural poverty incidence is 41.3 while urban poverty incidence is 13.2 in 2000. See Balisacan (2003).

^{20.} Mutual Benefit Associations are not-for-profit insurance schemes that operate for the mutual benefit of members. These are regulated by the Insurance Commission of the Philippines. They must conform to capitalization and other financial standards as well as reporting requirements of the Insurance Commission.

agent for government credit subsidies to a commercial financial intermediary" (Robinson 2002). The restructuring was radical and involved crucial support from the Ministry of Finance and other government agencies. There was "strong commitment to sustainable banking for the economically active poor" which "was a sine qua non for the transformation of the system" (Robinson 2002). At the heart of the package of policy and institutional reforms affecting BRI was Unit Desas' resolute saving mobilization campaign and the creation of a simplified but effective unit desa structure.

BRI is a state-owned bank with 23 divisions. The Business Unit Desa (BUD) Division was one of those divisions. Only this division and its managing director were directly responsible for the unit desa system²². Lending and deposit taking are the units' main activities although other services like payments for telephone and electric bills, payments for property taxes are provided for a fee. Unit desas are mostly located at sub-district capitals and are decentralized. Some unit desas operate village service posts whose days of operation depend on client demand. During 1993-96 total supervision costs at all levels for the unit desa system averaged 1.2% of loans outstanding. Fiebig and others (1999) note the effective strategy of BRI Unit Desas.

BRI mobilizes savings from different levels of the rural economy with a mix of liquid and non-liquid savings products and varying levels of return, based on the deposit amount. This mix of liquidity and return respects the depositors' demand. It also permits BRI to provide manageable and profitable savings services from the institution's perspective.

The Unit Desa system has enabled millions of poor Indonesians gain access to a savings facility that provides liquidity and return. The poor put a high value on savings services as indicated by the response of millions of poor depositors with the Unit Desas. Depositors outnumber borrowers, expanding BRI Unit Desa's client base. Security of deposits and relatively high returns serve to attract those depositors. Table 3 shows information on savings and loans outstanding in BRI Unit Desas over the period 1984 - July 2000.

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^{22.} The detailed information on the Unit Desas came from Robinson (2002) unless otherwise indicated. Other sources are Maurer (1999) and Seibel (2000).

Table 3. Savings and Loans Outstanding in BRI Unit Desas

Year	Savings		Loans		Total savings to loan ratio	
	deposits		outstanding			
	No. of	Amount	No. of	Amount	(per cent)	
	Accounts	(Billion Rp.)	Accounts	(Billion Rp.)		
1984	2 655	42.2	640 746	111.1	38	
1985	36 563	84.9	1 034 532	229.0	37	
1986	418 945	175.8	1 231 723	334.3	53	
1987	4 183 983	287.5	1,314,780	429.6	67	
1988	4 998 038	493.0	1 386 035	542.3	91	
1989	6 261 988	959.1	1 643 980	846.5	113	
1990	7 262 509	1 694.8	1 893 138	1 381.8	122	
1991	8 587 872	2 540.5	1 837 549	1 455.7	174	
1992	9 953 294	3 399.1	1 831 732	1 648.5	206	
1993	11 431 078	4 325.2	1 895 965	1 957.4	220	
1994	13 066 854	5 231.9	2 053 919	2 458.1	213	
1995	14 482 763	6 015.7	2 263 767	3 191.2	189	
1996	16 147 260	7 091.7	2 488 135	4 076.2	174	
1997	18 143 316	8 836.5	2 615 679	4 685.4	188	
1998	21 698 594	16 146.0	2 457 652	4 696.8	344	
1999	24 235 889	17 061.4	2 473 923	5 956.5	286	
July 2000	25 098 169	18 472.1	2 577 180	6 869.3	269	

Source: Seibel (2000).

The savings facility has provided poor households access to funds for investments, emergencies or consumption smoothing needs. This is a very important service provided by BRI since savings-in-kind can be risky. Buchenau (2003) noted that "savings in the form of cattle is subject to diseases and accidents, savings in gold invite theft." The savings history of those households also reveals critical information that helps establish a relationship with BRI Unit Desas. The experience with the savings innovation introduced through the Unit Desa system confirms the reports made by micro-finance NGOs that the poor save and are good credit risks. This is in stark contrast to the long held belief of policy makers and development planners that poor people do not have a significant savings capacity. Fiebig and others (1999) note that for the past several years, practitioners have realized that this is attributable to inappropriate deposit facilities and institutional structures. Thus, the record of BRI Unit Desa system in savings mobilization crushed old beliefs and biases against the poor.

Conversely, this has enabled BRI to tap a very large supply of funds that has strengthened its role in the financial markets. That source of funds supply is the millions of Indonesian households that until then had no access to financial saving instruments. Zeller and Sharma (1998) noted that until recently, household savings were perhaps the most overlooked component of rural finance. They cite

research indicating that poor rural farmers save to build a precautionary buffer to be used during lean seasons or to finance unexpected expenditures.

The ultimate test came with the collapse of the Indonesian banking system following the Asian financial crisis (Seibel 2000). BRI's Unit Desa system, the microbanking division remained profitable. At the peak of the crisis, from June to August 1998, the unit desas attracted 1.29 million new savers. The demand for credit stagnated because of lack of confidence in the future. By June 1999, the unit desa system's 12-month loss ratio had dropped to 1.5%, below its low long-term loss ratio (1984-1999) of 2.1%. Savings balances in the unit desas exceed loans outstanding by USD 1.8 billion (ibid).

BRI was able to survive the severe onslaught of the Asian financial crisis of 1997 basically because of the profitability and self-sufficiency provided by the Unit Desa System. The system was able to continue providing credit "to all levels of the economically active poor as well as to lower-middle-income borrowers. Savings are mobilized from all types of savers who live or work in a unit's service area" (Robinson 2002). The experience of Unit Desa system shows how it is possible for a formal financial intermediary to have a large outreach composed of savers and borrowers and maintain its operations in a cost effective way. Efficiency and simplicity of micro-finance products, in this case the savings products of Unit Desa system are essential elements of profitable, commercial micro-finance.

Lessons from the experience and concluding remarks

We can draw important lessons from the experience of micro-finance institutions with innovations. First, it is important to underscore government's critical role in ensuring the proper functioning of markets. The Philippine and Indonesian governments were and remain fully supportive of private micro-finance initiatives. Government can create a policy environment conducive to micro-finance innovations or it can introduce policy distortions that make it difficult for MFIs to innovate or have sustainable operations (Llanto 2000a; 2000b). An example of a policy distortion is capping or fixing interest rates that prevents MFIs to fully cover their costs and generate a profit margin. Another distortion is the establishment of barriers to entry to the banking industry that discourages competition. While the choice between these alternatives seems clear, that is, go for a policy environment conducive to innovations, the political calculus may lead to a contrary action.

Second, innovations flourish where the market environment is competitive. Competitive financial markets induce innovations because micro-finance institutions have to develop new products or new transaction-reducing procedures or innovate on existing products in order to protect or increase their market shares. Buchenau (2003) explains that financial institutions are most likely to develop and provide innovations if they have to compete. He notes that in competitive markets institutions have to continuously improve the quality and pricing of their services to protect or increase their market shares. Otherwise, they could not cope with the competition.

Third, an important job for government in the financial markets is to effectively regulate and supervise financial institutions for the protection of depositors. In the case of MFIs, there is a need to have an appropriate regulatory and supervisory framework. Gomez and others (2000), Llanto (2000c), Fitzgerald and others, among others, make a case for risk-based supervision of banks engaged in micro-finance. The removal of regulations that hinder the proper functioning of micro-finance markets, *e.g.*, rigid collateral or documentation requirements²³ paves the way for micro-finance institutions to look for innovative products and services for poor clients. Put differently, Fiebig and

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^{23.} See Buchenau, page 31.

others (1999) stated that inappropriate and interventionist regulations impede financial intermediation. Government interventions such as interest rate ceilings, burdensome minimum reserve requirements, barriers to enter the market distort credit markets and hinder client access to adequate finance services.

Fourth, we make a case for government support of institutional innovation as opposed to product and process innovation. The private sector can handle process and product innovation and thus, MFIs should be left to their creative instincts in developing new products, procedures, technologies that will enable them to reach more poor people and remain viable at the same time. As Zeller (2000) notes that MFIs, especially if they want to benefit the poor, should focus more on credit, savings, and insurance services that mitigate risks faced by the poor. There should be room for experimentation by MFIs and a search for appropriate legal and regulatory frameworks.

Institutional innovations may be a different case in the sense that there is a tendency for the market to under-produce or not produce them, depending on outstanding circumstances. Zeller and Sharma (1998) and Zeller (2001) suggest public support in institutional experimentation and development in micro-finance. The subsidies provided by donors and government organizations have enabled a range of experimentation and institutional development that generate social benefits²⁴. The successful institutional innovations were not produced by market forces, but through heavy reliance on financial support from the state and donors. The focus was on building cost-efficient MFIs that are congruent with market principles and that can reach poorer segments of the society as clients. Zeller (2001) points out the payoff in terms viable lending methodologies and institutions emerging in developing countries like Bangladesh and Indonesia.

^{24.} We carefully note though that the "subsidies" we mention here are not the same subsidies usually given to state-owned or sponsored banks (agricultural development banks, development banks) that were used to fund money-losing subsidized credit programmes.

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VERTICAL CONTRACTING AND FARM FINANCE: LESSONS FROM TRANSITION COUNTRIES

By Johan Swinnen and Liesbeth Dries

Abstract

Agricultural credit and rural finance problems are important constraints on restructuring, investment, and thus on recovery and growth in transition countries. This paper discusses which role trade and commodity credit can play in reducing these constraints. The paper shows that companies have overcome institutional constraints by introducing contract innovations and programmes including trade credit and more extensive financial packages throughout the agri-food chain. These innovations can be very important, but not all financial programmes and contract innovations were successful.

Introduction

Agricultural credit and rural finance problems¹ are important constraints on restructuring, investment, and thus on recovery and growth in transition countries. The problems are due to a combination of "normal" imperfections of rural credit and risk markets and specific transition problems such as macroeconomic instability, institutional reforms of the financial system, low profitability in agriculture, accumulated debts, high risk and uncertainty, and general contract enforcement problems (OECD, 1999, 2001).

Agricultural finance in East European transition countries has been dramatically restructured since 1988. Before, credit was distributed through the state controlled banking system in accordance to a State central plan. It was the government's instrument to implement its agricultural policy, among others by extending subsidized loans to farms and agri-food companies.

Since then the banking sector and macroeconomic policy has been reformed and liberalized. While this has caused hyperinflation, high interest rates, and many disruptions in the banking and rural finance system in early transition, these transitional features have diminished, some faster than others. Inflation generally came down relatively quickly. Interest rates have only gradually declined.

The restructuring of the banking system and the provision of finance to enterprises has taken longer. The flow of finance to farms and rural enterprises, and recovery of farm investments, under the new market finance system seems to have taken off only in the second part of the 1990s, even in the best performing countries.

Financing can come both from own resources and from (formal or informal) loans. Transition has constrained both sources of credit. Own financial resources are constrained because hyperinflation wiped out many savings in early transition, and low profitability and cash flow problems have

^{1.} The discussion in this paper focuses primarily on working capital and short and medium-term investments. Those were the main constraints in (early stages of) transition; and these are the main areas where vertical contracting and trade credit played an important role. For these reasons there is little discussion of factors such as land property rights and markets for collateral purposes, since this plays little or no role for short-to-medium term credit.

complicated building up own resources during transition. Access to external credit has suffered from the same, and other, problems. Financial institutions are less likely to lend to enterprises with low profitability, outstanding debts, and cash flow problems. In addition, institutional problems such as ongoing reforms of the banking systems and the farms, a lack of credit history, high monitoring costs, etc. contribute to these problems (Swinnen and Gow, 1999).

While early discussions of the finance problems focused mostly on the institutional problems, later studies emphasize profitability and cash flow problems. For example, Pederson *et al.* (1997) emphasize the importance of profitability and cash flow problems in the perceived "excessive debt burden" of Russian farms. Another example is a 1998 Romanian survey, where farmers identify insufficient income as the key reason for their loan application being rejected: 52% of the cases, much more than lack of collateral (18%) or outstanding debts (11%) (Davis *et al.*, 1998).

An important factor in the cash flow and profitability problems are contract enforcement problems throughout the agri-food chain (Gow and Swinnen, 1998, 2001). A widespread effect is delayed payments for product deliveries. A survey of food companies in Central Europe identified payment delays as their constraint number one for growth (Gorton *et al.*, 2000). Data from Slovakian farms show that payment delays are strongly correlated with profitability problems (Slovak Ministry of Agriculture, 1996). A survey of Hungarian agricultural enterprises shows that for 61% of the farms contract breaches under the form of delayed payments are an important impediment to expanding profits (Cungu and Swinnen, 2002).

These finance problems have induced political pressure for governments to intervene. In many transition countries, governments have reacted by introducing credit subsidies and loan guarantee programmes. The impact of these programmes varies considerably (Swinnen and Gow, 1999). However, more importantly, progress in macroeconomic and institutional reforms has reduced some of the institutional constraints and, especially in the more advanced transition countries, farm access to finance has gradually improved during transition. Yet, important imperfections and constraints remain.

Not only policy reforms but also private company restructuring has contributed to overcoming finance constraints. Agribusiness restructuring and investments up- and downstream from the farms have contributed to reducing farm finance constraints. Typically following a significant restructuring of the agribusiness companies, and often following foreign investment, companies have initiated programmes to assist farms with accessing inputs and to provide trade credit and other financial assistance. Empirical evidence suggests that the impact of these programmes has been significant and still grows in importance.

Agri-food contract innovations and farm finance

Empirical observations indicate that agribusiness and food processing companies have been able to overcome contracting problems by introducing institutional innovations in contracting with farms, although typically only after a significant restructuring of the companies. In particular, innovative vertical contracting between processors and their suppliers has induced contract enforcement and reduced financial constraints for the suppliers.

Investors in *food processing companies*, facing poor quality supplies from farms who have difficulties accessing basic inputs, technology, etc. ask: "how can we ensure that farms deliver guaranteed and better quality supply?" The answer turns out to be: by assisting the farms in accessing necessary inputs and assisting them in investments in better technology, management, etc.

Successful vertical contracting has taken many forms, but has typically included conditions for product delivery and timely payments, as well as farm assistance programmes for suppliers. Farm assistance by food processing companies includes input supply programmes, investment assistance programmes, trade credit, bank loan guarantee programmes, extension and management advisory services, etc. These programmes were created for farms that deliver products to them. The companies typically also guarantee timely payments based on pre-specified quality.

The input provision programmes assist farms with accessing inputs, such as seeds, fertilizer, chemicals, credit, etc. The most straightforward approach is pre-payment of farms' inputs and direct loans to them. In Gow and Swinnen (2001), we discuss a series of examples of companies, including sugar and oilseed processing companies and breweries, providing advanced payments for chemical inputs and fertilizers. In Dries and Swinnen (2003a, b), we show, based on a survey of dairy farms and companies in the north-east of Poland, that most dairy companies in that region provide a series of farm assistance programmes, including pre-financing of feed for farms delivering milk to them and loans for milking equipment (see Annex tables 1 to 3).

Like food processing companies, *agribusiness companies* trying to sell farm inputs, such as seed, machinery, fertilizer, etc. face important problems. They are confronted with farms who cannot pay for their inputs because they are not paid in time, or who do not have output markets for their products. They ask "how can we ensure that we can sell our products and get paid for them?". The answer is: by assisting customers (the farms) in finding market outlets for their products.

To ensure payments by farms, input suppliers have engaged in a variety of, sometimes quite unconventional, forms of contracting. For example, in one case in Ukraine, described by Foster (1999), a US farm equipment manufacturer partnered with local farm equipment distributors to sell combines and tractors to farms. The US company provided a large inventory of equipment for the distributor to sell on credit and service. The farms received the equipment for a 25% down payment (in cash or kind) and after three additional payments received ownership. The equipment dealer, to ensure payment, was given the rights to a certain agreed upon grain area as repayment; but moreover the equipment dealer was given the rights to harvest, transport, store and sell the grain himself. Further, as part of the arrangement, the equipment dealer and the transactions themselves provided the farms with training and skill development. Other examples are agricultural pesticide companies who, in order to ensure payments for inputs delivered to farms, collaborate with a local grain trading companies to market the grain of the farms they delivered inputs to.

Interestingly, both processing and input supplying companies vertically integrate "around" the farms. Processors introduced programmes to improve farms' access to inputs as part of enforcing contracts on the downstream side of the farms. Inversely, input suppliers got involved in harvesting and marketing farms' output to enforce contracts on the upstream side of the farms.

How important are these finance programmes?

The impact of these forms of contract innovations is difficult to quantify as several other factors affect output simultaneously (Macours and Swinnen, 2000). Yet, while 'hard' empirical evidence is still limited so far, increasing empirical evidence suggests that they are very important. Let us briefly review some available evidence.

In a representative survey in 1998 of 371 Hungarian farming enterprises we found that 318 were contracting with processors. Further, we found a significant negative effect of the perceived likelihood of contract breaches on the farms' investments in capital assets (Cungu and Swinnen, 2003). In a case study of Juhocukor, the largest Slovakian sugar company, we found that transition contract disruptions

caused a decline of sugar beet deliveries and contracted hectares of around 30% between 1990 and 1993 (see Gow *et al.*, 2000). However, after the restructured company introduced the contract innovations and finance assistance programmes, contracted hectares more than doubled and farm yields increased strongly. As a result Juhocukor's output increased by more than 200% between 1993 and 1997.

Many restructured sugar companies in Eastern Europe, often after foreign investment, have introduced similar programmes. By 2001, almost the entire sugar sector, with the exception of Poland where privatization of the sugar companies lagged, was taken over by foreign companies. Hence in the sugar sector these developments are very important. However, also in other sectors, especially with strong links between processors and farms, such developments have grown importantly.

The emergence of these contract innovations coincided with the start of yield improvements and important productivity gains in the Central and Eastern European agri-food systems. Figure 1 illustrates how yields in the CEEC agri-food sectors turned around since 1993 and have increased dramatically since then.

15 10 5 Change in yields (%) -5 Sugar Beet Milk -10 Coarse Grain -15 Oilseed -20 -25 -30 -35 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999

Figure 1. Changes in yields since 1989 in Central Europe

(Average for Poland, Czech Republic, Slovakia and Hungary)

Source: Own calculations based on data from FAO.

Evidence presented in Foster (1999) indicates that also in Ukraine and Russia, even in the 1990s, vertical contracting was introduced by foreign investors. Since 1999, important new developments have emerged in these markets. Following important policy changes in both Ukraine and Russia, both domestic and foreign investment has increased significantly in the agri-food sectors. These have induced important vertical integration in the supply chains. For example, in Russia the so-called financial industrial groups (FIGs) started investing in the agri-food sector in recent years and have

provided a much needed source of finance, resulting in vertical contracting and trade credit, similar to the programmes described above [see *e.g.* Melyukhina and Khramova (2000), Wandel (2000)]. As illustrated by figure 2, the recovery of yields also started around that time in countries such as Russia and Ukraine and preliminary evidence suggest that this vertical integration process also played a key role in the recovery in the recovery there (Rylko, 2001; Liefert and Osborne, 2003).

20 10 0 Changes in yield -10 Milk -20 ■ Barley -30 Sunflower -40 seed -50 -60 1989 1991 1993 1995 1997 1999 2001

Figure 2. Changes in yields since 1989 in NIS-3*

(Average for Russia, Ukraine and Kazakhstan)

Vertical contracting and farm finance: evidence from the dairy sector

To address the issue of how widespread and important these developments were, we recently studied the dairy sector, a sector that is very important for poor rural households, and in many countries dominated by small farms. For example, very small farms dominate the dairy sector in two of the largest agricultural producers in Eastern Europe: Poland and Romania. The vast majority of dairy cows in Poland were until recently in farms with less than 15 cows. In Romania, 90% of all cows are in 1-2 cow "farms".

In 2002, we surveyed both a set of dairy processing companies and small dairy farms delivering to them in the north-east of Poland [see Dries and Swinnen (2003a, b) for details]. We found that the impacts of vertical integration are widespread, and are very important also for small farms. All the interviewed dairies have programmes that assist their supplying farms. More specifically:

• All have an <u>input (esp. feed) supply programme</u>. The companies provide access to inputs, such as feed or seeds and fertilizers for on-farm feed production. Farmers purchase the inputs through company shops and the inputs are paid from the milk checks.

^{*} Milk data exclude Kazakhstan; Moving average for Barley and Sunflower seed yield. Source: USDA.

- Several companies assist farms in investing through <u>farm credit programmes</u>. Investment
 assistance takes the form of <u>leasing</u> of equipment and cows, also with payments deducted
 from future payments for milk deliveries, as well as <u>loans</u> for buying new or second hand
 cooling and milking equipment.
- Most of the companies also provide extension services to their suppliers. Technical assistance and support is provided through the company's extension agents. These specialists assist farmers with crop production, animal nutrition and health, animal genetics, breeding, selection and more recently they also assist farmers who want to expand their herds to find suitable cows for purchase both in Poland and in Western Europe. In some cases these extension programmes had a large impact on delivered milk quality because major improvements resulted from introducing basic hygienic and sanitary rules when handling the milk on the farm.
- Finally, most of the dairies provide <u>bank loan guarantees</u> for bank loans to farmers. Almost all bank loans for farm investments are with preferential interest rates (subsidized interest rates around 5% compared to commercial loans with interest rates often above 20%). In order to obtain such a loan, the farmer needs collateral. However, in many cases land or buildings are not accepted as a bank guarantee. Therefore, most interviewed dairies are providing an additional service to their suppliers by co-signing the bank loan. In this way the dairy puts in the bank loan guarantee and facilitates its farmers' access to bank credits and hence increases their investment possibilities.

From those who obtain credit, 43% get credit from the dairy company, and 69% get a loan from a bank (including 10% who get loans from both sources). The reason why loans come from dairies or from banks may have more to do with the *type* of investment than with the characteristics of the farm. Dairy loans are used almost uniquely for investments in enlarging and upgrading the livestock herd (30%) and cooling tanks (56%). Together these account for 86% of all dairy loans. In contrast, only 29% of all bank loans are used for these types of investments. Bank loans are used more for investments in stalls (new, enlarging, or modernizing), land, and other investments – and as mentioned above, are often indirectly due to company assistance through the loan guarantees.

These programmes have a significantly positive <u>impact</u> on product quality: the share of top quality milk (EU standards) in total milk deliveries increased from around 30% in 1996 to 80-90% by 2001. The survival and growth of the farms during this process of rapid restructuring is positively related to the extent of company assistance programmes provided to suppliers. Farms delivering to dairy companies with assistance packages are more likely to restructure and grow, and to invest more and grow faster.

This Polish case is no exception. Rather, it is a trend that is growing and becoming more important. For example, a 2003 report of the Slovak Dairy Union showed that 77% of milk purchased in Slovakia was processed by foreign-owned dairies (Agra Europe, April 2003). A case study of Friesland Coperco Dairy Foods (FCDF), one of the main Dutch dairy processing groups, confirmed that the introduction of vertical integration with farm assistance programmes is becoming the norm rather than the exception in Eastern European dairy sectors. FCDF, following a series of investments and take-overs between 1999 and 2003, is now one of the dominant players on the dairy market in the Czech Republic, Slovakia, Hungary and Romania. After the take-over investments, *all* its dairy processing plants started a series of quality improvement services and assistance programmes for farms delivering milk to the plants. The type of assistance and logistics differ between companies and regions to address local characteristics (*e.g.* domination of small versus large farms; and quality and

technological standards of farms), but the strategic approach is very similar. The farm-level effects on investment, productivity and quality appear similar to the ones we found in Poland.

Contract variations and determinants

Empirically we observe a variety of contracts and institutional innovations. These variations reflect differences in commodity characteristics, local conditions, farm types, etc. It is well understood in the institutional economics literature that product characteristics affect the optimality of contract forms. Here we briefly discuss four related issues:

- The development of more complex institutional structures.
- Failure of contract innovations.
- The importance of foreign investment in this institutional development.
- The impact of farm size.

Complex contracts

We found several more complex and sophisticated examples of vertical integration and interlinking markets than the ones describe above. One model is a triangular structure set up between the processing company, the supplying farm, and an input supplying company. The latter can be an agribusiness company supplying feed, fertilizer, or any other input, but it can also concern a financial institution. The processing company, instead of directly providing loans to the farm, provides a payment guarantee (or loan guarantee) with the agribusiness company (financial institution) who will then provide inputs (loan) to the farm. For example, Juhocukor, the Slovakian sugar processor, provided payment guarantees for farm input purchases with input supplying companies. The same approach was used in Juhocukor's finance and investment facilitation programme which provided Polnobanka, the main Slovakian agricultural bank, with a payment guarantee for contract-related loans by farms. We found similar loan guarantee programmes offered by the Polish dairy companies to farms; and these programmes were very important in terms of providing small farms access to bank loans.

A variation on this triangular structure is the use of so-called "special purpose vehicles (SPVs)", which we observed as used by Rabobank, an international agribusiness bank, in collaboration with agribusiness partners. An SPV is a stand-alone company jointly owned by the processor, input providers, and a project financed by the bank. The contract between the SPV and the farms includes all provisions on output, inputs, and credit. An important advantage of such institution is that the partners in the SPV now share the risk of contract breach. With the previously implemented input and investment facilitation programmes, processors carried the entire risk of farms' breaching contracts, although both the input suppliers and the financial institutions benefit from these contract innovations. Institutions such as SPVs allow sharing of the risk between various agents, and hence, will stimulate investments by companies who otherwise may be deterred by the risk.

Interestingly, we found a case where farms themselves participate in such structures through co-operative institutions. For example, in Eastern Hungary, we studied a group of sheep farmers who set up a producers' co-operative through which they participated in a SPV-like joint company. This gave them more bargaining power vis-à-vis the other partners, much in the same line as a marketing or input purchasing co-operative does in a normal environment.

Failure of contract innovations

That said, not all financial programmes and contract innovations were successful. For example, some companies quit their input support programmes since it could not enforce proper use of the inputs by its suppliers. In other cases, foreign investors left after they failed to obtain sufficient quality of raw materials from their supplying farms, despite extension, training, and support programmes.

For example, in crop production farms may use the pre-financed fertilizer and pesticides for other crops, or just sell them. In fact, Interbrew/Boortmalt in Croatia ended up cancelling their input pre-finance programme as farms continuously diverted the inputs for other uses. Another example is dairy farms who benefited from pre-financed feed and investment support from a dairy processor and then sold their milk to other dairy processors for a higher price, or ended up diverting some of their assistance to other uses.

To prevent this, processors have tried to introduce severe sanctions for quality and volume conditions in their contracts with the farms, with mixed success. For example, when Palma-Tumys finds farms cheating, *e.g.* by delivering less output than agreed based on their advanced seeds and payments, they are never again contracted with, a significant punishment given the dominant market position of Palma-Tumys. However, despite these rules, in some regions of the country up to 30% of oilseed producers were dropped as recently as 1999.

Typically, the processors combine their input and finance programmes with technical support and extension programmes. These programmes serve three purposes: they provide the farms with management and technical support; they enlarge the private enforcement capital committed by processors and they also serve as a monitoring device for the processors to control whether the farms are using their pre-financed inputs and guaranteed loans for contract-specific investments and whether they are committing the effort needed to produce high quality output. Obviously, the company needs to be able to rely on its monitors. This is done either by using to internalize their exchange transactions through vertical integration company employees for technical support and extension, or by contracting with "trusted" experts. The latter may result from reputation-based trust resulting from previous collaborations or because of private enforcement capital invested in external relationships. For example, in its brewery investments in several transition countries, Interbrew contracted with the same (Belgian) companies for upstream investments in malting (Boortmalt) and in providing technical and management advice and seed improvement techniques to barley farms (Persyn Consultants). In doing so, the costs of Boortmalt and Persyn Consultants of holding up Interbrew in one country where larger than implied by that specific contract. The private enforcement capital included losses of contracts in other countries (and in Western Europe), and major reputation losses.

Foreign investment and spillovers

An important issue is the role of foreign investment. While conceptually there is no need for FDI to implement the successful programmes and trade credit systems, empirically we observe that FDI has been the most important driving factor behind these programmes. One could think of reasons why that is the case: they have easier access to financial resources needed to get the system going and come in with a long term strategy in which upgrading of technology and quality standards throughout the chain is a key ingredient.

However, we do observe important instances of domestic companies implementing similar programmes. One could broadly distinguish two strategies of domestic companies introducing trade credit programmes and contracting strategies. The first is where domestic companies are forced to imitate programmes implemented by FDI-companies because of competitive pressures. Farms may no

longer want to deliver to the domestic companies unless they get the same conditions as they get from the FDI-companies. This is what we observe in many East European countries, and these spillover effects occur not only within a certain commodity sector, but even across commodities through the competition for land use (for example, when oilseed farmers shift to sugar beet to get the benefits from the programmes provided by sugar companies). Also in Poland we find much evidence of significant vertical *and* horizontal spillover effects.

A second strategy is where domestic companies autonomously introduce such programmes for much the same reason as the FDI companies. This seems to occur mostly when they can access financial sources from outside the agri-food sector. For example, in Russia the so-called financial industrial groups (FIGs) have started investing in the agri-food sector in after 1998 and have provided a much needed source of finance, resulting in vertical contracting and trade credit, similar to the programmes described above.

Will small farms survive vertical integration?

In most transition countries, farms vary widely in size and organisation, *e.g.* from small household plots, over family farms, to large co-operatives or farming companies. Intuitively one would expect companies to prefer larger farms to contract with in order to reduce transaction costs. However, our observations suggest that most companies contract with a variety of farms. Contracting with both small and large farms may be due to both necessity and preferences. The existing farm structure may require companies to deal with small farms. For example, in Romania 90% of dairy cows are now in 1-2 cow "farms". Similarly in Poland, much of the dairy supply is in very small farms. Hence any dairy processor needs to deal with small farms by necessity, focusing for example on investments in collection points etc. rather than on-farm equipment.

However, our case studies suggest also that company preferences for contracting with large farms are not as obvious as one may think. While processors may prefer to deal with large farms because of lower transaction costs in *e.g.* collection and administration, contract enforcement may be more problematic, and hence costly, with larger farms. In several interviews company managers indicated that (smaller) family farms were less likely to breach contracts or to divert company investments than large co-operatives or farming companies.

The company programmes differ to address the characteristics of these varying farms. For example, in case studies of dairy processors in Moldova, Poland and Romania, we find that investment support for larger farms include leasing arrangements for on-farm equipment, while assistance programmes for smaller dairy farms include investments in collection units with micro-refrigeration units.

A large Slovakian oilseed processor we studied has three different contract types. In West and East Slovakia it contracts directly with farms. However, as it experienced more severe problems of diverting company-assisted credit to other uses on farms in Eastern Slovakia, the company only provides them inputs in physical form (seeds, chemicals, and fertilizers), instead of credit assistance as in Western Slovakia. In Central and North Slovakia, the company contracts with so-called integrators who then in turn contract with the farms. Similarly, Interbrew's Hungarian brewery/malting facility also contracts through integrators with smaller farms and directly with the larger farms, because of differences in transaction costs.

Efficiency and income distribution

So far we have addressed mainly the benefits of vertical contracting. However, obviously there are potential dangers in terms of imperfect competition, unequal distribution of bargaining power in the chain, etc. For example, a major inflow of finance and technology in the agri-food chain may coincide with strong industry concentration and increasing pressures on farms and food processors. Such issues need to be integrated to obtain a more comprehensive assessment of the aggregate effects, and to assess the role for government policy in this area.

In other words, in trying to understand these new institutions, we should not be blind for their potentially adverse consequences. For example, the very rationale for these interlinked transactions may at the same time act as an important barrier to entry for other agents and may give the dominant partner in a transaction some additional leverage.

By introducing these contracts, farms can access credit, inputs, etc. which was unavailable before and companies can have access to higher quality and timely supplies. Total welfare increases. The question is who ultimately benefits from the welfare increase: both the farms and the companies or only one side? In other words, will both parties share in the gains from the institutional innovation, and will everybody be better off, or will the processing firm extract all the rents of the innovation? The contracts may actually bestow additional monopoly power upon the companies or can weaken the collective bargaining strength of farms. In these cases, one may end up in a situation where the farms' welfare is actually lower after the contract innovations, despite the fact that total welfare has improved significantly.

Competition should play an important role. Competition on the processing side would prevent monopoly power in the setting of the contract conditions. Interestingly, there may be, at least initially, a problem of sustainability of the new contracts in a competitive environment. Empirically we observed some cases where the option of alternative outlets for farm output made contract enforcement more complicated and caused the collapse of the contracts. For example, as explained above, with pre-financed feed by dairy companies, or seed and fertilizer by crop processing companies, farms sold their output to competing processors who could offer higher prices since they did not have to incorporate the costs of the assistance programmes. In other words, the question is whether, while competition seems important to induce a desirable distribution of the gains, competition would undermine the ability to obtain the gains.

However, this is not true in general – in other cases we found vertical contracts could be sustained in a competitive environment. At this point we do not know enough about the conditions which make the contracts sustainable.

Hence, an important – and very much an outstanding – issue is how to get both the efficiency gains and desirable income effects for all parties with these institutional innovations, and which role public policy, including competition policy could play in this.

Concluding remarks

Agricultural credit and rural finance problems are important constraints on restructuring, investment, and thus on recovery and growth in transition countries. The problems are due to a combination of "normal" imperfections of rural credit and risk markets and specific transition problems such as macroeconomic instability, institutional reforms of the financial system, low profitability in agriculture, accumulated debts, high risk and uncertainty, and general contract enforcement problems.

Since the start of transition, access to credit has improved significantly in the best performing transition countries. Agribusiness and food processing companies have played an important role by introducing institutional innovations in contracting with farms, although typically only after significant restructuring of the companies. In particular, innovative vertical contracting between processors and their suppliers has induced contract enforcement and reduced financial constraints for the suppliers through finance assistance programmes.

The impact of these forms of contract innovations is difficult to quantify as several other factors affect output simultaneously. Yet, increasing empirical evidence suggests that they are very important and more widespread than what is generally understood.

These contract innovations may also have potentially adverse consequences. For instance, the emergence of these interlinked transactions may act as an important barrier to entry for other agents and may give the dominant partner in a transaction some additional leverage. The contracts may actually bestow additional monopoly power upon the companies or can weaken the collective bargaining strength of farms. It is clear that more research is needed in this area to better understand the precise causes of success and failure of trade credit, finance assistance, and contract innovations in the agri-food chain, and to identify the impact of the programmes on all parties. An important issue therein is the potential role of public policy and regulation in stimulating the desirable effects of these innovations and in preventing potential harmful impacts.

Annex Table 1. Cases of vertical contracting and farm assistance by agribusinesses in Central and Eastern Europe

Foreign Investor	British/French Sugar Processor	British Sugar Processor E	Belgium Beer Produce	eı Belgium Malter	European Seed Merchant	
Local Firm or Partners	Local Sugar Processor	Local Sugar Processor	Local Brewery	Local Malting Plant	Foreign Food Manufacturers	Oilseed Producer
Activity	Sugar Production	Sugar Production	Malting	Malting	Seed Merchandising	Vegetable oil production
Countries of Investment	Hungary Czech Republic Slovakia	Poland	Romania Hungary	Croatia	Central and Eastern Europe	Slovakia
Producer Type	Sugar Beets	Sugar Beets	Barley	Barley	Crops	Rape and Sunflower
Types of Support to Producers						
Production and Equip. Training	Yes	Yes	Yes	Yes	Yes	Yes
Credit Access Programs	Yes	Yes	Yes	Yes	Yes	Yes
Input Provision and Facilitation	Yes	Yes	Yes	Yes	Yes	Yes
Machinery Procurement	Yes	Yes			Sometimes	
Agronomical Support	Yes	Yes	Yes	Yes	Yes	Yes
Veterinary Support						
Harvest and Handling Support	Yes	Yes	Yes	Yes	Yes	Yes
Quality Control	Yes	Yes	Yes	Yes	Yes	Yes
Transportation	Yes	Yes	Yes	Yes	Yes	Yes
Specialized Storage	Yes	Yes	Yes	Yes	Yes	Yes
Bus. And Fin. Mgmt Support	Yes	Yes	Yes	Yes	Yes	Yes
Market Access	Yes	Yes	Yes	Yes	Yes	Yes
Timely Payments	Yes	Yes	Yes	Yes	Yes	Yes

Source: Gow and Swinnen (2001).

Annex Table 2. Cases of vertical contracting and farm assistance by agribusinesses in the former Soviet Union

Western Investor	U.S. Combine Producer	Swiss Confectionary Producer	U.S. Dariy Processo	or U.S. Food Catering Firm	U.S. Nut Processor	U.S. Agri-Chemical Manufacturer
Foreign Partner	Ag. Equipment Dealer	Dairy Plant	Dairy Plants	Food Catering Enterprise	Facilitties Owners	Ag. Input Distributors
Activity	Ag Equip. Leasing and Sales	Confectionary	Dairy products	Fast Food Service	Walnut processing	Fertilizer and Pesticide Sales
Countries of Investment	Ukraine	Russia	Ukraine Moldova Kazakhstan	Russia Ukraine	Moldova	Ukraine Russia
Producer Type	Grain and Oilseed	Dairy Producers	Dairy producers	Vegetable producers	Walnut Growers	Crop Producers
Types of Support to Producer	'S					
Production and Equip. Training	Yes	Yes	Yes	Yes	Yes	Yes
Credit Access Programs	Yes				Yes	Yes
Input Provision and Facilitation	Yes	Yes	Yes	Yes	Yes	Yes
Machinery Procurement			Yes	Yes	Yes	Yes
Agronomical Support	Yes	Yes	Yes	Yes	Yes	Yes
Veterinary Support		Yes	Yes			
Harvest and Handling Support	Yes	Yes	Yes	Yes	Yes	Yes
Quality Control	Yes	Yes	Yes	Yes	Yes	Yes
Transportation	Yes	Yes	Yes	Yes	Yes	Yes
Specialized Storage	Yes	Yes	Yes	Yes	Yes	Yes
Bus. And Fin. Mgmt Support	Yes	Yes	Yes	Yes	Yes	Yes
Market Access	Yes	Yes	Yes	Yes	Yes	Yes
Timely Payments	Yes	Yes	Yes	Yes	Yes	Yes

Source: Foster (1999).

Annex Table 3. Vertical contracting and farm assistance programmes by dairy processing companies in Poland

Foreign Investor	No	No	No	No	US Dairy processor	Dutch dairy processor
Local alliance or legal structure	Cooperative	Private company	Cooperative	Cooperative	Joint venture with local cooperative	Private compar
Activity	Dairy products	Dairy products	Dairy products	Dairy products	Dairy products	Dairy product
Types of support to producers						
Credit Access Programmes	Yes	No	Yes	Yes	Yes	Yes
Bank loan guarantee	Yes	Yes	Yes	No	Yes	Yes
Input Provision and	Yes	Yes	Yes	Yes	Yes	Yes
Facilitation						
Agronomical Support	Yes	No	Yes	Yes	Yes	Yes
Veterinary Support	No	No	No	No	No	Yes

Source: Dries and Swinnen (2003a).

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SESSION IV. MICRO-CREDIT INSTITUTIONS AND ARRANGEMENTS FOR RURAL AREAS

ACTIVE INFORMAL FINANCING IN RURAL CHINA: A CASE STUDY OF ROTATING SAVINGS AND CREDIT ASSOCIATIONS IN A CHINESE VILLAGE

By Biliang Hu¹

Abstract

Difficulties continue to emerge in the financing sector of the formal system for supporting Chinese economic development because reforms of the financial system have been slow. Two of the most serious problems are that formal financing structures are not capable of providing sufficient capital for the development of private enterprises and it provides too little capital for the development needs of rural areas. In addition, access to funding needed by rural households/farmers for non-productive activities, such as purchasing durable consumer goods, house building, schooling, medical care, etc., is almost non-existent. Formal savings and loan structures are missing. As a result, with the rapid growth of the private and rural economy in recent years, informal finance in various forms in both the rural and urban areas plays an increasingly important role as a key supplement to more formal finance institutions, and this despite the many restrictions imposed on informal finance by the government. This article examines, as an example, the village of Xiang Dong in Zhejiang province where the author inquired into the use of Rotating Savings and Credit Associations (ROSCAs)² over the past decade. These associations are part of a traditional informal financing system in rural China.

I. The development of ROSCAs in Xiang Dong village

From the end of September to early October 2002, I went to Xiang Dong village (the village is attached to Qian Ku Town, Cang Nan County of Zhejiang province) for ten days of research into private financial ROSCAs. In order to gain a better understanding, I joined one of the ROSCAs in the village and became a formal member. This experience has enabled me to understand the specific operating rules and features of this private financial institution in rural China.

The number of ROSCAs in this village is high and wide-ranging. Almost all local residents have taken part in a ROSCA and most have been involved in more than one. The structure of the ROSCA is always very simple. In fact, with few exceptions most are in the form of Bidding ROSCAs. ROSCAs are also clearly community based with most members living in the same village and rarely from elsewhere. The aim of the villagers in establishing the ROSCAs, or becoming a member, is generally to finance family emergencies in their daily lives. The percentage of villagers who try to raise funds for production capital or for other types of commercial capital, through this means is relatively low. Finally, members are very trustworthy and rarely default on their debts. The financial risk is thus very limited.

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^{2.} Rotating Savings and Credit Associations (ROSCAs) are called *hehui* in China. Different forms of ROSCAs can be found in different regions. Based on the existing situation from the surveyed village, ROSCAs in this paper refers to *biaohui* — Bidding ROSCAs only, in which the sequences of the funds to be used among the registered members of the ROSCA is determined through bidding the interest rates at certain fixed period of time.

General background

When I arrived at Xiang Dong village at the end of September 2000, many of the household heads were away from their homes on business trips. My choice of households to study was based on chance and opportunity. If the head of the family was at home, that household was used in the sample. If I only found the elderly and the children at home and they were unable to give information regarding the economic arrangements within the family or the ROSCAs, I was not able to include that household. Given this limitation, I interviewed a total of 29 families, of which 24 were involved in the ROSCAs. The percentage of households that was part of a ROSCA was therefore 82.8% (but the cadres in the village insisted that the actual percentage was at least 90%, higher than my sample).

The number of ROSCAs is large and the scale of the finance quite considerable

There is no documented record of ROSCAs in Xiang Dong village. As far as the elderly citizens knew, from oral history, the practice of Xiang Dong villagers raising funds by way of self-organised financial associations predates the Qing Dynasty, although no one is sure of how far back the custom goes. Yet, if one counts just from the early years of the Qing, these associations have been in practice for over 350 years. During the Nationalist reign, there was a sharp fall in the number of ROSCAs throughout the country. According to research by the Agricultural Economy Department of the Central Agricultural Research Institute,³ there was an average of two ROSCAs per county in 1934. The average number of ROSCAs in Zhejiang province, however, was slightly higher at 3.4 per county in the 46 counties of the province and in Jiangsu province, the average number of ROSCAs was the highest at 6.1 per county in the 47 counties within the province. Based on the experience of the elderly villagers, Xiang Dong village normally had two or three ROSCAs in any given year during the 1930s (most were "non-profit ROSCAs" that did not involve any interest). This suggests that the research range by the Central Agricultural Research Institute did not cover the county that Xiang Dong village was part of (Xiang Dong village was not in Cang Nan county at the time).

In the early years of the new China, the ROSCA in Xiang Dong village became inactive due to the enormous political changes in the country. A few years later, at the end of 1950s and the beginning of 1960s, ROSCAs were once again common in the village, and this even during the Cultural Revolution. However, most of those ROSCAs were interest free and were purely a financial system for villagers to help each other. Since the reforms and the opening-up era, village ROSCAs have burgeoned. ROSCAs were at its most "popular" stage in the village in the 1980s, during which time almost every family became a founder of a ROSCA. The result was the establishment of at least 100 ROSCAs in the village. Due to such rapid and uncontrolled growth, several instances occurred of people absconding with the money they raised through the ROSCAs. This was quickly self-corrected and responsible management of ROSCAs was re-established after 1990.

During the ten years after 1990, the 24 households interviewed had taken part on average in nearly 10 (9.3) ROSCAs (Table 1). Almost all took part in a ROSCA each year. Taking into account that the duration for most ROSCAs is longer than one year, it is not surprising to learn that some people took part in two or more ROSCAs at the same time. During our research, we found that the sample households were involved in an average of nearly 2 (1.7) ROSCAs at once. It should be noted however that some households were involved in 5 or 6 ROSCAs at the same time while quite a number of households were only involved in 1 or 2.

^{3. &}quot;Rural Report" by Agricultural Economy Department of the Central Agricultural Research Institute, Issue 11, Volume 2, 1934.

Table 1. General information on the development of Xiang Dong village ROSCAs

Household	Number of ROSCAs	Number of ROSCAs	The established	The maximum amount
Reference	operating during the	currently operating	duration of current	of money involved in a
Number	past 10 years		ROSCA	ROSCA (Yuan)
			(months)	
1	12	2	3	12 000
2	11	2	3	30 000
3	2	1	2	5 000
4	13	2	3	10 000
5	8	2	3	10 000
6	10	2	3	10 000
7	5	1	1	2 000
8	3	1	2	6 500
9	39	5	3	30 000
10	12	1	1	6 000
11	21	6	3	41 700
12	4	1	3	10 000
13	6	2	3	30 000
14	11	1	2	10 000
15	28	1	3	10 000
16	7	3	3	20 000
17	4	1	1	5 000
18	3	1	3	10 000
19	6	2	3	14 000
20	3	2	1	1 000
21	4	2	3	50 000
22	1	1	3	50 000
23	7	3	3	10 000
24	4	1	2	6 000
Average	9. 3	1. 7	2-3	14 133

Source: Data from the field survey in the village.

If we want to do an initial estimate based on the typical data collected, we can extrapolate that the 82.8% ROSCA participation rate translates into 263 households out of the 318 in the village. We also became aware that the 45 families from Tai Kou village, Hong Kou town of Tai Shun county, recently arrived as a result of the new migration policy did not enjoy the same credit as the established residents because they were new to the area and were not related to the Xiang Family. To local residents, they had not yet established their credibility. They were unable to join any ROSCA run by the villagers nor could they start any ROSCA of their own. Thus, we have excluded these newcomers from our estimate. Therefore, we can roughly conclude that the number of households involved in ROSCAs was approximately 226. If the average number of households participating in one ROSCA is 13, then there are at least 17 ROSCAs running simultaneously in the village over the year. Since the average number of ROSCA for each household is 1.7, the number of ROSCAs should be at least as many as $17 \times 1.7 = 29$. Taking into account the overlap problem with villagers joining in the ROSCA and others who join in as out-of-village residents or friends and families of Xiang Dong villagers, if this kind of ROSCA accounts for 20% of the total number of ROSCAs, then the total number of ROSCAs in the village should be 29 plus 7. That makes the total number of ROSCAs in Xiang Dong village approximately 36.

Based on the information collected from the sample households, the average financing of each big ROSCA (normally over a two-month period) is 14 000 Yuan, compared with 1 000-6 000 Yuan for small ROSCAs. The average for both big and small ROSCAs is 6 000 Yuan. If the average duration of each ROSCA is two years, then the funds raised each year by the ROSCA alone as a means of private finance in Xiang Dong village is as much as 6 000 Yuan per ROSCA each time x 36

ROSCAs x 6 times each year (the average time per year for a household to have access to the fund, the period for each ROSCA/fund being 2 years) = 1 296 000 Yuan. Our estimate is a conservative one, the actual amount of finance being almost certainly higher.⁴

The form of these ROSCAs is simple: all of them are Bidding ROSCAs

From both our general household research and villager interviews, we found that only the Bidding ROSCA is found in Xiang Dong village. This is closely related to another finance feature of the village: even though the village ROSCA is in an advanced state, private loans are still actively practiced. As long as people do not need the money quickly when an emergency arises, a number choose private loan as a means for obtaining money; but if an emergency occurs, the chosen resource is the Bidding ROSCA. If one is willing to pay higher interest than others, it is almost certain that person will receive the money needed in time. It is not necessary for that person to rely on "having access to the fund in turns" (lún huì), or "having access to the fund by chance" (yáo huì). The most important feature of the Bidding ROSCA is that it can solve emergency problems. This also demonstrates that the most important role of the Xiang Dong villagers' mutual-aid fund is to solve family emergencies, rather than to be used for major businesses.

The Bidding ROSCA refers to a rural private finance cooperative which allows registered members to rotate their access to the collective fund through a bidding system. The higher the interest offered as a bid, the sooner the member gets to use the fund. The founder of the ROSCA normally is the first to benefit from the collective fund. He/she is called "the head of the association" (huì shǒu), and the rest of the members are called "the feet of the association" (huì jiǎo). The following is the written statement given to me when I joined one of the common Bidding ROSCAs in Xiang Dong village as a villager (Table 2). Because I was not from the village and had no local credit history, I could only join as part of the household of Fang Huai XIANG, the head of the village, and I shared the costs with him. To the other members, it was clear that any risk taken due to my membership would be born by Fang Huai XIANG.

The reason for Xian Liang XIANG's setting up this ROSCA was to repay a loan for his medical treatment. He had borrowed a high interest loan of 6 000 Yuan and his monthly interest was more than 100 Yuan. With his family's financial situation, it would have been difficult for him to pay off his debt. After setting up his ROSCA, he was able to make a one-off payment and clear his debt and, as the head of the ROSCA, he did not have to worry about interest. From the following analysis, we can see clearly how the head benefits from setting up a ROSCA.

associations.

240

^{4.} The cadres in the village are of the view that the actual total should be at least one million Yuan. The head of the village, Fang Huai Xiang, told me that in his family alone 6 000 Yuan per month was spent for the purpose of the ROSCA. Every year, his family can bring home nearly 100 000 Yuan from various ROSCAs. Of course, we must take into account that as the head of the village, he tries to help the less fortunate by taking part in their associations. Most families invest much less money in

Table 2. Statement for the Xian Liang XIANG ROSCA

Order of using the fund	Names of members	Date for gaining access to the funds (lunar calendar equivalent)	Interest for the fund (Yuan/month)	Funds gained access to (Yuan)
The head	Xian Liang XIANG	10 April 2002	0	6 000.00
6	Lan Fen ZHANG	10 April 2003	48.20	6 345.70
	Fang Keng XIANG			
5	Yan Bin XIANG	10 February 2003	68.90	6 276.80
	Xian Zang XIANG			
1	Fang Zhong XIANG	10 June 2002	70.00	6 000.00
	Bin Shi XIANG			
	Xian Feng XIANG			
2	Fang Wei XIANG	10 August 2002	80.50	6 070.00
	Xian Xiang XIANG			
3	Li Xian XIANG	10 October 2002	65.80	6 150.50
	Fang Huai XIANG, Bi Liang HU			
4	Yi HUANG	10 December 2002	60.50	6 216.30

Notes:

Source: The field survey in the village.

From Table 3 we can see that Xian Liang XIANG can take advantage of being the first to have access to the fund. On the day the ROSCA was founded, he was able to take 6 000 Yuan cash from the others in the ROSCA. Not until was he able to wait two months to pay the first 500 Yuan, he could pay this 500 Yuan with part of the money he had already received from the others; another two months later, he needed to pay his second 500 Yuan, and he has two years to pay for the 6 000 Yuan he gained from the others in instalments. It is clear that Xian Liang XIANG can use the others' 6 000 Yuan without having to pay interest during the period of two years. This helps him to gain time and opportunity to solve other problems that were caused by a shortage of cash. This is his biggest benefit as the head of an association.

^{1.} The ROSCA was founded on 10 April 2002 (lunar calendar equivalent), with total shares of 13. The membership fee is paid once every other month and the amount for each share paid is 500 Yuan per payment. After a bidding process, interest will be added. The time for the bidding is at noon on the due date. The bidding takes place on time and should someone be late, it is deemed to be an abstention from bidding.

^{2.} The head of the association has the right to have first access to the fund without having to pay interest.

Table 3. A structural analysis of the author's ROSCA (Xian Liang XIANG ROSCA)

						Indiv	idual Mor	ney Paid	to the RO	SCA (Yua	n)					
Bid order	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Payable (Yuan)	Total received amount (Yuan)
Head	Xian Liang XIANG	* 0	500	500	500	500	500	500	500	500	500	500	500	500	6 000	6 000
1	Fang Chong XIANG	500	*70	570	570	570	570	570	570	570	570	570	570	570	6 770	6 000
2	Fang Wei XIANG	500	500	*80.5	580.50	580.50	580.50	580.50	580.50	580.50	580.50	580.50	580.50	580.50	6 805	6 070
3	Li Xian XIANG	500	500	500	*65.8	565.80	565.80	565.80	565.80	565.80	565.80	565.80	565.80	565.80	6 592.20	6 150.50
4	Yi HUANG	500	500	500	500	*60.5	560.50	560.50	560.50	560.50	560.50	560.50	560.50	560.50	6 484.00	6 216.30
5	Yan Bin XIANG	500	500	500	500	500	*68.9	568.90	568.90	568.90	568.90	568.90	568.90	568.90	6 482.30	6 276.80
6	Lan Fen ZHANG	500	500	500	500	500	500	*48.2	548.20	548.20	548.20	548.20	548.20	548.20	6 289.20	6 345.70
7		500	500	500	500	500	500	500	**							
8		500	500	500	500	500	500	500	500	**						
9		500	500	500	500	500	500	500	500	500	**					
10		500	500	500	500	500	500	500	500	500	500	**				
11		500	500	500	500	500	500	500	500	500	500	500	**			
12		500	500	500	500	500	500	500	500	500	500	500	500	**		

Monthly interest after winning the bid for using the fund (Yuan).

As this ROSCA is still in operation, the second half of the table does not show any bids. Once the whole operation comes to an end (10 April 2004, lunar calendar), we will be able to finish the table according to the interest as bid.

Of course, the other members (the "feet") are not as lucky: in order to gain access to the collective fund, they need to pay interest (*i.e.* the cost for the capital). In each ROSCA, only one member does not need to pay interest for using the fund and he/she has the first right to the fund, the founder of the ROSCA, or using the jargon "the head". This helps us to understand why the villagers are enthusiastic about organising ROSCAs and acting as the head. It does not matter who organises the ROSCA and acts as head, the key is that there are at least ten members who want to take part and pay up regularly and on time. The villager who wants to set up the ROSCA will need to have some basic resources — such as his/her reputation and credibility in the village, family influence, a wide enough circle of friends and family members, etc. These elements restrict the number of ROSCAs and heads.

We will use a completed ROSCA to further analyse the ROSCA system in Xiang Dong village (Table 4). The head of this ROSCA was called "Su Jiao XIANG" and we named this one the "Su Jiao XIANG ROSCA". It was set up on 17 December 1999 (lunar calendar) and it was reaching its completion when I arrived at the village for the research (it was wrapped up according to plan on 17 September 2002, lunar calendar, after having run for two years and nine months.)

Su Jiao XIANG was born in Xiang Dong village but she married into a neighbouring village, the Li's village, which is roughly 2 or 3 km away. She nevertheless managed to set up this ROSCA in Xiang Dong. She set up the ROSCA due to a business loss of her husband's that resulted in debts.

Table 4. Statement for the Su Jiao XIANG ROSCA

Member order	Name	Date for using the fund (lunar year)	Bidding Amount (monthly interest: Yuan)	Amount received (Yuan)
Head	Su Jiao XIANG	17/12/1999	0.00	22 000.00
1	Yan Shen XIANG	17/03/2002	252.00	24 396.60
2	Wei Wei XIANG	17/09/2002	0.00	24 850.60
3	Zong Ling FANG	17/12/2000	310.00	23 034.60
4	Ru Sheng CHEN	17/06/2001	258.00	23 632.60
5	Ru Jian CHEN	17/09/2001	268.00	23 890.60
6	Yan Lun XIANG	17/09/2000	295.80	22 738.80
7	Zhu Xian XIANG	17/03/2000	438.80	22 000.00
8	Xiao Hua WU	17/06/2002	202.00	24 648.60
9	Qiu Hua XIANG	17/06/2000	300.00	22 438.80
10	Xiao Li XIANG	17/03/2001	288.00	23 344.60
11	Xue Bin LI	17/12/2001	238. 00	24 158.60

Note: The ROSCA was set up on 17 December 1999 (lunar calendar) with a total of 12 shares. The period is three months and each share pays 2 000 Yuan every three months to the ROSCA. The time for the bidding is at 1pm on the due date. Source: Field survey in the village.

Based on the above data and ROSCA's operating regulations, we have the following initial structural analysis findings (Table 5). The order of the members having access to the fund, the interest bid by each member at each bidding interval, the total paid amount, and the total repaid amount for each member appear clearly.

Table 5. Su Jiao XIANG ROSCA Structure Analysis

					Ea	ch Share's	s Money F	Paid to the	ROSCA	(Yuan)					
Order	Name	1	2	3	4	5	6	7	8	9	10	11	12	Total paid (Yuan)	Total received (Yuan)
Head	Su Jiao XIANG	*0	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	22 000	22 000
1	Zhu Xian XIANG	2 000	*438.80	2 438.8	2 438.8	2 438.8	2 438.8	2 438.8	2 438.8	2 438.8	2 438.8	2 438.8	2 438.8	26 388	22 000
2	Qiu Hua XIANG	2 000	2 000	*300	2 300	2 300	2 300	2 300	2 300	2 300	2 300	2 300	2 300	24 700	22 438.8
3	Yan Lun XIANG	2 000	2 000	2 000	*295.80	2 295.8	2 295.8	2 295.8	2 295.8	2 295.8	2 295.8	2 295.8	2 295.8	24 366.4	22 738.8
4	Zong Ling FANG	2 000	2 000	2 000	2 000	*310	2 310	2 310	2 310	2 310	2 310	2 310	2 310	24 170	23 034.6
5	Xiao Li XIANG	2 000	2 000	2 000	2 000	2 000	*288	2 288	2 288	2 288	2 288	2 288	2 288	23 728	23 344.6
6	Ru Sheng CHEN	2 000	2 000	2 000	2 000	2 000	2 000	*258	2 258	2 258	2 258	2 258	2 258	23 290	23 632.6
7	Ru Jian CHEN	2 000	2 000	2 000	2 000	2 000	2 000	2 000	*268	2 268	2 268	2 268	2 268	23 072	23 890.6
8	Xue Bin LI	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	*238	2 238	2 238	2 238	22 714	24 158.6
9	Yan Shen XIANG	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	*252	2 252	2 252	22 504	24 396.60
10	Xiao Hua WU	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	*202	2 202	22 202	24 648.60
11	Wei Wei XIANG	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	2 000	*0, automat. win	22 000	24 850.60

^{*}Monthly interest for winning the bid for using the fund (Yuan).

Source: Field survey in the village.

In a Bidding ROSCA, the winning bidder at any bidding interval is the member willing to pay the highest rate of interest for the use of the funds of the ROSCA. The change of the interest rate during the running of a ROSCA is a key feature. Generally speaking, the interest is calculated on a monthly basis. The interest offered at each bidding interval varies: it is affected by interest rates set by the central bank authority and by local economic conditions, and it is closely linked to how urgently the "foot" members need the capital. Amongst the factors, the last one was the most direct and important, and this is the "charm" of a Bidding ROSCA: the "foot" members who need the money urgently are normally willing to pay higher interest for the capital in order to get the money as soon as possible (dé hùi); and those who can set money aside can gain interest from their capital. Participants can feel they are helping others meet their emergency needs and at the same time are making some money.

Looking at the Su Jiao XIANG ROSCA, we can see the trend of the winning bid interest here was to go lower and lower: at the end of 1999, the monthly interest was as high as 2%, but by the end of 2000, it fell to 1.35%, a nearly 35% decrease. By the end of 2001, it fell even lower to 0.99%, a further 30% drop from the previous year, and by the time the ROSCA was nearing completion in the middle of 2002, the monthly interest was only 0.82%, another 20% fall (Table 6).

Table 6. Su Jiao XIANG ROSCA Interest Analysis

Order	Name	Date for access to funds (lunar calendar)	Bidding interest (Yuan)	Funds gained (Yuan)	Monthly interest (%)
Head	Su Jiao XIANG	17/12/1999	0.00	22 000.00	0 for the head
1	Zhu Xian XIANG	17/03/2000	438.80	22 000.00	2.00
2	Qiu Hua XIANG	17/06/2000	300.00	22 438.80	1.34
3	Yan Lun XIANG	17/09/2000	295.80	22 738.80	1.30
4	Zong Ling FANG	17/12/2000	310.00	23 034.60	1.35
5	Xiao Li XIANG	17/03/2001	288.00	23 344.60	1.23
6	Ru Sheng CHEN	17/06/2001	258.00	23 632.60	1.09
7	Ru Jian CHEN	17/09/2001	268.00	23 890.60	1.12
8	Xue Bin LI	17/12/2001	238.00	24 158.60	0.99
9	Yan Shen XIANG	17/03/2002	252.00	24 396.60	1.03
10	Xiao Hua WU	17/06/2002	202.00	24 648.60	0.82
11	Wei Wei XIANG	17/09/2002	0.00	24 850.60	No interest for "sitting tight" (zuò hui)

Source: Field survey in the village.

In the Xian Liang XIANG ROSCA, which the author joined, the bidding interest change amongst the members shows the same decline. Since Xian Liang XIANG's is a new ROSCA, its overall interest rate is much lower than Su Jiao XIANG's. The interest rate has fallen even more sharply. For example, the monthly interest for this ROSCA fell more than 35% during its first year (Table 7). We will continue to monitor its development in the future.

Table 7. Interest analysis on Xian Liang XIANG ROSCA

Order	Name	Date for using the funds (lunar year)	Bidding interest (Yuan)	Amount of Funds accessed (Yuan)	Monthly interest rate (%)
Head	Xian Liang XIANG	10/04/2002	0.0	6 000	0 interest for the head
1	Fang Chong XIANG	10/06/2002	70.0	6 000	1.17
2	Fang Wei XIANG	10/08/2002	80.5	6 070	1.33
3	Li Xian XIANG	10/10/2002	65.8	6 150.5	1.07
4	Yi HUANG	10/12/2002	60.5	6 216.3	0.97
5	Yan Bin XIANG	10/02/2003	68.9	6 276.8	1.10
6	Lan Fen ZHANG	10/04/2003	48.2	6 345.7	0.76

Source: Field survey in the village.

Apart from the apparent decline in the bidding interest rate amongst the members in the ROSCA, the interest rates also differ depending on the time a ROSCA is founded. Generally speaking, the interest rates for the newer ROSCA are lower than for the older ones. This trend to some extent coincides with economic development and financial market changes within China and in the rest of the world. This suggests that the interest rates are affected by the outside economic environment. Of course, interest rates of the ROSCA are higher than those of official finance institutions (Chart 1).

(annual interest %) 25.020.0 15.0 10.0 5.0 0.0 01/2000 06/2000 11/2000 04/2001 09/2001 02/2002 07/2002 12/2002 05/2003US Base Loan Interest (1 yr) Chinese Loan Rate (1yr) S J XIANG's Rate X L XIANG's Rate Z J XIANG's Rate

Chart 1. Comparison between China, United States One-Year Loan Interest and the interests of the Su Jiao XIANG, Xian Liang XIANG and Zhu Jian XIANG ROSCAs

Source: Bloomberg and the information from our research on site.

The range of the ROSCAs is limited to the villagers and nearby friends and family members

Inquiring into the identity of the ROSCAs' members in Xiang Dong village, we found that almost all of them fall into the following three categories: they are residents of the village; they are related to one another (some of them are relatives of the villagers who live in the same village and some others from other villages); and, they are co-workers or friends who live nearby.

Again, I will use the two ROSCAs that we are familiar with as examples. In the ROSCA I joined, I was the only sub-member who was from outside the village. I was accepted only because I was introduced and backed up by the head of the village. All the other members were residents in the village (including two who were residents in the village in the past and now worked at Qian Ku town, 2 km away). Apart from the elder brother of the head of the ROSCA, the rest of the members are not directly related, just fellow villagers of Xiang Dong. On the other hand, Su Jiao XIANG's ROSCA consists mainly of her co-workers and relations: amongst the 11 members, 4 of them are relatives of the head, which is 36% of all members; her co-workers are 4, that is another 36%; the other three are Xiang Dong villagers and they are her neighbours or friends back in her mother's home. The main link in Xian Liang XIANG's ROSCA was that members were from the same village, while Su Jiao XIANG's is based on her close friends and relatives (Table 8).

Table 8. Relationships between the ROSCAs members

Relationships between members and the head in Xian Relationships between members and the head in Su				
Liang XIANG ROSCA		Jiao XIANG ROSCA		
Xian Xiang XIANG	The elder brother of the head, now living in Qian Ku town, he is a supply salesman	Wei Wei XIANG	Sister	
Fang Huai XIANG、Bi Liang HU	Neighbours	Zong Ling FANG	Brother in law, husband of W. W. Xiang	
Lan Fen ZHANG	Wife of Fang Huai XIANG, neighbour	Zu Xian XIANG	Uncle on her parents' side, lives in Xiang Dong village	
Fang Keng XIANG	Elder brother of Fang Huai XIANG, lives in the same village as the head	Yan Lun XIANG	Cousin on her parents' side, lives in Xiang Dong village	
Yan Bin XIANG	Villager in the same village	Xiao Hua WU	Former co-worker, lives in LI village which the head married into	
Xian Zang XIANG	Villager in the same village	Xue Bin LI	Former co-worker, lives in LI village	
Fang Chong XIANG	Villager in the same village	Qiu Hua XIANG	Former co-worker, lives in Xiang Dong village where the head's parents reside	
Yi HUANG	Villager in the same village	Xiao Li XIANG	Former co-worker, lives in Xiang Dong village where the head's parents reside	
Bin Shi XIANG	Newly from Xi Kuo village, from the same clan family as the head	Ru Sheng CHEN	Neighbour, lives in Xiang Dong village where the head's parents reside	
Xian Feng XIANG	Newly from Xi Kuo village, from the same clan family as the head	Ru Jian CHEN	Neighbour, lives in Xiang Dong village where the head's parents reside, brother of Ru Sheng CHEN	
Li Xian XIANG	Newly from Xi Kuo village, from the same clan family as the head	Yan Shen XIANG	Friend, lives in Xiang Dong village where the head's parents reside	
Fang Wei XIANG	Originally from Xiang Dong village, now works in Qian Ku town hospital		•	

Source: Field survey in the village.

In some of the ROSCAs, all members are relatives. I would like to site the current village party general secretary Zu Jian XIANG's ROSCA as an example. His ROSCA was set up on the third day of the eighth month 2001 (lunar calendar). The interval is the months and it is due to finish by the 3 November 2004 (lunar calendar). Members who do not have access to the collective fund pay 3 000 Yuan each time. For those who do, the one-off payment for the fund is over 36 000 Yuan. This is relatively a big ROSCA in the village.

From the membership structure of this ROSCA, we can see that apart from one village cadre, a co-worker of the head, the others are all direct relatives of the head (Table 9). All are close family members, including his own children, brothers, cousins and relations of his wife's. During my research time in the village, the ROSCA held four bidding occasions, and the winners of the bids did not have to offer very high rates. They were low compared to other ROSCAs' interest rates during the same period of time. The monthly interest rate during these four times was respectively 1.17% (on the 3rd day in the 11th month of 2001, lunar calendar), 1.04% (on the 3rd day in the 2nd month of 2002, lunar calendar), 0.65% (at the 3rd day in the 5th month of 2002, lunar calendar), and 0.70% (at the 3rd day in the 8th month of 2002, lunar calendar). This suggests that the interest rates for the pure "relatives ROSCAs" is much lower than the rates for the above two ROSCAs during the same time

period (for example, in 5th and 6th month 2002, lunar calendar, the monthly interest at Xian Liang XIANG's was 1.17%, Su Jiao XIANG' was 1.04% while Zu Jian XIANG's was only 0.65%). One might well infer that the closer the relationship, the lower the interest for using the capital becomes, and the stronger is the co-operative spirit.

Table 9. Relationships between members and the head in Zu Jian XIANG's ROSCA

Name	Relation with the head	
Zu Jian XIANG (current general secretary for the party in the village)	The head	
Jin Bu WANG	Son, lives in Qian Ku town	
Li Jiao XIANG	Daughter, married into Xin An township which is 2 km from Xiang Dong	
Zu Qing XIANG	Brother	
Zu Zhang XIANG	Cousin	
Fang Xuan XIANG	Son-in-law of the head's brother, villager of the same village	
Zuo Guang XIE	Cousin of the head's uncle	
Zuo Fang XIE	Cousin of the head's uncle	
Zuo Yin XIE	Cousin of the head's uncle	
Zuo Keng XIE	Cousin of the head's uncle	
Zong Li ZHANG	Brother in law	
Xiao Ying SU	Daughter of the head's wife's brother, married into the nearby Jin Xiang town	
Fen Yu WANG	Cadre in the same village	

Source: Research field trip.

The purpose of the ROSCAs is to provide emergency funds for the rural farmers' daily lives, not to make a profit

From the information I found regarding the ROSCAs in Xiang Dong village, the purpose of setting up a ROSCA or joining one is not for profit, but for providing emergency funds for the villagers. This point is clearly shown in the data collected (Table 10).

Table 10. Survey for the purpose of setting up a ROSCA in Xiang Dong village

Name of ROSCAs	The head's reason for establishing the ROSCAs	Scale of the ROSCAs (Yuan)
Zu Chun XIANG's	Poor health, in need of money for medical treatment	2 000 (21 share)
Xian Lai XIANG's	Medical treatment for son	6 500 (14 shares)
Zu Mei XIANG's	Their son's being handicapped and old age (73 years old and 66 for his wife)	6 000 (26 shares)
Yan Yi XIANG's	Medical treatment for his wife	5 000 (11 shares)
Yan Dang XIANG's	Medical treatment for his wife	1 000 (11 shares)
Zu Wei XIANG's	Sending a child to university	5 000 (11 shares)
Zhong Lin GUAN's	Sending a child to university	14 000 (11 shares)
Rui Shen CHEN's	Sending a child to high school	10 000 (11 shares)
Jin Rong LIN's	Son's getting married	2 000 (11 shares)
Hong Xiu Ll's	Buying a house in Xiang Dong (working in Xiang Dong most of the year, residency nearby LI village)	10 000 (11 shares)
Fang Lian XIANG's	Loss in his factory, raising money to pay his debt	10 000 (11 shares)
Yan Cun XIANG's	Setting up a business in supplying goods	10 000 (11 shares)
Yan Qian XIANG's	Business	20 000 (11 shares)
Zu Rong XIANG's	Frog-farm business	30 000 (11 shares)
Jia Shen ZHENG's	Business	50 000 (11 shares)

Source: The field survey in the village.

The above is what was learned about a few of the ROSCAs in Xiang Dong. Taking into account other information gathered, I found there are four main purposes for the Xiang Dong villagers to set up ROSCAs:

- 1. To raise funds to solve family needs when situations arise that are urgent and cannot be put off; for example, medical treatment for a family member or tuition and other expenses for sending a child to school. Generally speaking, families who do not have such funds are the economically disadvantaged families. The amount of share capital they can offer is small and the size of the ROSCA they can join is also small. Most of their ROSCAs are limited to 1 000 Yuan per fund payment for a period of three months. Members of their ROSCA are mostly relatives of the head, neighbours and cadres in the village. Because the amount involved is small and members are willing to join for the sake of helping the poor and vulnerable, it is not difficult for them to set up a ROSCA. The disadvantaged households in the village set up ROSCAs every year. Some of them would have no other options than the ROSCAs. These villagers depend on their ROSCAs. For example, for the past six years, Zu Mei XIANG has depended for his basic livelihood on setting up ROSCAs and being the head of them. Every year, he sets up two or three ROSCAs. Disadvantaged villagers tend to set up a great number of the ROSCAs in the village.
- 2. Raising funds for important family matters. For example, building a new house, paying for a marriage, and for higher education fees. The households who set up ROSCAs for such matters are normally those who can manage their daily lives on a financial basis but lack reserves for important family matters. The size of these ROSCAs must be sufficient for major purposes. In Xiang Dong village, such ROSCAs normally can raise funds between 10 000 to 30 000 Yuan.

- 3. Raising funds for business capital or setting up a factory. Members of such ROSCAs normally enjoy better financial conditions. The head wants more money injected into the business for expansion. Meanwhile, "foot" members can also benefit from his/her business growth. Such ROSCAs normally can raise over 30 000 Yuan each. A few of them can even raise 50 000 Yuan.
- 4. Raising funds for investment. It is possible to use the funds raised by establishing a ROSCA to invest in other ROSCAs and make a profit by way of interest, *i.e.* to gain capital through a ROSCA and make profits by using other people's funds. This is rarely, if ever, seen in Xiang Dong village because nobody wants to join such ROSCAs or to support such a head.

From the above, we can see that ROSCAs in Xiang Dong exist for mutual aid and not for profit. Amongst the members interviewed, about 50% might be said to be in group 1, 40% in group 2, and 10% in group 3. The fourth group is a theoretical possibility rather than a reality.

The risk of Xiang Dong ROSCAs is so small that it can be discounted

Risk is a key factor for any financial institution. For a private financial organisation such as a ROSCA, risk is even more important because if any member breaches the agreement, the ROSCA cannot survive. The welfare of all members will be directly affected and the aims will not be realised. For this reason, every member of the ROSCAs is fully aware of the importance of risk control and management. For the head, he/she faces even more serious responsibilities. According to research, if any one of the members in a ROSCA fails to make his/her payment on time, the head will pay it out of his/her own pocket in order to maintain the ROSCA. In order to prevent this from happening, the head must carefully select his/her members. Accordingly, during the running of the ROSCA (normally 2-3 years), he/she monitors the situation very closely to reduce any risks. If "foot" members do not take the initiative to pay their share, he/she will often visit them and urge them to pay up, either directly or indirectly.

According to the heads and members interviewed in Xiang Dong village, over a period of more than ten years (from 1990s till the present) there have been only three cases of members' breaching the agreement and failing to pay up their share. The default rate was lower than 1%, and none of defaulters were simply lax in their behaviour. They failed because of serious family difficulties and could not make the payments on time. Under these circumstances, what is normally practiced in Xiang Dong village is that the head will put up the money as a private loan for the member and gain repayment by transferring an appropriate portion of the share from the member to the head according to the money owed. In this way, the negative influence will be restricted and the ROSCA can continue to operate as usual. In the recent past, the default rate in Xiang Dong village has reached the level of zero. Villagers told me that for them, this is no longer an issue. The reasons are explained in the following section.

II. The application of game theory to ROSCAs in Xiang Dong village

Our field research and initial analysis show that the members of the ROSCAs in Xiang Dong village are acting not only in accordance with game theory, but also social exchange theory (as they are also taking part in various other economic activities in the village). Since Xiang Dong village is very much clan and village community oriented, both theories are applicable.

The strategic alternatives for the members of ROSCAs taking part in multi-round bidding are: Co-operation - repay the capital and interest/Non Co-operation - refuse to repay the capital and interest.

Cost under co-operation

For members who do not have access to the funds: C_{it} , i = 1, 2, 3, n-1; C_{it} refers to the opportunity cost for putting money in the ROSCA, and "t" is the number of the ROSCAs' bidding rounds.

For members who have access to the funds, C_{nt} = interest payment, assuming the "n" is the person who gets access to the funds.

The overall income under co-operation

Under co-operation, members who do not have access to the funds have three advantages for their co-operation: income from interest R_{it} , $i=1,2,3,4,\ldots$ n-1, current value = $\sum \delta^t R_{it}$ (δ is discounted rate); expected future ROSCAs income $E[\sum_{t=0}^{\infty} \delta^t M]$ and other gains from the village public welfare $\int_0^{\infty} \delta^t B_{st}$ (N)dt. Members who access funds can also benefit from three sources of income: i.e. capital from the ROSCAs R_{nt} and the two other benefits shared with members with no access to the funds:

- Income for members having no access to the funds: $R_{it} + E[\sum_{t=0}^{\infty} \delta^t M_t] + \int_0^{\infty} \delta^t B_{st}(N_t) dt$
- Income for members having access to the funds: $R_{nt} + E[\sum_{t=0}^{\infty} \delta^t M_t] + \int_0^{\infty} \delta^t B_{st}(N_t) dt$

Net income under co-operation

- Members having access to the funds: $\Pi_n = \sum \left[\delta^t (R_{nt} C_{nt}) \right] + \left\{ E \left[\sum_{t=0}^{\infty} \delta^t M_t \right] + \int_0^{\infty} \delta^t B_{st} (N_t) dt \right\}$
- Members having no access to the funds: $\Pi_i = \Sigma \left(\delta^t R_{it} C_{it} \right) + \left\{ E[\sum_{t=0}^{\infty} \delta^t M_t] + \int_{0}^{\infty} \delta^t B_{st} \left(N_t \right) dt \right\}, i$ $= 1, 2, 3, 4, \dots, n-1$

Cost for non co-operation

- Members having no access to the funds: $C_i = X$ $I = 1, 2, 3, 4, 5, \dots$ n-1 (X is the principal loss)
- Members having access to the funds: $C_n = F + E[\sum_{t=0}^{\infty} \delta^t M_t] + \int_0^{\infty} \delta^t B_{st}(N_t) dt$

F stands for reputation damage; the other two items in the formula are loss of expected income after a member loses his/her credibility and opportunity to join a ROSCA, and various potential gains now lost from village society due to losing his/her credibility.

Income under non co-operation

- Members having no access to the funds: 0
- Members having access to the funds: (n-1) X

To sum up the above, the matrix for the game theory for Xiang Dong villagers taking part in ROSCAs under the framework of the village is:

	Non co-operation	Co-operation					
Non co-operation	0, 0	(n-1) X-{ F +E[$\sum_{t=0}^{\infty} \delta^{t} M_{t}] + \int_{0}^{\infty} \delta^{t} B_{st} (N_{t})dt$ },					
Co-operation	$\begin{array}{cccccccccccccccccccccccccccccccccccc$						

If the game theory applies only for one round, and the participants choose non co-operation, it is impossible for the ROSCAs to survive; if there is only the ROSCAs game theory operating, without the village social exchange theory, the ROSCAs cannot operate for long because of the absence of significant penalty to the member who breaches the agreement.

Because of the infinite multilateral interactions that would be applicable in the village as a whole, the penalty to the member for lack of co-operation $P_n = F_n + E[\sum_{t=0}^{\infty} \delta^t M_t] + \int_0^{\infty} \delta^t B_{st}(N_t) dt \text{ is not just}$

limited to the short term economic loss, but the complete loss for his/her long term economic and social interests. Therefore, P > (n-1) X, and people will choose to cooperate. This is a strategic game.

When $P \le (n-1) X$, it is expected that there will be people who do not co-operate, and therefore the ROSCAs will not exist. So, when X (size/scale of the association) is small, and P > (n-1) X, co-operation is the only way of reaching a Nash equilibrium. On the contrary, as the scale of a ROSCA gets larger, the probability for non co-operation increases. When it becomes very large, the likelihood of the ROSCA's failing is great.

III. Conclusions and policy implications

The following conclusions can be made after having carried out initial research and analysis on the ROSCAs in Xiang Dong village, Cang Nan county, Wen Zhou city of Zhejiang province.

 As typical informal financial systems, the emergence and development of various fund-raising institutions, such as ROSCAs, are not only an economic phenomenon, but also a cultural, social and historical phenomenon. As a custom, it is rooted deeply in the whole social system of the local area. The ineffective operation of or even the lack of national formal financing systems in the rural area has strengthened the rural residents' commitment to self-help institutions based on the realities of their daily lives. We believe that private financial development is the trend for rural China and is unstoppable.

- A ROSCA, especially a Bidding ROSCA in Xiang Dong village, is a well-designed financial system and an easily operated and rational financial arrangement. This financial method, operated through interest-rate bidding for access to the collective fund, shows the importance of interest in the private capital market. Furthermore, the interest rate setting policy takes into account the price factor for the funds available in the local market. It reflects not only the trend of the domestic and global capital markets, but also the principle of "putting people first" and treating them individually (interest varies depending on the structure of the ROSCAs; the ROSCAs having the lowest interest rate is formed by relatives in the same family). This arrangement combines economic interest and social and cultural factors. Thus, it is a highly competitive financial system.
- In Chinese rural society, given the close ties of the clan and villagers, the low level of marketization, limited mobility, and the shared history of members from the same village or friends and family members, the aim of a ROSCA is largely to meet their daily needs and the size of the ROSCAs is small. Such financial institutions represent very little risk (over the past ten years, the risk rate in the village has been lower than 1%).

Possible policy implications of this research are threefold:

- A ROSCA such as the one in Xiang Dong village is truly a rural residents' financial co-operative. The government should recognise its legitimacy, allow its existence, and support and encourage its growth.
 - In fact, even if the government disallows it or labels it as illegal, this kind of financial institution will continue, although continue in a more hidden way (in fact, it is rather hidden at the moment). It can be said that a custom that has been formed through trial and error over a thousand years cannot be eliminated by government fiat. Even during the Cultural Revolution, it was still in operation through various means, thus proving its vitality.
- Apart from recognising ROSCA's legitimacy and development as an informal financial rotating credit system, the government should seek to develop rural financial systems. The key to successful reforms lies in three aspects. First, the gradual establishment of financial markets in rural areas; secondly, cultivating rural financial markets and thereby encouraging various market-oriented competitions while firmly opposing any form of monopolistic operation; and, thirdly, as the interest rate in the informal private financial market (such as the ROSCAs interest rate in Xiang Dong village) has truly been free running in many areas, the government might consider rural areas as the first place for gradually loosening control over interest rates in the formal financial markets.
- As a virtually self-governing informal system, the risk for fund raising associations like those of Xiang Dong village is extremely low, but theoretically it is still important for the government to monitor rural private financial systems. We can see from the above discussion applying the game theory model that if the village is totally opened, allowing a majority of out-of-village members other than friends and families into a ROSCA, or over-expanding the size of the ROSCAs, the risk will be greatly increased. Government monitoring can work on the following aspects: analysing the member structure of the ROSCAs, controlling their range, and restricting the size of the funds. With these measures, the risk of such institutions can be managed. Some people debate about the necessity of regulations for such informal

credit institutions, but the lessons from the bankruptcy of similar ROSCAs remind us that formal regulations on risk management for informal financing is needed during China's economic transition period. This was emphasised to the author by a number of villagers.

Overall, the research has expanded our understanding of the Chinese rural private financial development issues, and inspired ideas for future rural financial reforms in China. We plan to continue our research after having received feedback from the experts in this area following publication of this preliminary research.

MICRO-FINANCE, POVERTY ALLEVIATION, AND FINANCIAL REFORM IN CHINA

By Albert Park, Changqing Ren and Sangui Wang*

Abstract

This paper assesses the potential role of micro-finance for poverty alleviation and financial reform in China in light of China's micro-finance experience to date and ongoing changes in China's economic, institutional, and policy environment. China's micro-finance movement began in 1994 and has experienced mixed success. Some small-scale NGO programs have demonstrated that the poor are capable of repaying loans at relatively high rates of interest and that such programs can achieve financial sustainability. But the uncertain legal status of NGOs, a strict financial regulatory environment, and inadequate financial management capacity prevent program expansion. Changes in credit demand associated with economic restructuring suggest that micro-finance is not well-placed to lead China's poverty alleviation efforts. As an example of innovative institutional design, China's micro-finance could help shape the direction of financial reform and play a future role in a diversified financial system.

1. Introduction

The goal of this paper is to assess the potential role of micro-finance for poverty alleviation and financial reform in China in light of China's micro-finance experience to date and ongoing changes in China's economic, institutional, and policy environment. Micro-finance programs have played a prominent role in the rural financial systems of a number of developing countries (*e.g.*, Bangladesh, Indonesia), and have been lauded for their ability to overcome traditional barriers to lending to the poor. They were first introduced into China in 1994, and since that time have achieved a mixed record of success.

Since economic reforms began, China has been undergoing rapid structural change characterized by rising incomes and fast-paced industrialization and urbanization. Many have been concerned that the rural poor, especially those living in remote areas, have been left out of this process, contributing to growing inequality. In particular, some have warned that poor farmers' access to credit has declined as financial reforms enable funds to flow to richer, rapidly growing urban areas either in response to the attraction of higher returns or due to implicit or explicit government policies biased in favour of urban areas. This creates concern because most of China's poor population continues to reside in rural areas, the recent emergence of urban poverty notwithstanding, and lack of credit has long been viewed as an important constraint to development in poor areas. Moreover, in recent years, the positive performance of some micro-finance programs in China has led to optimism that micro-finance models might help lift the poor out of poverty in a way that is financially sustainable and which could spur broader financial reform.

Of course, this train of logic rests on propositions that must be proven rather than assumed. This paper attempts to bring available empirical evidence to bear on these questions. China has moved slowly in reforming its financial system, delaying many liberalizing reforms until late in the transition process. Today China's financial system remains tightly regulated in several key areas, such as interest

^{*} The authors acknowledge helpful conversations with Andrew Watson and Enjiang Cheng.

rates, competition, and inter-bank lending. However, China has committed to opening its financial sector to international competition under the terms of the WTO agreement, and substantial reforms of China's financial system appear likely to occur soon. This makes it a particularly opportune time to reflect on the potential role that micro-finance can play in a reformed financial system.

The paper is organized as follows. We first review the experience of China's micro-finance programs to date in section 2. In section 3, we analyze economic changes occurring in China, especially those affecting the poor, and their implications for the potential for micro-finance programs on the demand side. In section 4, we examine China's financial regulatory environment, the performance of China's rural financial institutions, and the impact of recent reform initiatives, which shape the feasible space for operating micro-finance programs on the supply side. Finally, in section 5, we discuss the role that micro-finance should play in poverty alleviation and financial reform in the future

2. China's micro-finance movement

Micro-finance models were first introduced to China in 1994 as part of a worldwide proliferation of NGO-led micro-finance programs. The rapid introduction of micro-finance in China reflected the exuberant optimism of the international development community that such programs could not only empower the poor to help themselves but also do so in a way that was financially sustainable. A variety of programs were established in a very short time. Most were executed on a small scale, targeted the poor, followed the Grameen model, and were undertaken in collaboration with international donors. The early performance of NGO micro-finance projects was encouraging, with many programs achieving loan repayment rates of close to 100%.

In recent years, China's NGO micro-finance movement has continued to mature in some ways but overall has not maintained the momentum of its early rapid growth. In fact, the number of rural households participating in NGO micro-finance programs in China has probably declined since the late 1990s. Some of the early programs failed outright, as should have been expected. Some relied on one-time external grants that were not renewed as donors shifted to new priorities (*e.g.*, programs by UNFPA, UNICEF, UNDP, World Bank). Regulatory restrictions preventing micro-finance programs from mobilizing their own deposits severely curtailed possibilities for expansion. Most programs failed to institutionalize commercial banking practices necessary to achieve sustainable growth.

Well-known NGO micro-finance programs that remain active in China typically began as, and often continue to be, collaborations between international donors and Chinese government, financial, or research institutions. In order of size calculated by the number of current borrowers, these include the following: the China Foundation for Poverty Alleviation (CFPA), which took over two pilot sites begun by a World Bank project and also administers other sites with different financing sources, including a foundation in Hong Kong; the Funding the Poor Cooperatives (FPC), China's earliest micro-finance program administered by researchers at the Chinese Academy of Social Sciences (CASS) along with locally recruited staff working in township poverty alleviation cooperatives (*fupinshe*), with financing from Ford Foundation, Grameen Trust, and the Canada Fund; Sustainable Micro-finance Assistance for the Poor (SMAP), which manages four project sites that began as part of a United Nations Development Program (UNDP) project; and the Qinghai Agricultural Bank Micro-finance Program, involving the Agricultural Bank of China (ABC) and

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^{1.} One domestic micro-finance NGO, the Association for Rural Development and Poverty Alleviation in Sichuan (ARDPAS) established in 1997, was closed in 2001 with a clientele of over 35 000 people because its funds came from budgetary grants from the provincial government. In China, budgetary funds are not allowed to be used for lending.

supported by AUSAID. Key features of these programs are described in Table 1. For a longer list of programs established from 1994 to 2000, see Park and Ren (2001). He and Lin (2002) provide more detailed descriptions of the larger of China's past micro-finance programs. Table 1 omits many smaller NGO micro-finance programs that currently operate in China. A few NGOs also have initiated programs in urban China, targeting migrants or laid-off workers.²

A few observations about China's NGO micro-finance are worth noting.³ First, relative to China's rural population or even to her poor population, the number of participants remains miniscule. And as noted earlier, in aggregate the scale of NGO programs has recently contracted rather than expanded. Second, the Grameen model of group lending and poverty targeting remains dominant,⁴ even though the nature of many projects make greater flexibility in contract terms desirable. Third, some programs (in particular the FPC projects) have demonstrated that at current scales of operation they can achieve high repayment rates (generally over 95%) at relatively high rates of interest and reach financial and even economic sustainability. As seen in Table 1, the most common loan interest rate is 8%, but when instalment payments begin immediately after the loan is made, the effective interest rate doubles (to 16%). This is much higher than official interest rates. Fourth, the programs appear to be reaching some but not all of the poor (more below). Fifth, the programs have found it challenging to maintain and improve financial vigilance. Some current programs are legacies of earlier development projects, and receive less management support than before. Reporting and information systems remain far behind best practice. In fact, some well know micro-finance project sites recently have been closed because of management failures.⁵ NGO managers often treat the programs as development projects or experiments and have little personal stake in the projects' commercial viability or growth.⁶ Overall, no NGO programs have evidenced institutional potential for widespread expansion and outreach.

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^{2.} A project by UNDP, AUSAID, and the Tianjin government targets female laid off workers; a project by the Workers' Union (*gonghui*) and UNDP in Jiaozuo City in Henan supports workers through loans to employers; and the Women's Federation also has micro-finance initiatives in urban areas. The Ministry of Labor has just begun a small loan program for laid off state-sector workers (China Daily, 2003).

^{3.} Greater detail on most of these points can be found in Park and Ren (2001).

^{4.} Even when there is group lending, joint liability generally is not enforced. Borrowers form groups to discuss projects and meet weekly to make repayment installments witnessed by other borrowers.

^{5.} For example, in 2003 the FPC suspended new lending in Yucheng County, Henan Province, and CFPA dropped a site in Ankang which had been a former World Bank project area, because of fraud committed by local managers.

^{6.} Managers are usually project officers with no financial management experience. For example, researchers at CASS who supervise the FPCs are paid a fixed government salary, have responsibilities to their research institutes, and view their micro-finance work as action-research. This provides little incentive or ability to push for project expansion.

Table 1. Prominent NGO Micro-finance Programs in China

Chinese Organization(s)	International Donors/NGO	Year began	Groups?	Interest rate*	Repayment	Coverage
China Foundation for Poverty Alleviation (CFPA)	World Bank, Huaxia Bank, Kadrooie Charitable Foundation (Hongkong)	1997- 2002	yes	7-8%	One year (bi-weekly repayment)	27 937 members (Dec. 2002) in Sichuan, Guizhou, Shanxi, Fujian, and Guizhou
Funding the Poor Cooperative, Chinese Academy of Social Sciences	Ford Foundation, Grameen Trust, Canada Fund, Private donation	1994	yes	8%	One year (weekly repayment)	15 873 members (Sep. 2002), Henan (Nanzhao, Yucheng) and Hebei (Yixian)
Qinghai Agricultural Bank	AUSAID	1996	yes	12%	6-12 months (lump sum and/or instalments)	13 000 members (Feb. 2003) in Qinghai (Le Du, Ping An and Huang Zhong county)
Sustainable Micro-finance Assistance for the Poor (SMAP)	United Nations Development Program, Japan government	1996	yes	8%	One year (weekly repayment)	7 865 members (Dec. 2002) in Inner Mongolia, Gansu, Sichuan, and Guizhou

^{*}Effective interest rates are double when repayment is in equal instalments over the length of the loan.

After initial scepticism that micro-finance models were appropriate for China, the government in 1997 decided that it would lead rather than follow the micro-finance movement, adopting a Grameen-type approach to disburse loans as part of its longstanding program of subsidized loans for poverty alleviation administered by the Agricultural Bank of China. Following the lead of NGO pilot programs, the government established independent poverty alleviation cooperatives, usually staffed by government workers, to administer group lending with repayments made in instalments. The government programs expanded rapidly to reach over 600 counties in 22 provinces by August 1998, almost immediately dwarfing the NGO micro-finance movement. However, at about that time, financial reform policies required closure of poverty alleviation cooperatives because they were not officially recognized as financial institutions, and administration of poverty loans was fully returned to the Agricultural Bank of China. The rapid expansion of government micro-finance without proper training, incentives, or oversight predictably led to poor implementation of key micro-finance principles (i.e., election of group leaders, weekly meetings, etc.) and to poor repayment performance (Park and Ren, 2001). There is little promise that such programs can perform any better than the individual subsidized loan programs they replaced, which had repayment rates of about 50%. Not surprisingly, low interest rates also made the loans targets of wealthier households, reducing targeting effectiveness (Park and Ren, 2001). Worldwide, there is no successful precedent of which we aware for this type of government-run micro-finance. In the rest of this paper, we focus attention only on NGO micro-finance.

A few of China's NGO micro-finance programs have tried to involve existing rural financial institutions, encouraging them to try new institutional approaches to lending and helping them to improve their financial management capabilities (e.g., AUSAID and local Agricultural Bank branches in Qinghai, Developpement International Desjardins and local RCCs in Hebei).8 The Qinghai program has emphasized the establishment of strong incentives for village agents and improvement of the banks' capacity for loan management, and is attracting attention from the provincial ABC as a reform model.⁹ In many areas, the Agricultural Bank and in some locations RCCs, also have been involved in implementing the government's micro-finance programs, so have had some exposure to micro-finance concepts. In addition, managers of rural financial institutions have become aware of the success of pilot NGO micro-finance models through the media and professional circles. Finally, national-level officials in the People's Bank of China, the Agricultural Bank, and RCC headquarters, have been engaged by the development community in dialogue about the potential of micro-finance institutions, and have even taken study trips to Indonesia and Bangladesh to better understand how micro-finance has been implemented in other countries. 10 While it is hard to point to tangible results of these various activities that transcended local settings, such initiatives potentially can play a key role in the process of institutional learning that could yield much larger impacts when the regulatory environment permits more real experimentation with new methods of rural lending.

^{7.} Bank Rakyat Indonesia (BRI) in Indonesia was a state-owned bank, not a government administrative agency, and successfully established positive incentives for strict financial management. Later, we discuss the potential for similar reforms of China's rural financial institutions.

^{8.} One of the authors, Sangui Wang, is also engaged in experimental research with RCCs in Sichuan to examine the importance of interest rates and repayment schedules to profitability and loan repayment.

^{9.} Conversation with Enjiang Cheng.

^{10.} Ford Foundation has been a leading agent for promoting this dialogue. Engaging China's formal banking system also was a top priority of the Consultative Group to Assist the Poorest, headquartered at the World Bank.

3. Economic development and credit demand

China's micro-finance movement is predicated on the assumption that lack of credit is a barrier to investment and income growth of poor households. This same assumption long has underlied the government's emphasis on subsidized credit as the centrepiece of its rural poverty alleviation strategy. However, there are reasons to be sceptical of making household credit the top priority in China's poverty alleviation strategy.

Recently, the credit demand of households in poor areas has changed with the rapidly changing structure of economic production. In Table 2, we present summary data on the income composition of rural households in poor areas in 1997 and 2000, using data from the China Rural Poverty Survey, a longitudinal household survey conducted in officially designated poor counties in four poor provinces--Shaanxi, Gansu, Sichuan, and Guizhou. The sample is broken down into three wealth levels—rich, medium, and poor. Table 2 shows that there was a dramatic increase in the share of income from off-farm wage labour (primarily migration), from 24 to 56%, and a reduction in the share of income from traditional agriculture (cropping and livestock), from 60 to 31%. Self-employment income also increased, but not substantially among the poorest households. The importance of wage income increased for all wealth levels, mirroring changes occurring in much of rural China. Part of the increase in rural wage employment is a response to the collapse of agricultural commodity prices in the late 1990s which reduced the return to on-farm labour. However, the increase in the relative importance of wage income has been particularly fast in China's western regions where most of the poor reside. National Statistical Bureau rural survey data show that the wage share of income in Western China increased from 14 to 23% from 1995 to 2000, much faster than the national average.

Table 2. China Rural Poverty Survey Household Income Composition in 1997 and 2000, by Wealth Level

Unit	Cropping		Livestock		Wa	iges	Self-employment		Total income		
	Ullit	1997	2000	1997	2000	1997	2000	1997	2000	1997	2000
High	Yuan	1985	1 607	528	133	1 238	3 877	1 083	1 139	4 833	6 755
wealth %	%	45.40	22.45	9.87	1.90	23.58	59.93	21.15	15.72	100.00	100.00
Medium	Yuan	2 010	1459	250	150	791	1967	247	617	3 299	4 193
wealth	%	59.55	34.30	9.15	3.16	25.02	50.53	6.28	12.01	100.00	100.00
Low	Yuan	1 058	1 258	50	-26	475	1 342	385	235	1 967	2 809
wealth	%	54.61	42.43	2.07	-1.14	23.58	50.99	19.73	7.72	100.00	100
A 11	Yuan	1 683	1425	275	72	833	2 339	570	632	3 361	4 468
All	%	51.45	29.33	8.20	1.48	24.02	56.02	16.32	13.17	100.00	100.00

Note: Wealth groups in 1997 divided evenly into thirds and wealth groups in 2000 use the same wealth level cut-offs defined in 1997 real Yuan. See Table 4 for sample sizes.

Although official statistics suggesting the virtual elimination of absolute poverty in China undoubtedly understate the extent of poverty and overstate the speed of poverty reduction (Park and Wang, 2001), it is important to recognize that in most poor regions, incomes have risen significantly over the past decade, albeit inconsistently. As households engaged in traditional agriculture become richer, they generally able to borrow more but choose to borrow less, relying on their own savings or cash income to finance fertilizer and other input purchases. Thus, credit demand for traditional agriculture tends to decline as households become wealthier, except when substantial capital investments are made to realize scale economies or grow new input-intensive crops. Such shifts in cropping are less likely in China's poor areas, where most of the land is sloped and of poor quality.

Overall, economic trends in poor areas suggest that credit is becoming less of a critical constraint for China's poorest households than in the past. China is in the midst of rapid structural transformation in which labour is being shifted from agriculture to non-agriculture and from rural to urban areas. The most promising strategy for poverty alleviation is to make this process inclusive of labour from poor areas, suggesting that priority be given to improving educational attainment and lowering the costs of job search, such as by filling information gaps to enable the poor to find jobs in more distant locales. Although some have suggested that migration requires initial funds to pay for transportation and search costs, wage income from migration also provides cash to the household, which is likely to reduce credit demand.

In many other countries, micro-finance loans are used to support self-employment activities in densely populated areas, which often require capital investments and/or working capital. However, China's poor are located in remote, mountainous villages with low population density, high transport costs, and no sizable urban demand centres to support extensive self-employment activity. Farmers participating in micro-finance programs in China have most often used loans for cropping or livestock. If the poor could engage in self-employment activities as migrants in urban areas, they might be much larger demanders of credit. However, managers of local rural financial institutions have poor information to evaluate such projects. Rural migrants in cities also have little hope to obtain credit from urban financial institutions given their inability to provide collateral, lack of established reputations in urban communities, and high flight risk.

Evidence on the use of household loans in poor areas confirms some of the points just made (Table 3). Comparing the composition of loan demand in 1997 and 2000, we find that the percentage of loans used for production rather than consumption declines substantially for the low wealth group, from 44 to 30%. Borrowing for fertilizer and livestock both fall considerably, while that for self-employment increases. The table also suggests another important trend in credit demand—the growing need for consumption loans in response to rapidly rising costs of schooling, health care, and home construction. The table also reinforces the earlier finding that it is the wealthier households in poor areas that are the ones with growing demand for loans for self-employment. Other rural surveys reported recently in the Chinese literature find that the self-employed and specialized households are large demanders of credit (Xia and Deng, 2001; Zhejiang Rural Survey Team, 2002), the composition of household credit demand has become highly diversified (Gong, 2002), TVE lending has declined (He, Feng, and He, 2002; Shang, 2003), and households are more likely to engage in informal lending than formal lending (Zhejiang Rural Survey Team, 2002).

Table 3. China Rural Poverty Survey Household Credit Use in 1997 and 2000, by Wealth Level (per cent of total new loan value)

	High wealth		Mediun	n wealth	Low v	wealth	All	
	1997	2000	1997	2000	1997	2000	1997	2000
Production	20.93	56.01	37.79	35.30	43.53	30.47	30.99	45.93
Of which:								
Fertilizer	2.26	0.95	16.44	4.00	16.13	9.77	9.51	3.66
Other inputs	1.06	18.44	10.76	0.71	10.19	3.09	5.93	11.40
Livestock	6.89	0.43	3.62	4.70	5.53	3.78	5.65	2.04
Fixed capital	5.23	10.57	5.17	2.93	0.00	2.85	3.98	7.27
Self-employ	5.49	25.62	1.80	22.95	11.67	10.98	5.92	21.56
Consumption	16.45	13.31	22.03	34.32	26.79	40.24	20.46	23.78
Of which:								
Daily expend	1.56	0.61	7.11	2.71	9.51	2.79	4.99	1.53
Weddings, funerals, etc.	4.11	2.18	1.58	5.04	0.72	9.37	2.60	4.46
Education	5.91	7.74	7.43	6.32	3.36	15.55	5.73	9.37
Health	4.87	2.78	5.91	20.25	13.20	12.53	7.13	8.42
Housing	39.08	18.58	15.44	15.20	5.75	11.37	24.58	16.20
Repay other loans	9.23	5.63	16.15	10.74	5.59	6.37	10.30	6.76
Other	14.32	6.47	8.59	4.44	18.35	11.55	13.67	7.33

Note: Wealth groups in 1997 divided evenly into thirds and wealth groups in 2000 use the same wealth level cut-offs defined in 1997 real Yuan. See Table 4 for sample sizes.

The calculation of demand for micro-finance credit must also take into account the ability of the poor to obtain credit from existing formal financial institutions. Park and Wang (2002) found that in 1997 a surprisingly large number of poor households were already able to obtain loans from Rural Credit Cooperatives or other financial institutions, and Park and Ren (2001) found that half of the micro-finance recipients in several pilot programs also borrowed money from other sources. This probably results from the institutional weaknesses rather than strengths of the RCCs. Local RCCs in China are independent accounting units that have difficulty intermediating funds through higher level financial institutions to other regions. They also are encouraged to support local agriculture and to make loans. Poor areas often lack rural enterprises that might compete for available funds. These factors likely increased the access that poor households had to formal loans.

Since the late 1990s, there have been numerous anecdotal accounts of RCCs sharply curtailing or even suspending household lending in poor villages, as financial reforms sought to reduce the non-performing loans in the financial system. Collateral requirements were increased; in some villages savings accounts of equal value to the loan principle became the only acceptable form of collateral, putting loans out of the reach of many of the poor. However, the China Rural Poverty Survey (CRPS) data for 1997 and 2000 do not show a significant change in the percentage of rural households who said they could obtain formal loans if they desired (about 50% in both years), and in both years most of those reporting an inability to get loans also report not wanting a loan. Nevertheless, the data do reveal that actual borrowing from formal financial institutions fell quite sharply, from 38% to 19% of households (see Table 4, this includes households that borrow only formal loans or borrow both formal and informal loans). This pattern was especially pronounced for the low wealth group. This change could reflect a fall in formal credit demand associated with rising incomes due to greater

savings and supply of informal loans, or to higher perceived costs of formal borrowing given greater collateral requirements and stricter bank enforcement. Farmers in areas where RCCs provided new "trust" loans (described below) since 2002 have reported an improved ability to obtain loans (Wang, 2003). According to one study, 53% of households in Guizhou were deemed eligible for "trust" loans (*Guizhou Daily*, 2003).

Table 4. Household Credit Market Participation in 1997 and 2000 by Wealth Level, China Rural Poverty Survey (per cent of households)

	N° of observations		N° of loans Formal loans only			Informal	loans only	Both formal and informal loans	
	1997	2000	1997 2000	1997	2000	1997	2000	1997	2000
High wealth	92	192	50.00 54.69	14.13	9.90	26.09	29.69	9.78	5.73
Medium wealth	93	150	35.48 48.00	19.35	15.33	26.88	29.33	18.28	7.33
Low wealth	93	240	20.43 41.67	29.03	10.83	25.81	38.75	24.73	8.75
All	278	582	35.25 47.59	20.86	11.68	26.26	33.33	17.63	7.39

Note: Wealth groups in 1997 divided evenly into thirds and wealth groups in 2000 use the same wealth level cut-offs defined in 1997 real Yuan.

Regionally, there is some evidence that effective financial intermediation in poor areas has declined relative to rich areas, but this is not because funds are leaving poor areas. An analysis of fund flow in four provinces (Sichuan, Shanxi, Zhejiang, and Jiangsu) found no change in net fund outflow from poor versus rich areas from 1994 to 1997 when a number of financial reforms were implemented (Brandt *et al.*, 2003). The main reason for the relative decline in lending in poor areas was the faster increase in nonperforming loans in poor areas, which crowded out available funds for new lending. Paradoxically, weak financial institutions on the one hand may increase demand for alternative credit such as micro-finance, but on the other hand may make it more difficult for financial institutions themselves to learn from micro-finance programs and adopt innovative reforms.

Considering the rural economy as a whole, China's entry into the WTO is increasing pressure for restructuring. Increased imports of agricultural commodities adversely affect some rural producers, requiring that they shift to activities in which China has comparative advantage (e.g., production of fruit, vegetables, flowers, livestock, selected cash crops). At the same time, labour is increasingly leaving the land to work in the non-agricultural sector. Acceleration of these processes will maximize productivity growth and the welfare of rural labour, with many potential benefits for the poor.

Rural finance has an important role to play in facilitating such structural change. Specifically, promoting greater economies of scale in agriculture, which can help raise marginal labour productivity and close widening urban-rural gaps, will require more capital intensive production, as will the shift to production of new, higher-value crops (Johnson, 2000 and 2001). Thus, to support the rural sector as a whole, rural financial institutions will need to support not just the poor, but also larger scale producers and successful entrepreneurs of all types, especially those expanding activities sectors of comparative advantage (many in the non-agricultural sector). There has recently been much concern over the difficulty that TVEs have had in gaining access to credit. To some extent, this has been a product of poor TVE performance, low rates of repayment, and greater attention to loan repayment by rural banks. Still, it will be important for banks to lend to rural enterprises with good projects, especially those in the private sector that were often previously excluded from credit access, and who are potential employers of the poor. If micro-finance can contribute to rural financial reform in a way that promotes faster structural change emphasizing rapid growth of labour-intensive production and

services, it is possible that more of the poor could benefit than through narrower programs directly targeting the poorest of the poor.

4. Rural financial reform

In China, by far the most important financial institution providing credit to rural households is the Rural Credit Cooperatives (RCCs). Other formal financial institutions involved in rural lending include the Agricultural Bank of China (ABC) and the Agricultural Development Bank of China (ADBC). The ABC has lent mainly to rural enterprises and trading and retail organizations operating in rural areas, with limited and declining lending to households. As noted earlier, the ABC also administers the government's official subsidized poverty loans. The ADBC manages government policy lending, primarily to finance state procurement of agricultural products, especially grain and cotton. At year-end 2001, RCCs and the ABC controlled 14.1 and 12.0% of all deposits in financial institutions in China, and total outstanding loans of the RCCs, the ABC, and the ADBC were 1.2 trillion yuan, 1.6 trillion yuan, and 0.7 trillion yuan, respectively. The share of total outstanding loans allocated to agriculture (of which rural household lending is a part) was 36.9% for RCCs and 7.8% for the ABC (Xie, 2002). There also exist informal financial institutions, and as in most countries, informal lending among relatives and friends is common (often at zero interest). 11

Because they are the most likely formal financial institution to develop micro-finance components, we focus on RCCs, which are located in virtually every township in China, often with branches at the village level. Just like other financial institutions in China, RCCs have accumulated large amounts of nonperforming loans. Surveys of RCCs in Zhejiang, Jiangsu, Sichuan, and Shanxi found that nonperforming loans reached 27.4% of outstanding loans in 1997 (Brandt *et al.*, 2003). These shares were much higher in poorer regions. Other data on RCC performance reveal that overdue loans reached as high as 68.5% of outstanding loans in Sichuan (in 2000) and 75.0% in Shanxi (in 1999), before falling to less than 50% by year-end 2002 (Brandt, Park, and Wang, 2003). The recent improvement may reflect attempts by the PBC to write off bad loans through one-time capital injections, and to improved governance within RCCs. Still, as noted in the paper in this volume by Han Jun, by the end of 2002, bad loans accounted for 37% of the outstanding loans of RCCs nationwide.

RCC managers face a number of challenges. First, interest rates have been regulated and set at artificially low levels. This is a particular problem for lending to the poor since the cost of such lending is higher and so generally requires higher returns for banks to be willing to lend. Inter-bank transfers also have been prohibited, other than deposits and loans to RCC county associations. Until reforms in 2003, there has been no mechanism for intermediation of funds across counties. Internal interest rates for bank deposits and the limited volume of interbank lending also are regulated, and so do not effectively support efficient financial intermediation across regions. Second is the problem of governance. RCCs are supervised by local PBCs, who appoint managers. There are no owners with the ability and appropriate incentives to maintain the value of the bank's capital. Instead, managers, who often hold their position for just a few years, respond to contractual incentives that emphasize high rates of loan repayment, deposit mobilization, and profitability. Without a strong accompanying monitoring system, these imperfections in the governance system can easily lead to fraudulent strategies such as rolling over bad loans, or evergreening, which on paper meet the manager's short-term objectives while undermining the real value of the bank's portfolio. Third, RCCs live in an

^{11.} Rural Credit Foundations, quasi-formal financial institutions charging effective interest rates above regulated rates and formerly found in many rural areas, were abolished in 1999. Other informal sources include rotating savings and credit associations (ROSCAs, or *hui*). Moneylenders are not very common. Alternative credit sources are less common in remote rural areas.

imperfect institutional environment in which it can be difficult or costly to seize collateral through the courts, and information systems remain relatively primitive, making it difficult to obtain information on credit ratings or project quality. One response of higher level financial institutions to such institutional imperfections has been to centralize lending approval authority despite the lost local information available to branch managers (Park and Shen, 2003). This runs counter to the micro-finance goal of decentralized management and incentives. Fourth, the PBC, except in special cases, generally has been unwilling to sanction innovative changes in financial instruments, staffing, or ways of doing business, reducing the ability of managers to respond to local needs in creative and profitable ways. Finally, there is a severe shortage of experience and expertise in commercial financial management practices at all levels of the financial system, requiring training and changes in business culture that will occur only very slowly.

Despite these difficulties, there is evidence of improvement. Governance in rural financial institutions, as measured by pay incentives to managers and collateral requirements, has improved over time especially in richer areas and areas with greater repayment problems (Brandt *et al.*, 2003). At the beginning of 2002, experiments in interest rate liberalization began in 8 counties nationwide (Xie, 2002). To their credit, officials in China's PBC as well as a number of national and local government officials, have recognized the importance of lessons learned from micro-finance and appear open to experimenting with changes.

Several other policy reforms can be viewed as attempts to improve incentives and regulatory oversight, and to support innovations that might improve RCC capacity to lend effectively. In July 1999, a new form of household lending by RCCs was announced by the Peoples Bank of China. "Trust" loans (*nonghu xiaoe xinyong daikuan*) are loans in which households are assigned maximum credit limits based on evaluations of each household's credit-worthiness, and then are allowed to borrow freely up to the credit limit without condition (*i.e.*, no collateral or guarantors required). The program began in 10 experimental counties in 2000, and a conference was convened by the PBC in December 2001 in Beijing to assess the results. After favourable reviews, the program was promoted nationally beginning in 2002 and expanded rapidly. In many areas, "trust" loans have already become the most important type of lending to rural households.

In January 2000, local RCCs were also given permission to provide households with joint liability loans (*nonghu lianbao daikuan*) in which group members mutually guaranteed repayment of individual loans, similar to Grameen-type loans. By the end of 2002, RCCs had 25.3 billion yuan in outstanding joint liability loans, and 74.6 billion yuan in outstanding "trust" loans.

In 2003, the PBC announced a new reform plan for RCCs which endorsed three different models of RCC institutional reform for eastern, central, and western China, respectively: 1) establishment of rural commercial banks, or Jiangsu model, based on successful experiments with such reform in counties in Jiangsu (Cheng and Chu, 2003); 2) establishment of county-level RCC associations (*xianji lianshi*) as independent accounting units; and 3) maintenance of township or local RCC associations. The RCCs would be monitored by the newly established financial regulatory commission (*yinjianhui*). Main goals of this reform were to rationalize lending across regions and diversify risk across individual RCCs.

Among these recent changes, improved governance, liberalization of interest rates, and the creation of new mechanisms to facilitate better inter-regional financial intermediation all are critical for developing an effective commercial banking system. But the reforms need to go much further. In

^{12.} In experimental counties, local RCCs can adjust deposit and lending rates by 30 and 70% around official rates, compared to zero and 50% in other counties.

particular, it will be essential to strengthen prudential financial regulation (still in a stage of infancy in China) and design a governance and ownership system which credibly pressures managers to maximize banks' capital value. Allowing more open competition can also increase competitive pressure on local RCCs to improve their performance (Park, Brandt, and Giles, 2003). The reforms establishing new lending instruments (trust loans and joint liability loans) are unlikely to lead to noticeable improvements without a foundation of more fundamental reforms that allow bank managers the discretion and authority to tailor loans and savings instruments to meet the needs of local borrowers. On the positive side, they do reflect a willingness of China's rural financial institutions to experiment boldly with new ways of lending, which at least partly reflects the influence of China's micro-finance experience.

The message for micro-finance is similar. China's financial (and legal) reforms have yet to create an institutional space in which micro-finance can operate, thrive, and expand, and so expansion of micro-finance will almost definitely have to await substantial further progress in creating a truly commercial financial system. In the meantime, however, micro-finance programs can help push the boundaries of existing practice and accelerate meaningful reform by setting an example of possibility and by actively engaging China's formal financial institutions.

5. Micro-finance in China: challenges and policy recommendations

After all of this discussion, what can we say about the appropriate role of micro-finance in China's future poverty alleviation and financial reform strategies? Despite nearly a decade of experience, thus far micro-finance in China remains confined to small-scale projects and experiments, typically funded externally, that have little prospect of widespread replication or expansion. Government-run micro-finance, while larger in scale, has been a failure. A few attempts have been made to reform existing rural financial institutions such as the ABC and RCC to adopt micro-finance practices, but with very limited impact.

The stagnation of the micro-finance movement as a whole is mainly the product of an inhospitable legal and regulatory environment. It remains difficult to establish independent NGOs in China because NGOs enjoy uncertain legal status and must have a supervising government unit and be registered with the Ministry of Civil Affairs. NGO's involved in micro-finance have the additional problem of not being recognized as financial institutions, which prevents them from mobilizing deposits, which is critical for expansion and for developing a commercial banking culture. While small-scale micro-finance NGOs are often permitted to evade interest-rate regulations, the same has not been true for the RCC system as a whole. This, along with a host of incentive problems and limits to managerial authority, effectively preclude RCC managers from having the necessary motivation and freedom to experiment profitably with micro-finance design features. Thus, micro-finance will only play a large role in the rural financial system after many key system reforms are put into place, which may take some time.

Given the space to operate and expand, there is no reason that multiple micro-finance models cannot coexist in China. Given economic changes occurring in China's poor areas, we do not recommend that rural micro-finance programs be viewed as the key weapon in the fight against poverty, although in some localities targeted micro-finance can undoubtedly help some of the poor. There may be greater promise for micro-finance organizations to reach excluded groups by providing loans to self-employed migrants or laid-off workers in urban areas, although this brings with it

additional challenges.¹³ Meeting the growing demand for consumption loans also merits greater attention.

In the right institutional environment, micro-finance principles will have much greater influence if they can help existing rural financial institutions (RCCs) to profitably provide flexible saving and borrowing instruments to a broad range of rural residents, especially private entrepreneurs. This, too, will help many poor, by raising the return to saving and enabling the ambitious to embark on new projects. A diversity of financial institutions will best serve the increasingly diverse needs of different types of borrowers living in diverse regions across China.

How can micro-finance promote broader rural financial reform? First, by changing conventional wisdoms that handicap institutional innovation. Already, micro-finance programs have clearly demonstrated that many of the poor are capable of repaying loans at relatively high rates of interest, contrary to most Chinese rural banking experience before micro-finance. This should invite financial institutions to think hard about exploiting these potential markets when they can do so profitably. Second, the programs have shown that innovations such as group lending can reduce transaction costs and better harness local information in monitoring loans in poor areas. Third, the micro-finance programs have highlighted the importance of developing appropriate financial management systems if the vision of decentralized, innovative, accountable financial institutions is to be realized. In some cases, the programs have directly helped financial institutions to improve their own capacity. Many of China's major economic reforms began with experiments and models, and China's current micro-finance programs should see this as their mission even if the scale of their operations remains limited. In the longer run, it will be important for China's micro-finance NGOs to lay the groundwork for expansion, by ensuring independence of NGO decision-making, by hiring professional financial managers to head their organizations, and by further strengthening their financial management capacity. The micro-finance community in China should also place high priority on engaging China's existing rural financial institutions to support reforms that will improve their ability to provide financial intermediation to a diversity of borrowers in both poor and non-poor areas.

^{13.} In urban settings, more alternative sources of credit may be available, undermining dynamic incentives, and both bank and peer monitoring may be less effective because borrowers are more mobile and less socially connected.

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ATTEMPTS TO IMPLEMENT MICRO-FINANCE IN RURAL CHINA

By Xiaoshan Du

Abstract

This article begins with the basic definition of sustainable micro-finance, followed by a comprehensive analysis of the organisation, methodology, clients, finances, management, development, and scale of micro-finance in China. It also identifies different types of micro-finance programmes in China, how they have grown, and the trends and problems. In that spirit, the article suggests several beneficial courses of action: increase micro-finance's role in poverty alleviation, strengthen the regulation and supervision of existing programmes, adopt flexible interest rate policies, and push for a change from subsidy based programmes to fully sustainable, financially self-sufficient programmes. Finally, the possible future of micro-finance in China is discussed.

1. The basic meaning of micro-finance

From the prevalent international point of view, micro-finance means providing the low and middle-income strata with small amounts of credit through sustained credit service activities. The essential characteristics of micro-finance, which distinguish it from the conventional financial services of formal financial institutions and traditional ways of aiding the poor, is that the poor or low and middle income groups are the designated target customers and that customers in the designated target groups are provided with a financial products service. Such a project or institution providing particular financial services to specific target customers aspires to financial independence and constant goals. This constitutes the essential difference between micro-finance and developmental projects enjoying long-term subsidies from the government or aid organisations and traditional project aiming at reducing the poverty.

The prevalent international point of view considers that all models of micro-finance include two basic layers of meaning. The first is that a large number of persons with a low income (including the poor) are provided with a financial service. The second is that the independent existence and development of micro-finance organisations is guaranteed. These two aspects, which are both interrelated and mutually contradictory, constitute the key elements of micro-finance. If one of the two is missing, it cannot be called a complete or standard micro-finance. In essence, micro-finance is the organic combination of credit activity arising from organisational system and financial innovation together with projects bringing aid to the poor (or bringing support to the poor).

Currently, it is generally accepted internationally that successful micro-finance projects mainly began in the 1970s and 1980s. The micro-finance is mainly implemented by various financial institutions and nongovernmental organisations. The financial institutions mainly included the state-owned commercial banks, specially established micro-finance banks to aid the poor and micro-finance projects implemented by nongovernmental organisations which evolved into joint stock banks and informal intermediary financial service organisations, for example credit unions, associations and co-operatives.

Through over twenty years of practice and, in particular, the last ten years of development, micro-finance has expanded from some parts of the world to almost complete coverage of developing

countries and some developed countries. As far as the scale of development is concerned, there are some micro-finance arrangements reaching a national scale. Where its organisational structure is concerned, there are successful examples of the implementation of micro-finance by official state banks. There are cases achieving the dual goals of a service to the most impoverished and the realisation of an independent existence by nongovernmental organisations. There is the vanguard of specialised micro-finance institutions, which are continuously expanding their business, and there are successful models of special banks founded to meet special requirements. In spite of this, the history of standardised and successful micro-finance is not long and the ratio of success is not high. In international society, it is still categorised as something new and still faces risks and challenges of all kinds. At present, active investigation is still needed in all countries regarding how to promote the development of micro-finance from experiments to popularisation and then to institutionalisation. A good many questions await the response of those researching and implementing micro-finance and those formulating policies.

2. Putting micro-finance into practice in China

Overview

The reduction of poverty and the realisation of well-off society constitute the focal points of the work of the Chinese government. Micro-finance is an effective tool in this overall strategy for ensuring that credit funds reach peasants in poor households.

- 1. Type. Micro-finance projects in China can be divided into three types on the basis of their aim and purpose of the project, the sources of funds and organisational structure. The first type mainly indicates micro-finance experiments the purpose of which is to investigate the feasibility, modes of operation and policy proposals for micro-finance services and micro-finance aid for the poor in China, with international assistance or soft loans as the sources of funds and popular or semi-popular, semi-official forms of organisation as the mode of operation. The second type consists mainly of policy-related micro-finance aid projects drawing support from micro-finance services as a financial instrument, and with the realisation of the tasks of the year 2000 of combating poverty and helping the poor in the new century. Its sources of finance are state financial funds and discounted loans to relieve poverty and its mode of operation is a government financial institution (the Agricultural Bank of China-ABC). The third type is the development of micro-finance loans and co-guaranteed loans for peasant households by Rural Credit Cooperatives (RCCs) on the basis of the requirement of credit support for the "Three Nong" (i.e. agriculture, the countryside and peasants) by the Central Bank (the People's Bank of China), with deposits in RCCs and Central Bank reloans as sources of finance and coordinated by local governments.
- 2. Stages of development. From the early 1990s, a succession of micro-finance experiments has been carried out on a small scale in some impoverished areas. These have mainly concentrated on attempting to resolve some important problems of credit funds to alleviate poverty in China. Of these experimental projects, those which were undertaken earlier, on a larger scale and with better standards were mainly the "Funding the Poor" (FPC) projects of the Chinese Academy of Social Sciences (CASS), the Sichuan and Yunnan UNDP projects, the World Bank projects at Langzhong County in Sichuan and Ankang County in Shaanxi and the "Poverty Aid Coop" of the Shangluo Prefecture government in Shaanxi. Statistics show that, by the end of 1996, the scale of funds of experimental micro-finance projects reached 90 million Yuan. The results of the above experimental projects attracted the interest of relevant authorities and of society. For example, the FPC project of the Rural Development Institute (RDI) of the Chinese Academy of Social Sciences (CASS) which began early in 1993–94 has already to some extent realised the policy goals set at the start and has resolved "the difficulties of poor peasant households in obtaining loans, the difficulties of the state in

the provision and repayment of loans and the difficulties of survival of institutions providing a loan service" that it was to investigate. The fourth micro-finance experiment of the Chinese Academy of Social Sciences, namely the Danfeng "Poverty Aid Coop" in Shaanxi Province, has become the precursor and reference model of later government-led micro-finance projects for aiding the poor developed throughout Shaanxi. Naturally, during the process of implementing these projects, the modes of operation of funding still faced numerous theoretical and practical problems. There were also many imperfections in operations and management themselves. There appeared serious problems of arrears, fraud and breaches of discipline and the law in the experiment in one FPC's county-Level branch. In addition, the project itself has currently not yet been able to meet the requirement of economy of scale. After enhancing the scale, the capacity for supervision and the quality of operations of the project faced serious challenges. Experimental projects are currently still under investigation.

On the basis of the Chinese government's policy of aiding the poor and its changes to and requirements of support for the "Three Nong" policy, the development of micro-finance in China can be roughly divided into three stages. The first was the early experimental stage (early 1994 – October 1996). During this stage, micro-finance experiments were mainly undertaken through the first major type of project as described above. The outstanding characteristic of this stage was that, as far as capital resources were concerned, reliance was mainly placed on international aid and soft loans. There was basically no involvement of government capital. The key point of the investigation was the feasibility of a micro-finance project along the lines of the Grameen Bank (GB) of Bangladesh. Operations were through semi-official or popular institutions and the standardisation of the project's operations was emphasised. The second was the project expansion stage (October 1996–2000). During this stage, the two types described above were developed in parallel. The outstanding characteristics of this stage was active promotion by the government through funds, manpower and organisation and the realisation of the goal of poverty alleviation with the support of the micro-finance projects. At the same time, when the first major type of project was implemented, more attention was given to links with international standards. The third was the comprehensive trial implementation of RCCs acting as formal financial institutions and the expansion of micro-financing activities (from 2000 until now). The outstanding characteristic of this stage was that RCCs acting as formal rural financial institutions gradually became involved and rapidly expanded the micro-finance experiment and may have become the main force on the micro-finance stage. At the same time, major divisions appeared in projects of the first two major types as described above, with some successes and some failures. In addition, the central government and bank showed even more interest in micro-finance than before.

In addition, from approximately the beginning of the second stage, in some places some urban micro-finance experiments aimed at unemployed people also started but they have just begun and are limited in scope.

Policy changes and legality

Initially, Chinese micro-finance projects, with the resolution of the problems of the efficient use of funds to aid the poor and an attack on poverty as their main goals, were mainly developed against a background of the policies for aiding the poor of the Central Committee of the Chinese Communist Party and State Council. Since entering the new century, micro-finance has expanded from aid for the poor to a range of services for rural peasant households.

In September 1996, the Central Committee of the Chinese Communist Party and State Council held a Central Committee working conference on aiding the poor. At the meeting, the Central Committee unequivocally required Party Committees and governments at all levels in impoverished areas to resolve problems of adequate food and clothing for impoverished households their first priority. All work should revolve around and serve this central activity and nothing should affect or

interfere with it. At the same time it emphasised increasing the investment of funds for aiding the poor, the implementation of a system for taking funds to villages and households and also a responsibility system for aiding the poor with the participation of Party and government at all levels. The principles and policies of the Central Committee of aiding the poor are identical with the goals of bringing aid to households and guaranteeing a high rate of return on capital to aid the poor of such micro-financial experimental aid projects as "Poverty Aid Coops". A general environment of aiding the poor is extremely advantageous for the development and popularisation of the work of micro-finance experiments to aid the poor such as "Poverty Aid Coops". Since then, Party and government leadership at every level in impoverished areas together with relevant department have developed aid to the poor, and, in particular, the importance attached to the work and the strength of the measures to bring aid to villages and households substantially increased.

In February 1998, the State Council's Poverty Aid Office held a national forum on the work of aiding the poor and bringing aid to households. At the forum, Chen Junsheng, a member of the State Council and head of its Leading Group for the Poverty Alleviation and Development of State Council, pointed out that bringing aid to the poor through micro-finance is an effective form of aiding them and there should be vigorous experiments and steady popularisation. The most important characteristics of this form is that aid reaches the most impoverished peasant households directly and the rate of repayment is good, being 95% or more on average. The forum pointed out that, starting from the current year, all provinces and autonomous regions which had not conducted micro-finance experiments should actively do so. Where there were experiments, they should be gradually expanded. Where experiments were successful, they could proceed steadily to a larger scale of operation.

On 14 October 1998, the Third Plenum of the 15th Central Committee of the Chinese Communist Party passed a "Resolution of the Central Committee of the Chinese Communist Party on some major problems of agriculture and rural work". This pointed out that the resolution of problems of adequate food and clothing for the rural poor is an urgent and formidable task. It proposed that, "effective methods of extending funds to households for aiding poverty, such as micro-finance, should be implemented" This was the first confirmation in a Central Committee document that micro-finance is an effective method of bringing funds to households for aiding poverty. In 1999, the Central Committee's working conference on developing aid to the poor again emphasised the function of micro-finance in aiding the poor. Document Zhongfa 10/1999 further points out that micro-finance is an effective form for bringing aid to households and that it should be actively and steadily promoted, on the basis of summing up experience and standardising operations.

In April 1999, the "Method of the Agricultural Bank of China for Managing 'Micro-finance' in Bringing Aid Loans to Households" required that, when low interest loans are extended to impoverished rural households, the provision of mortgages or guarantees by the households is not necessary and that the basic operational requirements are that amount should be small, terms should be short, there should be co-guarantee of households receiving loans and that the whole loan should be extended with repayment in instalments.

In its outline for development aid to the poor in rural China over ten years (2001–2010), the central government reiterated that, "micro-finance as aid to poor households should be actively and steadily extended."

In July 1999 and January 2000, the Central Bank promulgated the "Provisional method for managing micro-finance loans by RCCs" and an "Opinion on directing the management of co-guaranteed loans by RCCs to peasant households" which encouraged RCCs to take up micro-finance activity.

In December 2001, the Central Bank also published an "Opinion on directing the management of micro-finance by RCCs to peasant households", requiring that micro-finance for peasant households should be fully implemented to resolve the problem of "loan difficulties for peasant households".

Beginning from the first half of 1998, controversy concerning such matters as management efficiency and financial legality resulted in structural changes to projects of the second type given above. Initially, the function of implementing state discounted loans to aid the poor was transferred from the Agricultural Development Bank of China-ADBC (a state-owned policy-related bank) to the ABC (a commercial bank). This led to an attack on the method which began in 1997 whereby the Poverty Aid Offices of some provincial and autonomous regions' local governments (Poverty Aid Coops) acted for the ADBC with discounted loans to aid the poor. At the same time, however, there were opportunities, because the staff of commercial banks began to pay close attention to micro-finance projects of the "poverty aid Coop" type and this was advantageous for the gradual establishment of a micro-finance supervisory system with its related institutional and policy structure. By June 1998, state discounted loans to aid the poor were all returned to ABC management and the government's Poverty Aid Offices (Poverty Aid Coops) began to act for the ABC in respect of discounted loans to aid the poor. During the latter half of 1998, there was a rapid expansion in government-type micro-finance support for the poor. At the end of 1998, government-type micro-finance projects to aid the poor were inspected and investigated by the Central Bank and the ABC. The legality of the provision of discounted loans to aid the poor by Poverty Aid Coops established under government poverty aid offices acting for the ABC was called into question. It was proposed that non-financial institutions could not act as agents nor operate micro-finance business which is essentially a financial activity. Beginning in 1999, all discounted loans to aid the poor were altered to direct granting by the ABC to peasant households. Focussing on borrowing agreements signed by the ABC and peasant households, poverty aid societies established under government poverty aid offices provided services for such activities as issuing micro-finance. However, the government's micro-finance projects to aid the poor still faced some problems. As a result of changes to management systems, the time when state loans to aid the poor were actually in place was greatly delayed. As for the problem of the legality of projects of the first category, it remains unresolved today.

With the backing of the Central Bank, the micro-finance projects of RCCs were greatly developed in 2002, although some of them still seemed inactive. According to Central Bank statistics, by the end of 2002, there were 30 710 RCCs organising these projects, accounting for 92.6% of the total number of RCCs. The balance of the types of micro-finance was close to 100 billion Yuan, with 59.9 million peasant households receiving loans; 46 885 credit villages and 1 736 credit towns were evaluated.

Organisational structure

The organisational structure of micro-finance in China can be roughly divided into four types.

- 1. Bilateral or multilateral projects are used to establish a specialised institution (office) to manage and deal with foreign aid funds, with operations in accordance with the requirements and regulations for capital contribution organisations. Projects with this type of organisational structure include UNDP projects, World Bank financial aid projects, UNICEF projects, Australian aid for Qinghai projects during the term of their implementation and Canadian aid for Xinjiang.
- 2. Micro-finance to aid the poor is implemented by popular institutions (nongovernmental organisations). Projects operating with this type of organisational structure include the FPC projects of the Chinese Academy of Social Sciences (CASS) and OXFAM Hong Kong.

- 3. Government departments have founded special institutions to manage and operate discounted loans to aid the poor. Projects operating with this kind of organisational structure include numerous government projects to aid the poor in Shaanxi, Yunnan and Sichuan Provinces and the Guangxi Autonomous Region.
- 4. Micro-finance projects are operated directly by financial institutions, for example the Luanping County RCCs micro-finance project and the project handed over for running by the local ABC after the expiry of the Australian Aid for Qinghai project. Micro-finance and co-guarantee loans for peasant households were launched by RCCs in 2002 on a national scale.

Projects implemented with different organisational structures all have their own characteristics. In general, popular institution and foreign aid projects attach importance to goals of social development and sustained development. Government projects emphasise speed and scale of development. The majority of the projects of financial institutions emphasise sustainability and control of risks.

Project operational methods

Initially, Chinese micro-finance projects imitated the GB model. Soon after, micro-finance projects to aid the poor popularised by the government also drew from the experience of the GB model. At the same time, some international institutions and bilateral co-operation projects continuously explored other methods. Generally speaking, the overwhelming majority of the first two types of Chinese micro-finance projects to aid the poor involved groups, emphasising the mutual co-operation and supervision of members. In a typical case of the group method, the members of the Coops form five-person groups (with direct relatives not allowed in the same group) and in general six to eight groups constitute a centre with group leaders and centre heads being chosen. Group members should help and supervise each other and foster co-guarantee so as to form their own mechanism of restraint. A meeting is called every week by the centre head (or as determined by the frequency of repayments) it may be every ten days, every fortnight or every month). The content of the meeting is mainly to check the implementation of the project and the use of funds, to undertake formalities for issuing, repaying and depositing sums of money and to exchange experience.

In addition, some current Chinese micro-finance projects for aiding the poor extend loans directly to individuals and also extend loans to those similar in form of village banks. Moreover, some Chinese micro-finance projects for aiding the poor only emphasise credit services, others are only part of a comprehensive aid project while the third type of projects do not merely provide credit services but also provide other services concerned with economic and social development activity.

Micro-finance projects of RCCs do not have a particular function of aiding the poor. Their basic method is to make a distinction between the various credit ratings of peasant households within their areas and use this to determine the amount of the loan (from 1 000 to 20 000 Yuan), with the entire loan generally repaid by a single repayment. They implement a policy for credit loans to peasant households of "a single authorisation, loans for any purpose, balance control and use of turnover" and propose standards for the establishment of credit villages (towns). Co-guaranteed peasant household loans from RCCs are based on the modified GB model and existing domestic projects.

Characteristics of the target group

The general characteristics of the target group for Chinese micro-finance projects to aid the poor are impoverished households in impoverished areas and many institutions emphasise impoverished women as the main groups to benefit.

With the aim of making an attack on poverty, state discounted loans to aid the poor are the main source of capital for policy-type micro-finance projects to aid the poor. It is stressed that their target group should extend to the poorest households with capacity for production, which means impoverished households registered by the government are the basic target group. However, it is not entirely emphasised that women are the chief target. For example, micro-finance projects to aid the poor promoted by the Shaanxi Provincial Government have registered impoverished households as their target. The vast majority of foreign aid projects and the FPC projects of the CASS strongly emphasise impoverished women as their main target group. Financial institutions (Australian aid for Qinghai projects currently run in co-operation with the ABC and the Luanping project run in co-operation with the Canadian co-operative financial institution DID - Développement International Desjardins) only require development in impoverished areas and do not stress that target customers should definitely be impoverished households or women. The target group of RCCs micro-finance projects is all peasant households in the countryside that need loans and meet the criteria for credit. Lending is mainly to the head of the household who is generally male.

Scale of development

On the basis of the statistics of the office of the Leading Group for the Poverty Alleviation and Development of State Council, by August 1998 government micro-finance projects to aid the poor had been launched in 605 counties in 22 provinces nationwide, issuing 600 million Yuan in loans. By the end of 1998, the total amount of investment capital was more than 1 billion Yuan. Provinces and regions where there were government projects on a comparatively large scale included Shaanxi, Yunnan, Sichuan, the Guangxi Autonomous Region and Guizhou. On the basis of the ABC's statistics, by the end of 2001, cumulative loans to aid the poor brought to households stood at 25 billion Yuan with a balance of 24 billion Yuan. A grand total of 17.2 million impoverished peasant households were aided.

According to statistics, projects within the United Nations system (including UNDP, UNICEF, IFAD, WFP, ILO and UNFPA) and World Bank projects were launched in 150 counties in 22 provinces and regions by the end of 1998 with total funds of 1 billion Yuan.

Projects of bilateral and popular institutions include the Australian aid project to Eastern Qinghai (AusAID), with the scale of funding being 12 million Yuan, the Canadian Xinjiang project (CIDA) with the scale of funding being over 3 million Yuan, the "FPC" project of the CASS supported by the Bangladeshi Grameen Trust (GT) and the Ford Foundation with a scale of funding of 15 million Yuan, OXFAM Hong Kong's Yunnan and Guizhou project funds of 1.2 million Yuan, the *Shanjianghu* (Mountain, River and Lake) project in Jiangxi of the German Technical Consultancy Company (GTZ) with a scale of funding of 600 000 Yuan and the DID project with a scale of funding of 1 million Yuan.

Large-scale micro-finance projects by RCCs began in 2002. In that year, 96.7 billion Yuan of micro-finance loans were issued to peasant households with a year-end balance of 75.5 billion Yuan. 47.5 billion Yuan was issued as peasant household co-guarantee loans with a balance at the end of December of 25.3 billion Yuan. The scale of this far exceeded foreign aid projects and government-led projects.

Financial conduct

1. Loan products. The vast majority of government micro-finance loans were between 1 000 and 2 000 Yuan with a term of one year, repayable in instalments, a repayment frequency of 1–4 weeks and interest paid at an annual rate of 2.88–7.2% with co-guarantee by group members. However, after

the management of government projects was moved to the ABC, men became the majority of the recipients of loans rather than women, the term changed to between one and three years and repayment periods were changed to one payment every 3, 6 or 12 months.

The majority of micro-finance loans from foreign aid and popular organisations were limited to between 400 and 1 000 Yuan for terms between three and twelve months. Some were repaid in instalments while others were settled in a single payment. The repayment frequency was between one and four weeks, with interest rates generally between 6% and 20%. The overwhelming majority used a system of co-guarantee by group members but some projects did not exclude individual loans.

The micro-finance projects of RCCs were based on their various credit ratings (generally between three and four grades). The amount of loans ranged from one or two thousand Yuan to ten or twenty thousand Yuan. The term of loans ranged from a few months to one or two years with repayment generally being made by a single repayment. Interest rates were generally identical to other RCC loans.

- **2. Savings products.** Currently, government projects and the vast majority of Chinese micro-finance projects to aid the poor supported by foreign aid and popular institutions basically all have compulsory savings, *i.e.* as a group fund which replaces mortgages and guarantees. At the same time, some projects also have deposits where, in accordance with the frequency of repayments, an amount equivalent to a certain ratio of the loan amount is deposited every time. For example, the FPC project of the CASS provides that, at the time of borrowing, every borrower should deposit 5% of the loan amount into a group fund and that everyone should deposit one Yuan or an amount equivalent to 0.1% of the loan every week. The CIDA Xinjiang project also links the amount of the deposit to the amount of the loan and provides that the ratio of the deposit should be 1:10, 1:8, 1:6 or 1:4. It decreases progressively as the amount borrowed increases. RCCs encourage peasant household savings but do not require that micro-finance should be linked to a deposit.
- **3. Financial management**. The financial management of micro-finance by RCCs is not very different from their financial management of other loans. Relatively speaking, it is quite sound. Other micro-finance accounting and financial management setups and systems are gradually being established in China. Before the end of 1996, during the initial experimental stage, the focus of almost all projects was on the structure of project development, *i.e.* on recognising and mobilising impoverished households, guaranteeing that loans reached these households and guaranteeing a high repayment rate. At the time, the vast majority of projects did not have sound accounting and financial reporting systems did not have comprehensive or consolidated profit and loss statements or balance sheets, nor did they have consolidated loan quality and business progress reports. Initially,, the majority of the workers dealing with the micro-finance projects, the principal aims of which were aid for the poor and social development, only had a background of social development and lacked knowledge of and an aptitude for financial business. Relative to this, when the AusAID Qinghai project run by the local ABC began to issue loans at the end of 1996, it had a considerable capacity for financial operations and financial management with a relatively comprehensive financial management system.

In 1997, after the government began to experiment and popularise projects, it obtained the assistance of local financial institutions (generally the local ABC and RCCs) and it gradually established and perfected accounting systems and financial management systems. The FPC project of the CASS was trained by foreign micro-finance specialists and has established a relevant accounting system and financial management system. Every month a consolidated financial report is completed and financial analyses are performed in accordance with the framework established by the international SEEP organisation (Small Enterprise Education and Promotion project).

4. Sustainability. At present, as a result of the Chinese finance policy of capping interest rates, Chinese micro-finance has up to now been unable to abide by the international principle that micro-finance rates of interest should be higher than the commercial rates. Nor has it been able to operate in accordance with theoretically calculated interest rates. However, this by no means signifies that Chinese micro-finance does not have the goal of sustainability. Where the current micro-finance projects launched by RCCs are concerned, the scale of their work and quality of their asset operations are quite high and they can achieve a "win-win situation" for both RCCs and peasant households. In addition, through several years of practice, the first micro-finance experimental projects in China already take responsibility for their own profits and losses. For example, in its experiments in three counties, grassroots sub-branches and branches (county and township level) of the FPC project of the CASS had by the end of 1997 begun to operate on the basis of responsibility for their own profits and losses. In addition, the Australian project to aid eastern Qinghai run by the local ABC is currently operating on the basis of responsibility for its own profits and losses. This has been realised through the implementation of appropriate interest rate policies, strict control of costs, increased working efficiency and guaranteeing loan quality.

3. The inspiration of micro-finance and policy considerations

Inspiration

From the perspective of the practice and trials in the Chinese micro-finance over the past ten years, it is possible to gain some inspiration and lessons of experience.

The vitality of micro-finance has initially manifested itself although medium-sized and large micro-finance projects have so far not appeared. The experimental projects in China have initially shown theoretical and practical vitality in their implementation of micro-finance operations to aid the poor. Micro-finance in China can serve peasant households and the poor in the very poorest places and it enables the vast majority of borrowers to benefit. Also, some experimental projects are now on a considerable scale. So long as there are serious attitudes and strict management, micro-finance projects can realise a reasonably high repayment rate and reasonably quick turnover rate of credit funds. Practice also proves that, so long as there is a suitable macro environment, distinct goals and correct methods, micro-finance is completely capable of realising responsibility for profits and losses taken by the institutes themselves and sustained development. A basic premise of this is that the rates of interest of the projects should generally be equivalent to commercial ones. Since the funding resources for all projects in China at present are soft loans or grants, the average cost of finance is low (generally not exceeding 3%). The effective interest rate differential of projects seeking to achieve the goal of sustainability is 6–10% or more. However, all micro-finance projects in China have so far relied on technical support from outside and these expenses have not been fully entered into the operating costs.

The three types of project are each faced with their own problems. The history of micro-finance development in China remains short and cannot be mature in any area. There are also all types of questions which worth research and investigation. In this paper, Chinese micro-finance can roughly be summarised as three types. One type is the use of unofficial funds with popular or semi-official operations, with experimental projects investigating a model of micro-finance bringing aid to the poor. Another type consists of projects operating with micro-finance supported by the government and financial institutions, using state finance and discounted loans in order to achieve the aim of aiding the poor. The third is micro-finance activities for peasant households launched by formal financial institutions, mainly RCCs to resolve the problem of "difficulties for loan by peasant households". All manner of contradictions and problems exist for these three types of projects. From our point of view, to put it simply, as far as the current stage is concerned the main contradiction for the first type of project is that problems of the legality of long-term development have not been resolved. The main

problem for the second type of project is that the goals of sustained development have not been considered. The main problem for the third type of project is whether or not the free acceptance and conscientious running of a micro-finance project can also guarantee the quality of its operations. A problem shared by all three is how to break through the constraints of the bottleneck caused by an inferior level of management in both the running of the project and finance. On the basis of current government policy, since, in the first type, nongovernmental funds are used to aid the poor, no deposits are taken from society and projects are short-term, it is possible to carry out appropriately flexible activities to collect loan interest and charges. However, if they are to act as institutions which participate in financial activities and which will survive and develop in the long-term, there remains the problem of their legality as financial institutions.

With regard to the second type of project, i.e. projects under government direction, their basic goal is to realise the government's task of aiding the poor. They attempt to resolve problems of bringing aid to poor households and repayment difficulties. However, no consideration is given to establishing the goals and measures for the long-term, sustained development of the project and its institutions. When considered from the "sustained" criterion, strictly speaking this type of project cannot be called a micro-finance project in the normal or strict sense and it is perhaps more appropriate to call it a poverty aid project. In addition, its failure to establish a contingent of dedicated staff and its emphasis on subsidised interest rate policies explain why it does not have a goal of sustained development. On the basis of the lessons from the mass of problems caused by the presence of "once you get liberation there is chaos, once you get unity there is death" in China's economic work in the past and the development of Rural Credit foundations, the central government has made it clear that the borrowing relationships for this type of project should be between the ABC and peasant households while "Poverty Aid Coops" or "Work Stations" under local government direction and supervision should be intermediary service institutions. In fact, however, the current joint activity of government departments and the ABC in fostering government micro-finance projects to aid the poor is an inevitable choice for which there is no alternative. Currently, the phenomenon of "two sides" is present among government departments and the financial departments of the ABC with frequent mutual recriminations. Therefore, one of the key elements in the success of the projects is whether or not they can put the interests of the whole above all else and work together in harmony. This point is made clear in practice everywhere. However, the most harmful malpractice in this system of joint management of micro-finance projects by the ABC and government is that the responsibilities, powers and benefits of each are unclear or uneven and supervisory control is difficult. The likely end result will be a substantial fall in the recovery rate of loans, leading to a great amount of waste and loss of state resources. In the long-term view, if changes in the management system cannot be made, the realisation of the three main goals, namely bringing credit funds directly to poor households, a high loan repayment rate and sustained institutional development, cannot be guaranteed.

In addition, common operational problems concerning the need to strengthen management and improve staff quality are widespread in the two types of project described above. These are mainly that staff at every level should conscientiously increase their knowledge and take on responsibilities, that the establishment of a contingent of specialist staff, financial management and staff training should be reinforced, that the supervision of operations and finance should be strengthened, that effective mechanisms for encouragement and restraint should be defined, that the funds for covering operational costs in government projects should be truly resolved and that an independent financial accounting system should be implemented.

Here, we shall give some opinions on certain problems that need resolution concerning the direct, independent operation of micro-finance projects by financial institutions (including the RCCs and ABC systems) and projects developed by them in co-operation with government institutions (also the second type of project directed by the government as described in this paper). In the first place, the

problem of promoting understanding of the thinking behind micro-finance business needs to be resolved. Financial institutions undertaking micro-finance should do it voluntarily and of their own initiative and cannot be compelled by the demands of government at higher levels. Also, where finance, product design and operations are concerned, the characteristics and requirements of target customers should be met and traditional financial models should not be copied. Next, impatient practices where desire for speed will prevent achievement should be avoided. Thirdly, the relationship with the local government where micro-finance projects are run should be handled well so to prevent the same disasters as those in the second type of government-led project. Fourthly, problems of its own organisational structure, staff and policy measures need to be resolved. In these areas, factors to which consideration should at least be given are as follows. Special policies and measures for operating micro-finance should be formulated in the parent financial institution. Competent persons should be sought out and placed in charge. A sound and effective standard of interest management systems and operational management should be guaranteed. Interest on borrowing should be capable of covering the full cost of loan transactions. Staff should be recruited from outside banking or they should be given specialist training. All these matters are questions to be considered for the successful development of the micro-finance business.

Policy considerations

On the basis of the experience over several years of micro-finance experiments in China, the following policy recommendations are now put forward to promote the development of micro-finance in China.

- 1. Financial services involving micro-finance should be fostered in respect of their anti-poverty and peasant household functions. Micro-finance is a practical and effective tool for combating poverty in the rural areas of China with great potential. Government policy-makers should place it in a suitably important strategic position. On the basis of the current fundamental resolution of problems of adequate food and clothing, the service targets and markets should be broadened and effective credit services should be provided on the basis of the requirements of different customers in different areas. At the same time, experimental urban micro-finance projects should be developed and methods of providing financial services to micro and small enterprises in cities should be explored. Micro-finance experiments using different methods should be actively developed and not just restricted to certain methods of borrowing, in order to satisfy the requirements of different areas and different customers.
- 2. Standards should be reinforced and suitable methods of supervision should be sought. It is necessary to standardise and support experimental micro-finance projects, investigate the formulation of relevant rules and regulations and seek suitable methods of supervision. Associations and organisations of all kinds which enthusiastically develop micro-finance activities with only loans and no deposits should be permitted by law to run projects. However they should be required to meet some basic conditions and conform to standards so that there is fair competition. Institutions which absorb deposits from society should be strictly controlled. Government organisations are not themselves suitable for operating micro-finance as the institutions developing a long-term project. The particular circumstances of different projects should be considered and policies dealing with each case on its merits should be adopted. Through adjustment and improvement, those qualified should be permitted to exist legally and given financial support so that micro-finance in China can develop along a healthy track and be brought into consideration of the overall design for the reform of China's financial system.
- 3. Flexibility of interest rates. Greater flexibility should be permitted in respect of interest rates when issuing loans to borrowers. This is one of the key factors in determining whether the

sustainable development of micro-finance projects is possible. From now on, consideration should be given to the abolition or gradual abolition of discounted loans to aid the poor. Channels for sources of funding should be actively broadened and not just limited to gifts of aid and soft loans. Greater use should be made of experimental projects with funds from commercial channels.

- 4. Training and technical support should be provided. There should be continuous training of management and basic-level staff and the provision of effective technical support to projects. Education about credit for the whole of society should be reinforced and an excellent credit environment established.
- 5. Where guidance to thinking, policy and operations management are concerned, there should be a transformation from subsidised micro-finance to sustainable micro-finance. The key to this transformation is the transformation of management policy and goals or aims. Changes should be made from the dominance of political goals to simultaneous economic, political and social goals and from political action to compliance with the market. In these two different stages, government policy and action are completely different. Completion of the political tasks requires reliance on much government capital and input from staff, organisation, structure and publicity. The implementation of economic goals mainly requires relevant government polices and the two cannot be confused.

Micro-finance is a financial instrument with the functions of aiding the poor and of helping agriculture and rural development. It can also realise its own economic sustainability. The implicit premise now is that the economy is an important goal. Micro-finance projects are neither completely governmental nor market activities. They rely to some extent on aid organisations or government preferential policies, especially during the initial stages of a project, while at the same time needing a sound market. The importance of sustainability or financial independence rests with the change of non-market problems to market problems. The establishment of sustainable goals will guide micro-financial organisations in moving from asking for funds from the government or aid organisations to seeking funds in market competition. Therefore, the dual goals of micro-finance, namely aiding the poor and its own sustainability, have determined that it must make full use of market mechanisms, but not depend fully on them.

To sum up, like international micro-finance activity, China's experiments in micro-finance, when compared with large-scale micro-finance institutions and projects including those in parts of neighbouring South and Southeast Asia, is different with regard to time, scale, design thinking, operational entities and the policy environment for implementing micro-finance. China's continuous reform of its political and economic systems and its economic and financial domains, together with changes to the duties and jurisdiction of local government, mean that the policy environment of implementing sustainable micro-finance to aid the poor has unique features. However, we must also carefully research, study and learn from the successful experience and lessons of international micro-finance schemes.

From an analysis of the development of international micro-finance practice, future developmental trends, progress with micro-finance trial and practice in China and market demand for suitable financial services by customers of every type, it can be anticipated that, in the near future, Chinese micro-finance may enter the institutionalisation stage. The obvious signs should be as follows. The government will have a clear-cut policy and standards for micro-finance and there will be involvement by financial institutions on a large scale. At the same time as the functions of micro-finance in aiding the poor and farmers, helping agriculture and rural development are emphasised, the financial service function will also be emphasised. The development of the service capacity of micro-finance institutions will be strengthened. There will be standardisation of the

financial management systems of sound micro-finance institutions and they will have the capacity to control risk. Micro-finance loan capital is mainly from foreign aid or policy-related funds and will gradually transfer to an equivalent proportion of funds from local financial markets.

We consider that, up to now, some experimental micro-finance projects using nongovernmental funds and managed by popular or semi-official institutions, going ahead with links to international standards, have played the role of vanguard, model and inspiration in the cause of Chinese micro-finance. Projects directed by the government and the RCCs micro-finance projects have made an indelible contribution to the rapid and large-scale use of credit instruments to aid impoverished households and the development of peasant households. However, so long as there is a suitable policy environment, formal financial institutions may become the main strength behind micro-finance. At the same time, all types of implementation of micro-finance can find their own places in competition or co-operation and the greatest beneficiaries are the borrowing customers. It may be said that, if such a situation is to take shape, the government's overall policies will play an important, almost fundamental, role. However, it needs to be pointed out that even if formal financial institutions can truly become the main strength behind the development of micro-finance (so far their time running micro-finance has been too short and it is difficult to reach conclusions), international experience shows that the main service target of the micro-finance projects of formal financial institutions is not the poorest household. In this sense, the non-government micro-finance organisations have a long-term mission to aid the poor and a wide field of activity.

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RURAL FINANCE AND MICRO-FINANCE DEVELOPMENT IN TRANSITION COUNTRIES IN SOUTH-EAST AND EAST ASIA

By Ryu Fukui and Gilberto Llanto¹

Abstract

Micro-finance is an emerging important financial sub-sector in Asian transition countries. Its role is to improve financial access of the poor and small economic players and thus help them to build assets, thereby contribute to poverty alleviation. This paper provides an overview of rural finance and micro-finance development in transition countries in South-East and East Asia — Cambodia, Lao PDR, Myanmar, Vietnam, and Mongolia — focusing on the institutional evolution and the inter-relation between policies and institutions. We find diverse potentials that formal and semi-formal financial institution—agricultural banks, micro-finance banks, micro-finance NGOs, financial co-operatives and other indigenous financial systems—have to reach out to the rural poor of respective nations. Any monolithic view that expects a single type of micro-finance institutions to dominate the rural financial markets is to be denied. To develop effective rural financial systems, some policy implications are drawn, such as reforms of agricultural banks, adoption of market-based policy framework, development of retail capacities of micro-finance institutions, progressive establishment of legal and regulatory framework for micro-finance, improvement in governance of indigenous financial systems, and the importance of savings mobilization.

I. Introduction

Socio-economic diversity among transition countries in South-East and East Asia is large. The institutional heritage from previous centrally-planned economic systems is more uneven compared with that of former Soviet Union transition countries in Europe and Central Asia. The "gradual approach" for economic reforms in South-East or East Asia has often been cited as a salient characteristic, in contrast with the "shock approach" adopted by many countries in Eastern Europe and Central Asia. This gradualism, however, is to be understood as a consequence of diverse political and economic systems both before and after changes in the national regimes. A country-specific context largely dominates economic reform programmes and processes. Thus, financial sector development is not an exception to the gradual process of domestic reform efforts in those countries.

Micro-finance is an emerging important financial sub-sector in Asian transition economies, as it is in many other regions. Its role is to improve financial access of the poor and small economic players and thus help them to build assets, which means a contribution to poverty alleviation. Since rural economy dominates Asian transition countries, micro-finance is expected to play a significant role in improving rural financial systems, which are largely deficient in meeting demand for capital in the countryside.

^{1.} Ryu Fukui is Deputy Director General of the Development Bank of Japan; and Gilberto M. Llanto is a Vice-President of the Philippine Institute for Development Studies and a Research Fellow of the Rural Development Consortium, University of California, Berkeley, USA. The authors express their deep appreciation to Jaime Aristote B. Alip (CARD Bank), Haruko Awano (IC-Net), and Akiko Nakagawa (JBIC) for their generous collaboration in providing data, information, and views on micro-finance in Cambodia, Lao PDR, Vietnam, and Mongolia.

Considering that the shape of existing financial systems and the degree of institutional development quite differ from country to country, questions arise: Can we expect any particular type of micro-finance institutions (MFIs) to grow and dominate across different countries? What are the *developmental* issues and *transition* issues of micro-finance? What policies and institutional reforms are appropriate for micro-finance development in transition countries? To answer these questions, one should firstly look closely at how different institutions are evolving to reach out to the rural poor in Asian transition countries in *the period of micro-finance*.

With the above-mentioned viewing angle, this paper attempts to provide an overview of rural finance and development of micro-finance² in transition countries in South-East and East Asia, excluding China³—Cambodia, Lao PDR, Myanmar, Vietnam, and Mongolia. It focuses on the institutional evolution and the inter-relation between policies and institutions, through exploitation of secondary information in literature and, in some cases, firsthand information. Section II outlines the rural finance and micro-finance development in rural areas in each nation. Section III highlights the institutional evolution of agricultural banks. Section IV highlights the evolution by major institution types of micro-finance. Section V draws policy implications from the previous sections, though tentative. A chief limitation of this paper is that the arguments remain in *sketch* form and each country experience is treated very briefly, due to space constraints. However, we hope that the paper would be able to provide a holistic view on the impact of various environments and policies on the development of rural finance and micro-finance development in the countries concerned.

II. Overview of rural finance and micro-finance development in transition countries in South-East and East Asia

Cambodia⁴

Cambodia has a population of 12.3 million, of which about 10 million live in rural areas. The financial sector is still in its infancy. Banks have to this point played only a small role in savings mobilization and financial intermediation and their operations are generally confined to Phnom Penh. Nearly 40% of the people have no access to formal bank branches and only 6% of total banking sector advances are for agriculture or related activities. Cambodia does not have any specialized public bank, or other financial vehicle, that extends retail services to farmers. Such an institutional *vacuum* in formal financial supply seems to characterize the basic environment of Cambodian rural finance, there is high anticipation for micro-finance development to fill the huge gap in demand and supply of rural financial services. NGOs who became active in the late 1970s with the humanitarian approach have gradually moved out of relief and rehabilitation works and redefined their roles in interventions in the development process. Among those interventions, micro-credit undertakings have thrived since the early 1990s, and most of the country's 24 provinces now have micro-credit services provided by NGOs (reportedly numbering 72 in total).

286

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^{2.} This note basically deals with micro-finance as a concept of the financial business model without differentiating between those in rural and those in urban areas; however, descriptions on micro-finance institutions are mostly addressed to those operating in rural areas.

^{3.} China is excluded for two reasons: (i) the knowledge and experiences of the authors in analyzing China's micro-finance is insufficient, and (ii) the primary purpose of this paper as presented to OECD conference on China rural finance is to draw policy implications from experiences in transition economies other than China.

^{4.} Sources: see section of Cambodia in bibliography.

Cognizant of serious lack in rural financial services, the government has adopted a series of policy measures, supported by international donors: (i) establishment of the Credit Committee for Rural Development (CCRD) in 1995; (ii) introduction of a framework in the Banking Law to enable eligible NGOs and other rural finance providers to become regulated micro-finance institutions; (iii) creation of a unit in the National Bank of Cambodia (NBC) to supervise and monitor MFIs; and (iv) establishment of an apex institution to provide financing for MFIs, namely the Rural Development Bank (RDB). With these measures being in effect since the late 1990s, it can be said that among South-East and East Asian transition countries, Cambodia has put in place the most supportive fundamentals as to policy framework for micro-credit development (but not necessarily in terms of savings mobilization), though local capacities and institutions are to be yet substantially developed. Currently, specialized banks engaged in micro-finance and NGO MFIs are integrated into the regulations of the NBC. With technical and financial supports by donors, the NBC developed banking legislation that includes registration and licensing requirements and some prudential standards for larger MFIs. As of the end of 2001, there were 32 registered NGOs and MFIs, the top five of which dominated more than 80% of the aggregated loan portfolio, including ACLEDA Bank (specialized bank), the EMT and Hatthakaksekar (licensed NGOs), and PRASAC and Seilanithih (registered NGOs). In total the rural financial institutions reach around 420 000 borrowers, which represent about 23% of the rural households. Among them, the rapid growth of ACLEDA Bank is phenomenal: after only about three years in operation as an NGO micro-finance project, ACLEDA transformed into a micro-finance specialized bank in 1995, and it as of the end of 2002 had 75 branches in 14 provinces and a workforce of 863. Its loan outstanding had grown to USD 27 million, serving more than 80 000 borrowing customers.⁵ Fully supported by international donors since its establishment, ACLEDA Bank has been expanding its range of products in retail banking to include loans to small and medium enterprises, cash management and money transfer services, and deposit services to the public. Savings mobilized by ACLEDA's deposits are yet small (USD 5.7 million in 19 070 accounts as of the end of 2002), but have been growing rapidly in recent years.

As regards the RDB, a governmental wholesale conduit to MFIs, the loan outstanding (to five financial institutions) was USD 1.9 million as of January 2002, with an additional USD 20 million available in credit from the Asian Development Bank (ADB) to be on-lent to MFIs.

Lao PDR⁶

Lao PDR remains largely agricultural and rural. About 85% of the workforce is engaged in agriculture, which generates 51% of the GDP. The financial sector in Lao PDR is small relative to the size of the national economy (the total banking system assets are approximately 25% of GDP) and, in particular, has achieved a very low level of outreach in rural areas. According to the UNDP/UNCDF estimation based on a rural household survey conducted in 1996, only 11% of rural people had the ability to access formal financial institutions, and only 1% saved in bank deposits. Foreign banks are not allowed to open branches outside the municipality of Vientiane.

The country's current policy to support rural access to finance has been implemented primarily by the Agriculture Promotion Bank (APB), functioning as a policy bank (one of the four state-owned banks established in 1993). The APB is, to date, the only formal credit provider of any significance in

^{5.} The amount of loan outstanding was at the end of 2002, according to ACELEDA annual report 2002. The number of borrowing customers was reported as 81 453 as of the end of 2002, according to In Channy (2002).

^{6.} Sources: see section of Lao PDR in bibliography.

rural Lao PDR. Although its financial situation is unclear, the APB has been producing operating losses and has accumulated a high level of problem loans, resulting in periodic recapitalization by the government, according to the ADB. The APB's operations have been reportedly controlled by the government, including the setting of the level of interest rates, and thus responsibility and management autonomy as a financial institution have been limited. However, given the difficult operating environment for rural finance, the government has moved to introduce micro-finance projects since the late 1990s. Pilot micro-finance projects catering to the rural poor have recently emerged with supports by donors and international NGOs; reportedly, the current outreach by the three largest MFIs, including the Lao Women's Union (LWU), has been estimated at about 10 000 clients. Currently, there are no regulations for NGO MFIs in Lao PDR.

There are also traditional credit schemes and revolving funds based at the village level, generally called "village revolving funds" (VRFs), in Lao PDR, which serve as financial and social intermediaries between supporters (the government and donors) and villagers. It is reported that more than 1 600 VRFs serving about 8 000 borrowers are active; however, they are not operating on a financially sustainable basis. Recently, the government established the Rural Micro Finance Committee (RMFC) and prepared to assess the status of rural micro-finance so that it could develop a policy statement and action plans for implementing sustainable micro-finance. The World Bank reports that the draft is currently under a consultative process including stakeholders such as donors, practitioners, and provincial authorities.

Myanmar⁸

Myanmar is an agriculture-based country in which more than 70% of the population resides in rural areas (total population: 48.3 million) and the agricultural sector (including livestock, fisheries, and forestry) accounts for 57% of GDP. In rural Myanmar, the Myanma Agricultural Development Bank (MADB), a state-owned bank established in 1953, is virtually the only major source of institutional credit, with the exception of financial co-operative societies; the Myanmar Economic Bank (state-owned) and private commercial banks are mostly confined to the urban areas. The MADB's mandate and funding priority have been for the benefit of farmers, but the scale of loans is severely limited, mainly due to funding constraints. Also, the mountainous geography and poor infrastructure in the rural area make provision of financial services very difficult. As a result, there is huge excess demand for capital in the countryside.

Micro-finance in Myanmar is an exogenous phenomenon brought to the country in 1997 by international NGOs (PACT, GRET, and Grameen Trust) contracted with the UNDP/UNOPS, who are interested in using micro-finance as part of an overall package for poverty alleviation in the three specially designated regions in the rural area. Although such micro-finance projects are yet at the early stage, the aggregate number of clients has grown quite rapidly; the estimated number of active borrowers exceeded 100 000 after only about four years' operation. However, the geographical coverage by those projects is yet very small (only a few per cent of the country's townships), which may be explained by the experimental or pilot nature of the UNDP/UNOPS project.

Thus, micro-finance in Myanmar is yet at an embryonic stage; it is only of *project status*, supported by international donors, although the quick growth in outreach provides encouraging

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^{7.} APB has never published its financial statements (ADB, 2002).

^{8.} Sources: see section of Myanmar in bibliography. The observations and estimations deriving from the authors' field research on micro-finance in Myanmar in 2001-2002 are also included.

evidence of potentials for future growth. The Myanmar government, including the central bank, has insufficient exposure to micro-finance practices, though at least two sensitization seminars supported by donors have been held since 1999. The country lacks the policy framework, legal structure for registering micro-finance NGOs, and administrative structure that are needed for dealing with micro-finance undertakings. As for indigenous financial systems in Myanmar, savings and credit co-operative societies are run under the auspice of the Ministry of Co-operatives and small-scale economic players are a large part of their members. The number of such savings and credit societies in operation is said to be about 2 000 throughout the nation, which indicates that the co-operatives form a sector of some significant weight in rural financial activities in Myanmar.

Vietnam¹¹

In Vietnam, 75% of the population and 90% of the poor currently live in rural areas. Agricultural activities account for 70% of the income of rural dwellers. Hence, in spite of vigorous industrial growth and economic structural transformation throughout the 1990s, the rural economy is yet dominant in Vietnam. Since its establishment in 1988, the Vietnam Bank for Agriculture and Rural Development (VBARD)¹² has been the major source of credit and savings in rural Vietnam. Its growth in size and scope during the 1990s is remarkable: VBARD is regarded as having contributed significantly to the agricultural expansion under the doi-moi (renovation) policies in Vietnam. Now the biggest commercial bank, it has a very extensive network (1 568 branches) and serves 5.5 million rural households, which represent as large as 45% of the total. It had total outstanding loans of USD 4 billion and deposits of USD 1.8 billion as of 2001. The Vietnamese government established the Vietnam Bank for the Poor (VBP) in 1995 to serve poor households that could not be reached by VBARD, whose major task was to provide subsidized credit through a joint liability group. The VBP used VBARD's extensive network of branches; it had no separate staff members and was not involved in any savings activity. By 2002, the VBP had provided a total of USD 452 million in credit to some 2.7 million households, which is a substantial outreach. However, the most crucial issue concerning the VBP was its lack of long-term viability and sustainability. In 2002, one of the financial reforms to separate policy lending from commercial banking included the reorganization of the VBP as a new policy bank. Thus the Vietnam Bank for Social Policies (VBSP) was established in March 2003, integrating all of the operations of the VBP and four other policy lending programmes that were extended by the government, including loans to students and "employment generation" programmes, i.e., lending to small entrepreneurs.

At the commune level, there used to be thousands of credit co-operatives (about 7 100 in 1985) throughout the country. They, however, collapsed by 1990 and the substantial amount of deposits (reportedly VND 100 billion) were not reimbursed to their owners. In 1993, People's Credit Funds (PCFs) were established, commune-level savings and credit co-operatives modelled on the *Caisse Populaire* Credit Union System in Quebec, Canada; they now form another pillar of rural finance in Vietnam, operating under the co-operative law. As of the end of 2001, there were 906 PCFs totalling 807 546 member, loans outstanding of USD 168 million, and mobilized savings of

^{9.} The Central Bank of Myanmar is not autonomous from the government; it is part of the Ministry of Finance and Revenue.

^{10.} Micro-finance seminars were organized by UNDP/UNOPS in November 1999 and by JICA in June 2002.

^{11.} Sources: see section of Vietnam in bibliography.

^{12.} VBARD was established in 1988 as the Vietnam Bank for Agriculture, separated from the State Bank. In 1996 its mandate was extended to include development of the rural economy, rather than only agriculture, and thus its name was changed.

USD 128 million. PCFs can be regarded as micro-finance institutions that, while operating without any subsidies, have been relatively successful in reaching out to the poor and mobilizing savings.

VBARD, the VBSP, and the PCFs are thus forming a formal sector for the provision of micro-finance and are supervised by the State Bank of Vietnam. In addition to their activities, the various roles of semi-formal actors should be noted, in particular those of people's organizations such as Vietnamese Women Union and international NGO projects, in rural finance. People's or mass organizations, though not financial intermediaries *per se*, are quasi-governmental bodies that are represented at all levels, from national to commune. They often act as "brokers" between VBARD or the VBP and their borrowers and establish savings and credit groups that enable them to reach many rural poor (1.6 million as of 1998). However, they heavily depend on the government for loan funds. International NGOs are active in Vietnam in bringing in best practices, providing capacity building programmes, and implementing savings and credit schemes. Nonetheless, they are yet small compared with those of other Asian countries in terms of size relative to the nation's financial system. Finally, the postal savings have grown rapidly since the programmes establishment in 1999; as of the end of 2002, the total outstanding was over USD 250 million among 420 000 accounts, collected by 709 offices throughout the country.¹³

Mongolia¹⁴

Mongolia is a vast country with one of the lowest population densities in the world. The inhabitants number only 2.4 million and are widely dispersed over the land, the surface of which is equivalent to that of Alaska. About 65% of the population reside in rural areas and a large part of them live as semi-nomadic herders. Agriculture contributes about 30% of GDP. The lack of access to financial services in rural Mongolia has been perceived as one of the key constraints to the country's rural development. Until recently, there were only two formal financial institutions that had networks at the soum (village) level: the Agricultural Bank of Mongolia (AgBank) and Post Bank. Financial services diffusion was further hampered by a series of banking crises during the 1990s that caused the whole banking system to suffer from widespread public distrust. As a result, rural finance in Mongolia became a serious need that was very difficult to fulfil. AgBank was founded in 1991, inheriting the rural banking network of the State Bank. AgBank became insolvent after years of accumulated losses, and in 1999 the Bank of Mongolia placed it in receivership. Since then, many programmes for remediation have been initiated, supported by international donors, as all of the stakeholders realized the importance of AgBank whose network in rural areas was the most extensive. The management was contracted with a foreign firm, and finally the privatization was successfully finalized in March 2003. The results of restructuring during this process have initially been viewed as successful; the rehabilitation of the rural financial infrastructure thus far includes the following increases in 2002: branch offices, from 269 to 356; employees, from 803 to 1525; loans, to more than 400 000 in number; and deposits, to USD 39 million. According to AgBank, one out of every two rural households uses AgBank. As for the client base, it is reported that AgBank is strengthening its focus on wealthier herders, rather than the poor segment.

Also dramatic in the recent evolution of Mongolian rural micro-finance was the birth of XacBank¹⁵ in 2001, a product of the merger of the nation's first finance company (XAC Co. Ltd.) that originated from the UNDP-supported MicroStart project and an SME lending institution in the Gobi region (Goviin Ehlel Ltd.) funded by USAID. Being owned by seven NGOs through the holding

- 13. Nikkei Journal (2003.3.17).
- 14. Sources: see section of Mongolia in bibliography.
- 15. Xac is a Mongolian acronym for "Golden Fund for Development."

company, XacBank has 15 branches in rural areas in addition to its six in Ulaanbaater. As of the end of 2002 it had 11 063 borrowers with total loan outstanding of USD 4.9 million (of which, "micro-loans" constituted 51%) and savings of USD 6.0 million. So far XacBank has targeted the "vulnerable non-poor" and the "moderately poor."

Besides the fast growing AgBank and XacBank, savings and credit unions (SCUs) and NGO micro-finance have also emerged in rural micro-finance. Backed by active donor supports, the rural finance in Mongolia has been experiencing an ice-breaking moment in its history. The first SCUs outside the capital were formed in 1999 and, as of the end of 2001, 135 SCUs were registered, out of which 69 were located in rural areas. The ADB has been supporting these undertakings. As to NGO micro-finance and donor-supported projects, UNDP reports that about 60 are active, among which is Credit Mongol, a non-bank financial institution functioning as an implementer of a UNDP-DFID applied research project, has been attracting an increased level of attention from the donor community. Other projects have also been implemented, including those under the auspices of the World Bank Sustainable Livelihoods Support Project and World Vision.

III. Agricultural banks/Rural development banks

Institutional forms

As was overviewed in section I, agricultural banks are currently playing a central role as formal providers of financial services in rural areas in Asian transition countries, and a good part of their operation is to serve small farmers, and in some cases non-farmers, in the countryside, even though micro-finance methodology has not necessarily been built into the system. The most sizable outreach has been achieved by VBARD (Vietnam), which serves as much as 45% of the nation's total households. The MADB (Myanmar) is the second largest agricultural bank in terms of workforce, serving about 1.6 million rural households. Although its recent operational and financial status is unknown, the APB (Lao PDR) remains the only formal supplier of credit of any significance in Lao PDR. These three banks basically follow a policy bank model of being fully owned by the government and thus are given the major mandate of supporting agricultural expansion and related activities in the countryside of their respective countries. However, their banking licenses differ depending on the country context. For example, VBARD is given the status of full-fledged commercial bank that serves to farming and non-farming individuals and enterprises, whereas the MADB is mandated by a special law to limit its scope mostly to seasonal crop loans to farmers. AgBank (Mongolia) is an example involving institutional transformation from the governmental policy bank model. After it was established as a state-owned commercial bank holding an extended outreach in rural areas, subsequent managerial failures caused insolvency, which necessitated that the authorities initiate comprehensive restructuring of the bank's operations and financial base. The Mongolian government pursued the AgBank's organizational rehabilitation and improvement of governance by adopting a management contract with a foreign party and, eventually, privatization involving foreign investors. While these four banks are financial service retailers in rural areas, the RDB (Cambodia) is a small apex organization for the purpose of channelling (on-lending) funds to financial intermediaries specialized in micro-credit. This formation derived from, on one hand, a serious lack of any significant formal outreach by any existing financial institution and, on the other hand, the government's determination to use micro-finance systems to reach rural areas rather than expecting commercial banks' networks to expand.

Table 1. Rural Finance and Micro-finance Development in Transition Countries in South-East and East Asia

			East Asia		East Asia
	Cambodia	Lao PDR	Myanmar	Vietnam	Mongolia
Country Profile					
Population (rural portion)	12.3 million (85%)	5.3 million (76%)	48.3 million (72%)	78.7 million (75%)	2.4 million (63%)
Population density (000/sq. km)	68	23	73	241	2
GNI per capita (USD)	260	320	n/a	410	410
Gross domestic investment/GDP (%)	17.9	22.1	12.4	30.9	30.0
Gross domestic savings/GDP (%)	9.8	15 °	12.3	28.9	14.1
M2/GDP	18.4	16.3	34.3	58.1	38.2
Year economic reform started	1988	1986 (New Economic Mechanism)	1989	1986 (doi-moi)	1990
Banking Reforms					
Two-tiered banking system	National Bank of Cambodia (NBC) separated commercial banks in 1991	The Bank of Lao PRD (BOL) was established in 1990	Central Bank of Myanmar (CBM) was established in 1990	State Bank of Vietnam (SBV) separated commercial banks in 1988	Bank of Mongolia (BOM) was established in 1991
Interest rate regulation (explicit)	No	No	Yes	No	No
State-owned banks	2 (FTB, RDB)	4 (BCEL Bank, Lao Mai Bank, Lane Xang Bank, APB)	4 (MEB, MFTB, MCIB, MADB)	6 (BIDV, VCB, ICB, VBARD, VBSP, MDHDB)	1 (Savings Bank)
Total assets of the banking system	USD 644 million (20% of GDP) (2000)	USD 408 million (25% of GDP) (1999)	n/a	Estimated total bank loans/GDP is 44% (2000)	USD 206 million (22% of GDP) (2000)
Private banks (excluding rep. offices of foreign banks)	12 local banks; 5 foreign branch banks; 2 specialized banks	10 private banks	20 private banks	39 joint stock banks; 4 joint venture banks; 26 foreign bank branches	11 private banks
Banking crises	-	-	2003 bank run at leading private commercial banks	-	1992, 94, 96, 98/99 Banking crises or failure
Financial sector vision statement	Financial Sector Blueprint for 2001-2010 (ADB)				
Rural credit policy	Credit Committee for Rural Development (CCRD) in 1995	Rural Micro-finance Committee (RMFC)			
Agricultural Banks or Rural Development Banks	Rural Development Bank (RDB) established in 1998	The Agricultural Promotion Bank (APB) established in 1993	Myanma Agricultural Development Bank established in 1953	Vietnam Bank for Agriculture and Rural Development (VBARD) established in 1988	AgBank established in 1991 (privatized in March 2003)
Network	[wholesale organization]	17 provincial branches and 50 sub-service units	15 regional offices and 204 branches (2000)	1 568 branches (2001)	356 offices (2002)
Employees	n/a	n/a	3 357 (2000)	22 372 (2001)	1 525 (2002)
Outreach	wholesale organization	(APB reports it served 15% of all villages, containing 14% of all households in 1996 and had 12 000 depositors)	1.6 million borrowers; 2.0 million savings accounts (2000)	Serving 5.5 million households; the total loan outstanding of USD 4 billion and savings mobilization of USD 1.8 billion	(the number of loans made in 2000-2002 was 400 000; AgBank reports one of every two rural households uses AgBank)

Table 1. Rural Finance and Micro-finance Development in Transition Countries in South-East and East Asia (cont')

		South-E	ast Asia		East Asia
	Cambodia	Lao PDR	Myanmar	Vietnam	Mongolia
Donors	AFD, ADB	EU, IFAD, ADB	none	WB, ADB, AFD, KfW, etc. (53 foreign projects)	USAID
Balance sheet	12/2000	1996, estimated by UNDP/CDF	3/2000	12/2001	12/2002
Assets (composition, %)	-Loans 24 -Deposits with NBC 71 -Others 5	n/a	-Loans & advances 36 -Investment 2 -"Adjustment a/c" 51 -Others 11	-Loans 77 -Placement in banks 11 -Balance in SBV 5 -Others 7	-Loans 51 -Investment 28 -Others 21
Liabilities/Equity (composition, %)	-Deposits (customers) 9 -Capital/reserves 85	-Borrowing from BOL and donors 92	-Deposits 33 -"Borrowing a/c" 52 - Capital/reserves 9	-Deposits (customers) 46 -Deposits/borrowing from SBV and treasury 25 -Capital/reserves (1)	-Deposits (customers) 76 -Govt deposits, etc. 15 -Capital/reserves 7
Micro-finance Institutions					
Micro-finance banks	ACLEDA Bank: more than 80 000 borrowers; loan outstanding USD	None	None	Vietnam Bank for Social Policy (March 2003): state-owned	Xac Bank (March 2002): 11 063 borrowers; loan outstanding of USD 4.9 million (12/2002)
Estimated Number of NGOs & Projects involving micro-finance	72 local and international NGOs	15 international NGOs (1997)	25 local & international NGOs/projects involving micro-finance (2002)	60 international NGOs involving savings and credit schemes (1997)	60 local and international NGOs
Leading NGOs / Projects	Hatthakaksekar, EMT, Seilanithih, UNICEF, MOWA	UNDP/UNCDF (micro-finance project), Lao Women's Union (LWU)	GRET, PACT (UNDP/UNOPS)		Credit Mongol, World Vision
Outreach of MFIs	4 000 (1991)→420 000 borrowers (235% of rural households (12/2001)	Three largest MFIs reach about 10 000 clients	Estimated borrowers of NGOs/projects exceeds 100 000	n/a	n/a
Financial Co-operatives and Other Indigenous Financial Systems (incl. urban area)		Only one official (CCSP); network not yet emerged, Approx. 1 600 village revolving funds (VRFs): credit USD 5 million	Estimated number of credit and savings co-operative societies is 2000.	906 People's Credit Funds (PCFs) have 807 546 members	135 registered savings and credit unions (2001)
Note				Postal savings: total outstanding USD 250 million	

Sources: World Bank, Country at a Glance. International Monetary Fund, International Financial Statistics. Asia Development Bank.

Targeted borrowers and credit extension

As regards recipients for banking services, VBARD (Vietnam) and AgBank (Mongolia) deal with both individuals and enterprises since they are committed to becoming effective rural commercial banks, whereas the APB (Lao PDR) and MADB (Myanmar) target mostly small farmers. The RDB (Cambodia) channels on-lent funds through micro-credit intermediaries to farmers and micro enterprises. Among these banks, VBARD's and AgBank's management directions, targeting clients, and their lending methodologies merit particular attention. The experience indicates that directed credit, when done in a non-flexible manner or when it is forced, is not an effective means for rural finance. Traditional types of directed credit extended by retail agricultural banks include either short-term loans to farmers and herders or other agricultural extension, as well as some specific midor long-term loans to capital investment for the agricultural sector. It is well documented that inflexible directed credit to specific production activities that is accompanied by provision of very low interest rates to end users, has experienced many failures in terms of operational and financial performance across the world: VBARD's and AgBank's ongoing experiences, however, may fall into different models. Although VBARD still involves directed credit and its lending has been at interest rates too low to cover its financial costs, it has not been providing "cheap credit." AgBank has been more freely charging interest rates that will enable them to recover their costs.

Savings mobilization

To date, mobilization of savings by agricultural banks is more successful than that by any other financial organizations involving micro-finance undertakings, in relative terms, in Asian transition countries. However, more traditional types of agricultural banks are less successful among the five countries referred to in this paper. The APB (Lao PDR) has been dependent on borrowing from the government or the central bank for its financial resources. The MADB (Myanmar), in which the major finance is provided by short-term borrowing from the central bank, mobilizes yet a limited amount of savings from farmers, though its outreach in terms of the number of savings accounts is fairly sizable. In contrast, VBARD (Vietnam) has mobilized savings of USD 1.8 billion, at a rapid growth rate. In the case of AgBank (Mongolia), the deposits collected from herders were already the major financial resources for banking operations even prior to the organizational restructuring; after implementing the rehabilitation programmes, the savings amount from herders and agricultural businesses has been growing rapidly, and now constitutes 76% of the total liabilities in addition to equity capital of the bank. The relative success in mobilization of savings in rural commercial banks in Vietnam and Mongolia can be attributed largely to the following factors: (i) stable macroeconomic management to keep positive real interest rates; (ii) extended branch networks throughout the respective countries; and (iii) more or less flexible financial products for clients in rural areas.

^{16.} See World Bank (2002) and Izumida (2002). In Vietnam, the interest rate regulations on banking services have been gradually removed since the mid-1990s and currently the there is no ceiling on rates for credit provision. However, VBARD is not seemingly very flexible in changing lending interest rates compared with other state-owned commercial banks; to what extent this practice has been imposed by the government policies remains to be clarified. As to directed credit, Izumida (2003) estimates that approximately 20% of lending is still directed by the state and reports that the policy for rescheduling payment schedules for existing clients is also influenced by the state.

IV. Micro-finance banks/NGOs and financial co-operatives

Micro-finance banks

In the five transition countries covered in this paper, two privately owned micro-finance banks are operating: ACLEDA Bank (Cambodia) and XacBank (Mongolia). Although they exist in the different country contexts, the following institutional and environmental similarities are recognized:

- (i) Their origins are as an NGO or a private company with a strong stake in rural areas, which had a clear vision to cater to small economic players and the poor.
- (ii) Their operations have been fully supported by international donors since their establishment, and the rapid transformation into regulated banks specialized in micro-finance and small finance was achieved through the involvement of such strong support.
- (iii) The governments and monetary authorities in the two countries have been exposed to micro-finance practices and are on the way to developing enabling legal and regulatory frameworks.
- (iv) Because their respective monetary authorities have not limited them with ceilings on their interest rates, those micro-finance banks are charging sufficient levels to be sustainable entities.
- (v) They are achieving rapid growth in loan portfolio through extension of their branch networks.
- (vi) They aim at offering more full-fledged retail bank services, including provision of loans to small and medium enterprises and other financial services to the public as commercial banks.
- (vii) Mobilization of savings is yet limited in relative terms to credit extension, though rapid growth has been seen recently.

The VBP (Vietnam), the VBSP's predecessor, was unique as a governmental bank in that it provided unsecured small credit to the poor. As was stated in section I, its character was virtually more of *a loan fund* than of a bank since it did not have its own organizational structure or staff members and its operations were entirely dependent on the branch network of VBARD. The VBP was heavily subsidized by government funds and charged lower lending rates than those of VBARD; thus, the VBP lacked the financial base for sustainability. Moreover, non-separation of such policy lending from commercial banking evoked criticism from both society and the donor community as it severely undermines financial discipline in borrowers. The VBP's transformation into the VBSP is an attempt to segregate policy lending and establish the bank's own organizational structure, including a branch network; however, the institutional and financial viability is uncertain at this moment.¹⁷

295

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^{17.} According to Izumida (2003), the newly established VBSP is exempted from holding capital reserves and the clients' deposits at VBSP will be fully guaranteed by the state. The lending interest rates to the poor (0.5% per month) are set below the 6-month term deposit rates at VBARD and the PCFs, indicating that subsidized credit would distort rural financial markets as was the case in the former VBP. Izumida also warns that the VBSP's establishment of its own branch network, which would probably incur operational inefficiencies, would bring about huge social costs.

Micro-finance NGOs and projects

It is estimated that more than 230 projects involving micro-finance, either in full scale or as a component of their other activities, are being carried out by local or international NGOs in the five transition countries. Considering that many of them started operations in the last decade or so, this emergence is an encouraging proof of the potential of micro-finance development in this region. Micro-finance seems to offer a viable alternative to traditional moneylendering to poor people and small scale players who have been shut out from the formal banking system. The most sizable outreach achieved by NGO micro-finance, to date, is seen in Cambodia, where the total estimated number of borrowers of all rural MFIs has reached about a quarter of the rural households, according to NBC. Generally speaking, local capacities to run micro-finance programmes in a professional way are yet very weak in many aspects, such as implementation of adequate lending methodologies, achievement of sound financial management, and establishment of appropriate governance in spite of active support by international NGOs specialized in micro-finance. Nonetheless, some good examples of institutionalization, based on reliable track records in outreach and financial sustainability, have emerged in the region.

As to the impact of policy framework for NGO micro-finance, the following are observed:

- (i) Each country's legislative framework in some way provides for the registration of NGOs involved in micro-finance, but with quite diverse authorizing activities. Cambodia has established a set of standards to register micro-finance NGOs under the regulations of the NBC, whereas the other four countries do not have such explicit regulatory frameworks. Among them, Myanmar's is the least developed; micro-finance undertakings are only allowed as part of humanitarian projects that require special agreement with line ministries on a project by project basis.
- (ii) In Cambodia, as a result of its central bank's regulatory framework, "licensed" NGO MFIs have emerged, in addition to a micro-finance bank (ACLEDA). The MFIs are making progress in terms of information disclosure, which will significantly contribute to establishment of industry standards and risk management of the monetary authorities.
- (iii) Formal and informal associations or forums among NGOs and projects that involve micro-finance have thrived and are contributing to the establishment of a base for dialogue among practitioners and policy makers. Examples of formal committees on rural finance and micro-finance are found in Cambodia and Lao PDR, and informal dialogue has widely emerged in the region, including at opportunities driven by donors as part of financial sector or rural finance projects.

Financial co-operatives and other indigenous systems

The experiences in these five Asian transition countries provide some indication of the potentials of financial co-operatives and other indigenous financial systems to become important sub-sectors of their domestic financial systems. Together with other micro-finance undertakings, the mutual financial systems running at the small community level are contributing to enable poor and small economic players to switch from informal finance (borrowing from relatives or moneylenders in villages) to formal or semi-formal means. Also, given the "savings first" mechanism, one of the salient advantages of the financial co-operatives is their effectiveness in mobilizing savings, and, once appropriate governance is in place, the financial demand of their members can be expected to contribute towards healthy development.

An encouraging example of co-operatives' responsiveness to rural financial needs is indicated by PCFs in Vietnam that have been rapidly expanding at the commune level through the delivery of micro-credit and the mobilization of savings in only for less than 10 years of operation. Another example of rapid growth in observed in savings and credit unions in Mongolia since 1999. The institutional forms and linkages of financial co-operatives with the formal sector vary and this bears future studies. In Myanmar, savings and credit societies are one form of many kinds of co-operatives, which are registered under the Ministry of Co-operatives.

V. Policy implications

An overview of rural finance and micro-finance development in Asian transition countries shows us the diverse potentials that formal and semi-formal financial institutions have to reach out to the rural poor and small economic players in the countryside. Any monolithic view that expects a single MFI type—either NGOs or specialized banks—to dominate the financial market for micro-credit and micro savings is neither healthy nor realistic. Existing formal and semi-formal financial systems should be reformed to overcome the constraints deriving from their old models to deliver financial products, and emerging innovative NGOs have still many tasks ahead before being institutionalized and eventually integrated into the formal financial sector. The following policy implications are drawn by the previous sections:

- (i) **Reform of agricultural banks**. The extensive branch networks of agricultural banks are invaluable socio-economic infrastructure for rural finance; however, inefficient management, often in the form of inflexible directed credit, not only undermines such assets but also inhibits borrowers' development of financial discipline. Effective reforms are being undertaken in the region: retail services can be developed by strengthening commercial banking with more varied financial products by market-based pricing (VBARD and AgBank). The core issue, to cover the social costs, is managerial autonomy from the political decision-making rather than the argument that state ownership is disruptive. Existing agricultural banks, regardless of the ownership structure, should challenge to reconcile their mandate of contributing to the rural economy with the achievement of financial sustainability.
- (ii) **Financial sector vision and market-based policy framework for rural and micro-finance**. This is a basic requirement for developing an efficient rural financial system, as it is far easier to start with a set of enabling policies rather than modifying policies after they become a practice or norm. The Cambodian experience clearly shows that the government's and the monetary authorities' understanding and support to market-based approaches to rural finance enable MFIs to grow fast. On the other hand, co-existence of the market-based micro-finance undertakings and the provision of heavily subsidized micro-credit by the governmental schemes is to be resolved (*e.g.* Vietnam).
- (iii) **Development of retail capacities of MFIs.** The further development of rural finance and micro-finance is constrained by the insufficient capacity of current institutions, *e.g.*, local NGOs, to expand and become strong institutions. There is an obvious need to develop retail capacities of MFIs.
- (iv) **Legal and regulatory environment for MFIs**. Over the world, most MFIs grow outside the regulatory system at the early stage of development and so are the Asian transition countries studied in this paper. This basically provides favourable conditions for MFIs to adopt non-conventional methodologies to deliver financial services to the poor. However, if severe restrictions for micro-finance operations exist or if the existing legal framework discourages

NGOs to start micro-finance undertakings, those restrictions should be urgently removed. In a country like Myanmar, the registration system for NGOs to lawfully deliver micro-credit is to be established. Another indication from this overview is that there is a clear need to develop or improve regulatory capacities in the monetary authorities to understand particular risk profiles of micro-finance. Capacity building of regulators should, generally speaking, prevail to drafting particular laws and regulations for micro-finance.

- (v) Improvement in governance of indigenous financial systems. Each country has developed indigenous financial systems that have some potential for being mainstreamed to or linked with the formal financial system in the future. The foremost challenge of indigenous groups for sound expansion is an achievement of good governance. There is need to study those systems to draw lessons and identify tasks and action plans, under specific context of each country, to be mainstreamed or linked with the formal system.
- (vi) **Savings mobilization and financial sustainability.** Savings mobilization cannot be overemphasized, since it benefits both the MFIs and the small depositor clientele and thus contributes to financial deepening in the rural economy. There is a need to ensure that the savings of poor people entrusted to MFIs are safe and sound.

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FUNDING SMALL BUSINESSES IN CHINESE TAIPEI: FROM INFORMAL MICRO-FINANCE INSTITUTIONS TO FORMAL BANKING INSTITUTIONS

By Thierry Pairault¹

Abstract

The evolution from informal micro-finance institutions toward formal banking institutions is a long march of one hundred years as far as small businesses and the island of Taiwan are concerned. It began in 1895 when the Chinese Imperial government relinquished sovereignty over the island and ceded it to Japan (Treaty of Shimonoseki). It ended in 1995 when Small and Medium Business Banks did not have to manage any longer some tontine-based funds, (hehui jin Amage. First, the Japanese colonial government (1895-1945), later the Chinese government (1945-1995) have relied on similar strategies in dealing with tontine-based forms of finance: regulating them, rarely banning them, and allowing certain types of micro-finance institutions to absorb them. This policy was designed for increasing the availability of credit to low-income entrepreneurs and eliminating their reliance on supposedly usurious but actually unpredictable financing means. This paper will examine the stages of this transformation.

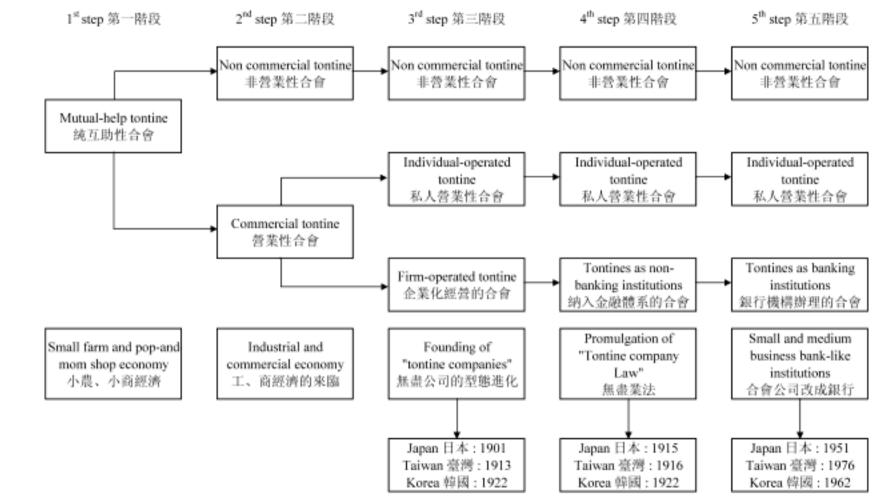
The evolution from informal micro-finance institutions toward formal banking institutions is a long march of one hundred years as far as small businesses are concerned. It began in 1895 when the Chinese Imperial government relinquished sovereignty over the isle of Taiwan and ceded the island to Japan (Treaty of Shimonoseki). It ended in 1995 when Small and Medium Business Banks did not have to manage any longer tontine-based funds, (*hehui jin* 1995). First, the Japanese colonial government (1895-1945), later the Guomindang government (1945-1995) have relied on similar strategies in dealing with tontine-based forms of finance: regulating them, rarely banning them, and allowing certain types of microfinance institutions to absorb them. This policy was designed for increasing the availability of credit to low-income entrepreneurs and eliminating their reliance on supposedly usurious but actually unpredictable financing means. This paper will examine the stages of this transformation which are outlined in Table 1 (five steps) and in Table 2 (legal events in comparative perspective).

^{1.} Thierry Pairault裴天士is Directeur de recherche (Research Professor) at the Centre National de la Recherche Scientifique國家科學研究院. In addition he is teaching at the École des Hautes Études en Sciences Sociales社會科學高等學院and at the Institut National des Langues et Civilisations Orientales東方語言學院.

^{2.} In this paper, the phrase "tontine" names what is sometimes called "rotating saving and credit association", other times "mutual financing clubs" and so on. In the statistical parlance, deposits in tontines were called "Advances to Mutual Loans Account" (墊付合會金) and loans backed upon tontines were called "Amount of Mutual Contract" (合會金契約額) (see *Taiwan Financial Statistics Monthly*「臺灣金融統計月報」).

Tontines under the Japanese rule (1895-1945)

After Japan defeated Qing China and took over the island of Taiwan in 1895, the Japanese colonial administration intended to transform a small backward island into a more modern economy. For that very reason, a major step was taken as soon as in March 1897 to revamp the financial system on the island: the Taiwan Bank (Taiwan Ginkō / Taiwan Yinhang台灣銀行) was created as a development bank. The constituting act states clearly that the Bank of Taiwan is to regulate the financial situation, to explore the resources of the island and to spur economic development (see Tu Zhaoyan 1982:42-43). Irony of fate, to raise its starting capital Japan had to spend the compensation the Qing government paid her after the Sino-Japanese War for quite nobody on the island dared invest in this project! Not only people did not have much confidence in the bank but also, the bank has been asked to issue bills on behalf of the government as if it were the Treasury. As a result, its ambiguous role threw people into confusion just when the economy was to take off again. As the bank carried out levies for the government, the money became scarce and expensive, economic agents had to resort to alternative sources of funding, namely tontines. In other words, what the colonial government was afraid of was to lose its grip over the economy of the island. To face up this situation, the Japanese rulers made two decisions in 1902. Firstly, they allowed the Industrial Bank of Japan (Nihon kangyō ginkō, 日本勸業銀行) to open a branch on Taiwan in order to foster investment and organise the funding of businesses (Tu Zhaoyan, 1982:476-477). Secondly, they promulgated a "Regulation to discipline the tontines" (Kōkai torishima kisoku**講會以辞規)** made of five articles (Chen Ruitang, 1981:544-545).



1	Table 2. Tontine companies: step by step from 1895 to 197	6	
TAIWAN	Events	JAPAN	KOREA
	Treaty of Shimonoseki 馬關條約: China cedes to Japan the island of		
1895	Formosa in perpetuity and full sovereignty and recognises definitively	1895	1895
	the full and complete independence and autonomy of Korea.		
	First Japanese regulation governing the mandatory registration of	1006	
	tontines 「賴母子講、無盡講及類似者申報規定」	1896	
1007	Establishment of the Bank of Taiwan which from 1899 started issuing		
1897	paper money and providing funds for private and public investments.		
	Founding of the first Japanese "tontine company"	4004	j
	無盡公司/無盡會社.	1901	
1002	Japanese colonial regulation governing the multiplication of		
1902	commercial tontines on the island of Taiwan.		
	Formal annexation of Korea by Japan.	1910	1910
1010	Founding of the first private commercial "tontine company" on the		
1913	island of Taiwan.		
	Promulgation in Japan of the Tontine Company Law 無盡業法 which		
	came after a rather thorough survey of the financing practices in small	1915	
	and medium Japanese businesses.	1,710	
	Introduction in Taiwan of the Japanese Tontine Company Law which		
1916	will be "indigenised" in 1922.		
	Founding of the first private commercial "tontine company" in Korea		1922
	Introduction in Korea of a Japanese Korean Tontine Company Law		
	韓國無盡業法.		1931
	Application of the full disclosure principle to the interest rates charged		
	by "tontine companies" in Japan.	1936	
	"Tontine companies" in Korea are merged in one new company.		1942
	With the capitulation of Japan, the island of Taiwan is handed over to		1712
	the control of the Chinese nationalist government; "tontine		
1946	companies" are merged into one nationalised company; new		
	regulations are promulgated.		
10.40	Founding on the island of Taiwan of six private "tontine companies"		
1948	with limited territorial authority.		
	Founding in Japan of the mutual banks (sōgo ginkō 相互銀行) which		
	are to take over all the tontine-related business formerly operated by	1951	
	the "tontine companies".		
	Japanese mutual banks are allowed to discount bills of exchange.	1953	
	Promulgation in Korea of the Small-Medium Industry Adjustment		
	Law.		
	Founding in 1962 of the Citizen's National Bank (also called Koomin		1961
	Bank 國民銀行) which is to take over the tontine-related business and		
	to lend the pop-and-mom shops.		
	In Japan, the mutual banks are upgraded to the status of ordinary	1069	
	banks.	1968	
	In Korea, "tontine companies" are allowed to convert into mutual		1972
	credit institutions.		19/4
1973	On the island of Taiwan, reforms of the 1948's regulations of the		
1973	"tontine companies" are carried out.		
	In Japan, the mutual banks are allowed to deal with foreign exchange.	1973	1973
	On the island of Taiwan, "tontine companies" are to be transformed		
1976	into small and medium business banks 中小企業銀行. At that time, it		
17/0	was deemed they should get rid of their tontine-related business by		
	1987; actually they had to wait till 1995.		

This regulation was aiming at mutual-help tontines, it required that each tontine organiser writes down a tontine deed and registers it at any appointed bureau. It very soon appeared that only a few tontines among those in operation were actually registered, the latter ones being in most cases managed by small Japanese entrepreneurs. Therefore, most of the tontines organised by small Chinese entrepreneurs and of course all "secret tontines" (*mitsu kō* $\frac{1}{1}$ in which Japanese participants are free to fix the interest rate were not recorded (*Taiwan sheng tongzhi*, 1970:4-2-211b).

The extent to which the phenomenon spread is illustrated by the investigations the Japanese government set up in 1922. That year, Chinese businessmen were deemed to have organised (and registered?) about 4 400 tontines, each calling together twelve participants on average -i.e. 52 276 participants in all, as half of which were staying in Taibei (Taipei, according to the old Wade-Giles romanisation). On the other hand, Japanese businessmen have registered 1 070 tontines called tanamoko $k\bar{o}$ 賴母子講 each calling together twenty-five participants on average – i.e. 27 107 participants in all. Moreover, according to the Japanese authorities, there were 321 "secret tontines" gathering 8 132 participants. Despite some differences in organisation, it appears that the amount of the pot Chinese businessmen might have drawn was quite identical to the one Japanese businessmen might have drawn. This proliferation led the Japanese government to reinforce and indigenise the regulations of tontines: tontine deed minutely detailing the functioning, arrangement in case of participant bereavement or participant non-payment, binding obligation of each participant resulting from affixing one's own signature, guarantee. Simultaneously, registration rules were relaxed and tontines need not to register if they were not calling over twenty participants, they were lasting less than two years and if the periodic contributions were not exceeding fifteen yen (Cheng Rongfu, 1953:123-124). Whether lawful or unlawful ("secret tontines") non-registration of tontines might have been, participants were guarded against deceitful practices initiated by tontines' organisers as the Supreme Court最高进滤tated it in 1928: protection for contractual freedom is provided by law, therefore no one can declare null and void any tontine deed on the grounds that it has not been duly registered nor officially endorsed and thus take this opportunity to cheat participants out of their money (Chen Ruitang, 1981:546).

Concurrently firm-operated tontines began to emerge. The first tontine company on the island of Taiwan started its business in 1913, it was designed so to be similar to the Foster Savings Company (Chochiku shōrei sha 貯蓄資訊) created in Tokyo in 1900. Nevertheless, the island did not experience any tontine frenzy as Japan did before the promulgation of the Tontine Company Law (Mujingyō hō 無盡業為³. When the Japanese rulers issued this law on the island in 1916, there were only three tontines companies; when they relinquished it in 1945, there were no more than four of them, the capital of which was Japanese up to 80% (see Table 3). The close watch under which the Japanese government kept them certainly put a curb on their potential wild spreading; conversely, this surveillance did not impede the blooming of their business. From 1916 to 1942, the number of persons participating in tontines managed by tontine companies rose from 6 642 to 42 385 (+540%), their contributions increased twenty-fold and the pots they drew fivefold. In the 1940s, the average firm-operated tontine might have called together thirty participants, each one contributing 650 year each month during two years and a half. Such a monthly contribution is quite significant if compared to the per capita annual income on the island: at the height of inflation in 1946, this income reached 4 702 yen, but its purchase power had dropped by two thirds if compared with 1937 (Taiwan kin-yū nempō, 1934:125; 1942:152-155; Taiwan sheng wushiyi nianlai, 1946:1114-1115).

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^{3.} A Chinese translation of this law appears in Cao 1980:210-200.

Table 3. Tontine companies on the island of Taiwan (1913-1946)

1913	August 八月	Founding in Taibei of the "Taiwanese Saving Tontine Company", closed and sold in 1920. 「台灣蓄財無盡朱式會社」在台北開業,在1920年被轉讓。	1 branch 支店
1916	February 二月	Introduction on the island of Taiwan of the Japanese <i>Tontine Company Law</i> . 日本的「無盡業法」在台灣施行。	
	May 五月	Founding in Taibei of the "Taiwanese Tontine Company", closed and sold in 1920. 「台灣無盡朱式會社」在台北開業,在1920年被轉讓。	6 branches 支店, 7 sub-branches 出帳所
	August 八月	Founding in Tainan of the "Taishō Tontine Company" (named so to honour Emperor Taishō), closed in 1925, sold in 1926. 「大正無盡朱式會社」在台南開業,在1925停業,在1926年被轉讓。	3 branches 支店
1920	July 七月	Founding in Taibei of the "Taiwanese Industrial Tontine Company", it acquires the "Taiwanese Tontine Company". 「台灣勸業無盡朱式會社」在台北開業,收購「台灣無盡朱式會社」。	7 branches 支店, 1 sub-branches 出帳所, 2 proxies 代理店
1922	November 十一月	Indigenisation of the Japanese <i>Tontine Company Law</i> . 日本的「無盡業法」的本地化。	
1926	May 五月	Founding in Hualian of the "East-Taiwan Tontine Company". 「東台灣無盡朱式會社」在花蓮開業。	3 proxies 代理店
	November 十一月	Founding in Tainan of the "South-Taiwan Tontine Company", it acquires the "Taishō Tontine Company". 「台灣南部無盡朱式會社」在台南開業,收購「大正無盡朱式會社」。	3 branches 支店
1942		Founding of the "Taiwanese Housing Tontine Company". 「台灣住宅無盡朱式會社」開業。	
1946	September 九月	Former tontine companies are merged by the Chinese government into one nationalised company named the "Taiwan Savings Tontine Company". 台灣光復後,原來有的四家無盡公司合併成立「台灣合會儲蓄股份有限公司」。	

their amounts are small but enough to cope with unexpected needs in working capital. Previous participations in tontines demonstrate one's saving aptitude; affiliation to a social network works as a collateral which binding obligations are legally formalised when the organiser is a tontine company. That is the lesson which has been understood by the Nationalist government after the take over of the island in 1945.

Table 4. Taibei and Jilong (1938)

	Occurrence rate	Share of loans' worth	Average loan (yen)
Types of institutions			
Wholesalers	18.8%	34.6%	10 370
Banks	11.4%	31.6%	15 633
Friends, relatives	19.1%	13.9%	4 176
Credit cooperatives	23.6%	12.1%	2 954
Tontine companies	7.2%	2.3%	1 852
Others	3.0%	1.8%	3 455
Insurance company	6.2%	1.5%	1 440
Moneylenders	3.2%	0.9%	1 615
Tontines	4.5%	0.7%	937
Pawnbrokers	2.0%	0.1%	288
Trusts	0.4%	0.0%	900
Types of funding			
Tontines	11.7%	3.0%	1 501
"Informal"	29.0%	15.7%	3 106
"Traditional"	55.1%	52.7%	5 466
"Modern"	41.9%	45.4%	6 220

Tontine companies under the Guomindang rule (1945-1976)

After the Guomindang (GMD) officially took the leads of the island's destiny on the 25th October 1945, it adopted the pre-existing centralised structure built by the Japanese and simultaneously intended to prevent the private holders of money from exercising power over the economy. Thus, on the 1st September 1946, it merged the four former tontine companies into one nationalised company. At first it was named the "Taiwan tontine limited liability company" (*Taiwan wujinye gufen youxian gongsi* 台灣山東東東東河南東京區 for this name was changed to the "Province of Taiwan's people limited liability company for mutual financial help" (*Taiwan sheng renmin chujin huji gufen youxiqn gongsi* 台灣山大河東京區 for the former name has too much of a Japanese flavour (the word wujin 無力 "tontine" obviously emulated the Japanese use). On June 1947, the name was once more altered and became the "Taiwan tontine savings limited liability company" (*Taiwan hehui chuxu gufen youxian gongsi* 台灣山東京區 using now the Chinese phrase hehui 合画 or "tontine" (Chen Rongfu 1953:132). From then on, privately funded tontine companies began to spring up.

At that time, the government main concern was the runaway inflation. The index of retail prices in Taibei (base: January-June 1937=100) stood at 38 233 (December 1947) before it came to 1 112 683 (December 1948) and then to 15 456 228 (June 1949) when the government decided to devaluate and to adopt a new currency – the New Taiwan Dollar, hereafter NT\$ –, 40 000 dollars of the old currency was exchanged for one of the new (*Taiwan Monthly of Commodity-Price Statistics*,

night be used as a tool for speculation, it promulgated on the 27th of January 1948 a Regulation for the Management of Tontines Companies in the Province of Taiwan (*Taiwan sheng hehui chuxuye guanli guize* 台灣 自己 中華 (Imited liability companies) were entitled to operate on the island (see Table 5); their territorial jurisdictions were closely drawn up and each were limited to a given area unlike the nationalised company whose territorial jurisdiction was set over the whole province. The task of the eight tontines companies was twofold. Firstly, they gave a legal framework to tontines and had to manage them on behalf of their own patrons. Secondly, they were authorised to provide their tontines' members with a minor range of financial services as handling loan and deposit accounts. In return, they were paid for their services (Chen Rongfu 1953:133-136).

According to the regulation, these tontine companies had to put forward few tontine deeds (*hehui chuxu qiyue* 合言語文句 allowing patrons to choose between several options depending on four major criterions (Cao 1980:50-59 & 195-199; He 1965:52-65; Du 1969:339-356):

- The span of the tontine: tontines could include at the least twelve tontiners and no more than sixty, *i.e.* it could last between twelve and sixty months; according to available statistics, in most cases (85%) the span of a tontine life was a cycle of 18 to 20 months.
- The appropriation of the pot: in earlier times, the order of pot recipients was determined by secret bidding, whereby the tontiner who makes the highest bid picks up the pot. In 1956, the Taibei Tontine Company was the first to introduce a new way which reminded of the old tontine practice of dice-casting; the order of pot recipients was to be set even before the tontine might begin –according to the sequence in which their names were drawn out. Doing so firstly aimed at reducing the costs resulting from successive outbidding. It also aimed at altering the nature of tontines from credit instruments into saving instruments. In 1964, less than a third of all tontines operated by tontine companies were run by auction; ten years later, this proportion felt to 3.7%.
- The way to draw the pot: tontiners usually had two ways to draw the pot, either in cash (xianjin hehui] 中 or in kind (wuchan hehui] 中 or more accurately the sum of money equivalent to the purchase price of a given good). The latter method aimed at promoting the purchase of capital goods as well as consumption goods such as sewing machine, bicycle, fan, radio receiving set. It was actually nothing more than a variety of purchase by instalments which have not had much success: tontines using this method to draw the pot accounted in 1964 for less than 10% of the total value invested in tontines; this figure had felt to 1.5% when this technique was grounded to a halt in 1973.
- The amount of the pot: in the late sixties, about two thirds of the pots had an average value of NT\$ 10 000 (US\$ 250 at current value), that is to say the two thirds of the *per capita* National Income at that time.

Table 5. Tontine companies from 1946 to 1978

Taiwan Tontine Company 台灣合會儲蓄公司

- Business started on 1st September 1946; merger of former four Japanese-funded tontine companies.
- Public enterprise which territorial jurisdiction extended over the whole province; its market share in 1976 was about 46% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st July 1976.
- Privatised on 22nd January 1998 under the name of Taiwan Business Bank.

Taibei Tontine Company 台北區合會儲蓄公司

- Business started on May 1948.
- Private enterprise which territorial jurisdiction limited to the cities of Taibei et Jilong as well as the districts of Taibei and Yilan; its market share in 1976 was about 18.2% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st January 1978.

Tainan Tontine Company 台南區合會儲蓄公司

- Business started on 1st November 1948.
- Private enterprise which territorial jurisdiction limited to the city of Tainan as well as the districts of Yunlin and Jiayi; its market share in 1976 was about 7.6% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st January 1978.

Xinzhu Tontine Company 新竹區合會儲蓄公司

- Business started on 1st February 1949.
- Private enterprise which territorial jurisdiction limited to the districts of Xinzhu, Taiyuan and Miaoli; its market share in 1976 was about 8.6% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st January 1978.

Taidong Tontine Company 台東區合會儲蓄公司

- Business started on 21st May 1949.
- Private enterprise which territorial jurisdiction limited to the district of Taidong; its market share in 1976 was about 1.1% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st February 1979.

Gaoxiong Tontine Company 高雄區合會儲蓄公司

- Business started on 1st November 1950.
- Private enterprise which territorial jurisdiction limited to the city of Gaoxiong as well as the districts of Gaoxiong, Pingdong and Penghu; its market share in 1976 was about 7.9% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st January 1978.

Hualian Tontine Company 花蓮區合會儲蓄公司

- Business started on 21st March 1952.
- Private enterprise which territorial jurisdiction limited to the district of Hualian; its market share in 1976 was about 1.3% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st January 1979.

Taizhong Tontine Company 台中區合會儲蓄公司

- Business started on 1st August 1953.
- Private enterprise which territorial jurisdiction limited to the city of Taizhong as well as the districts of Taizhong, Zhanghua and Nantou; its market share in 1976 was about 10.1% of all tontine transactions operated by tontine companies.
- Converted into a Small and Medium Business Bank on 1st January 1978.

As shown in Table 6, tontine companies performed rather significantly as fund providers. The index of tontines deeds rose at 1955 constant prices from 100 in 1955 to 1 253 in 1976. Furthermore, the ratio of tontines loans to the total loans allocated by the tontine companies increased from 15.5%

to 79.6% during the same period of time. From the middle of the fifties to the end of the sixties, tontine companies also played an increasing part in the mobilisation of savings: less than 1% of all savings in 1955 but more than 5% fifteen years later. During the seventies their relative part began to go into reverse gear with the diversification of financial institutions; nevertheless, the absolute amount of deposits in tontine companies went on growing at a steady pace of 25% a year on the average.

Table 6. Part played by tontines companies

	Index of tontines deeds (at constant prices)	Ratio of tontine loans to the total of loans by tontine companies	Ratio of deposits in tontine companies to total deposits
1955	100	15.5%	0.8%
1960	228	46.1%	3.2%
1965	420	59.9%	6.5%
1970	767	81.7%	5.3%
1975	1 185	83.9%	3.3%
1976	1 253	79.6%	3.3%

Sources: JTY 1964-1977; Hou Jiaju 1984.

The success met by the tontine companies deserved a twofold amendment. Firstly, on an organisational level, one would remember that traditional tontines were based on mutual confidence between each tontiner and the organiser as well as between tontiners themselves. Within a tontine company, this fundamental characteristics looses most of its weight for the gathering of tontiners can be hold on a rather anonymous standpoint; these "modern" tontiners just cared about putting their confidence in well-established financial institutions which might help them either to raise the funds they need or to have their savings blooming. Formerly, the role tontine companies had to play was essentially to congregate in a tontine tontiners in need of a loan and tontiners expecting to earn money through their savings; therefore these companies' main occupation was initially to plan each tontiner's withdrawal according to his/her own aim, "emergency" loaners ranking first, "ordinary" loaners ranking second, "opportunist" savers ranking third and "utter" savers ranking last. Afterwards, tontine companies began to urge their patrons (i.e. people already participating in tontines) to make deposits in interest-bearing savings accounts and also to encourage them to borrow directly from the tontine companies using their tontine deposits and savings deposits as collaterals. This policy could have lead to a reversal of the chores of tontine companies from tontines' organisers to virtual banking institutions, but their status as well as the requests of their patrons precluded this change from happening at that time. Tontine companies instead tried to promote new procedures for granting facilities and lead to a proposal which has been called "loan tontines" (daifangshi hehui 對文合會) whereby individual loans (in contrast to mutual loans) were dressed up in tontines clothes (Lin Jiafan 1976; Cao 1980:109-114).

improvements clearly specify the part to be performed by tontine companies whose patrons mainly were small entrepreneurs: 64.5% of the accounts representing 75.4% of the deposits in 1974 (see Table 7). It is this state of affairs which led the government of the island to go a step further and to come on the 1st July 1976 to the decision of transforming the tontine companies into banks of small and medium businesses. Their major assignment was to provide small and medium businesses with a full range of banking services including intermediate-term and long-term loans. The tontine business (hehui yewu台灣教) handled by the former tontine companies did not disappear at once, financial authorities deemed appropriate to encourage its absorption the sooner the better or, at least, in the span of ten years (Huang Boyi 1983; Yang Jinlong 1981). Actually, it lasted till 1995.

Table 7. Importance of small businesses

	Accounts	Deposits
Agriculture	13.0%	7.7%
Handicraft	17.3%	28.0%
Commerce	29.5%	28.0%
Other industries	17.7%	19.4%
Individuals	22.5%	16.9%
Total	100.0%	100.0%

Source: Lin Jiafan 1976:35-36.

Risk perception of banks plays a key role; as a rule small borrowers are regarded as too risky. When dealing with small businesses, banks used to add on the pure rate of interest some sort of "premium" in proportion of the risk entailed (or supposedly entailed). Moreover, small transactions have to bear the same amount of fixed charges (those transaction costs which are to be incurred whatever happens) than bigger ones. Thus, in the case of small and scattered loans, the interest rate has to be set rather high to cover the cost of awarding, managing and recovering credit as well as the cost of the resource (saving, credit line...) and the risk of default. Taking tontines as basis to fund small businesses might yield threefold advantages. A tontiner who participates in tontines demonstrates that way his reliability as well as his saving aptitude; that is how tontine companies saved on information costs and how small business banks could do too. The management of tontine by tontine companies had proved to be rather unsophisticated and a matter of routine; that is how tontine companies saved on administration costs and how small business banks could do too. In tontines - it does not mater whether they are "traditional" or institutionalised – computation has always shown high rate of interest on loans. Actually, interest rate level is not the main constraint for small entrepreneurs; but credit availability is. They are chiefly concerned with the overall profitability of the operation to be financed by the loan they ask for. Hence, first tontine companies, then small business banks might have charged / may charge high level of interest so to assure their financial equilibrium.

Table 8. Banks and levels of education of clerks

		Tertiary	Post-secondary non tertiary	Upper secondary	Lower secondary	Primary	Total
	1979	12.2	14.2	59.7	9.5	4.4	100
State-owned small business bank	1986	22.3	23.5	46.1	3.8	4.3	100
	1991	23.8	28.6	41.4	3.1	3.1	100
	1979	9.7	10.4	63.4	8.4	8.1	100
Private small business banks	1986	10.4	18	63.2	4.1	4.3	100
	1991	16.7	21.3	57.5	4.3	0.2	100
All banks	1986	16.5	20.5	53.5	Ģ	9.5	100
Special purpose banks	1986	58.6	19.7	21.4	(0.3	100

Sources: Fu Guiqin 1992:196; Huang Boyi 1986:110-112; Huang Boyi 1987:40-42; Lin Qiufa 1988:135-137.

This drive towards modernisation was led on rather flexible grounds so to suit local conditions. What was requested from the state-owned small business bank was more demanding than what was asked from the Taipei Small and Medium Business Bank (Taibei qu zhongxiao qiye yinhang台北區中了企業設立, not to speak of the small Taitung Small and Medium Business Bank (Taidong qu zhongxiao qiye yinhang台東區中小企業版方) which prospective practice is rather limited (as a rough indicator, industrial parks in this district are occupying today only 0.28% of the whole island industrial parks area)⁴. The bigger these small business banks are and the more impersonal relations with patrons are, the more "modern" they make their management look. Conversely, the smaller they are, the more protective of their tontine business they intended to be. Changes in the number of bank branches devoted to tontine business (biaohui banshi chu標齡牌處 actually disclose these trends. Formerly, it was planned that tontine business was to gradually vanish within about ten years as from the shift from tontine companies to small business banks. During a first period, in accordance with the current policy, the number of tontine counters did diminish from 45 in December 1979 to 9 in December 1985 (see Table 9). During the same period, the number of purely banking branches rose from 153 to 213. It appears that the planned disappearance of the tontine business did meet strong resistance from small business banks' patrons, the government subsequently had to move backwards: in six months from January 1986 to June 1986, the number of tontine counters climbed back up to 21. This increase did not stop, therefore in 1987 - i.e. when tontine business was supposed to come to an end – every small business bank (including the state-owned one) had revived its tontine counters.

accessed on 3 May 2003.

4.

See http://idb.management.org.tw/chinese/Research/Annals_Journal/year/089/089-004-01.asp,

Table 9. Banking branches and Tontine counters

(End of year)	197	79	198	33	198	35	199	90	199	91	199)2
Small business banks for the	В	T	В	T	В	T	В	T	В	T	В	T
- whole island	65	33	85		88		92	6	94	9	97	6
- region of Taibei	21		29		33		40	7	43	10	52	7
- region of Xinzhu	14	2	16	2	21	3	33	15	36	19	42	15
- region of Taizhong	20		23		27		40	15	41	15	44	12
- region of Tainan	13		14		19		25	9	28	12	31	12
- region of Gaoxiong	13	3	14	2	15	2	24	10	27	17	33	13
- region of Hualian	4	3	4	3	4	3	9	4	12	7	15	4
- region of Taidong	3	4	4	4	6	1	11	2	13	2	13	2
Total	153	45	182	11	213	9	274	68	294	91	327	71

B = Banking branches; T = Tontines counters.

Sources: Jiceng Jinrong various years from 1981 to 1993.

The number of these counters carried on its increase till 1991 when 91 tontine counters were in full operation. The following year, it began its course downwards and felt to 71. Actually, the decrease occurring between 1991 and 1992 discloses a genuine vitality for not a few tontine counters had been in the meantime promoted to the status of banking branch. From 1992 to 1997, small business banks have opened thirteen new banking branches every year, figure which has to be compared with the fifteen branches opened by all others banks on the island during the whole period! As for the scattering of small business banks, 32.8% of their branches and counters were in major urban areas as against 56.2% for all others banks. During the same period their capital stock grew by 21.7% every year. In the 1990, small business banks were contributing less than 25% to the funding of small- and medium-sized enterprises. This figure should not suggest that small business banks are of small significance, on the contrary their marginal utility is rather high. These banks are serving the smallest among small businesses, i.e. those which are more labour-spending than capital-spending, which are more in need of daily working capital than investment in fixed capital, which are wanting more short-term funds than medium- or long-term ones and, for all these reasons, they are those which are requiring rather small loans which can precisely be granted by small business banks (as well as some other grass-roots financial institutions) and not by other but more "modern" banks (Yang 1992:66-67; ZXQB 1992:44-48; JJYGN 1990:50).

When small business banks were established in 1976-1977, the proportion of tontine-funded transactions accounted for 46.7% of the whole amount of transactions (see Table 10). In the early 1990s, they had dropped to about 5%; this fall should not conceal that the tontine business was at first trending towards different directions. At current prices, the tontine transactions topped in 1984; at constant prices, their amount remained rather unchanged oscillating around a balance point from 1977 till 1991. Afterwards, the trend moved downwards till 1995 when tontine transactions reached an almost zero level. As far as tontine deposits and tontine-funded loans are concerned, the movements are more erratic. Tontines deposits have been steadily growing at 4.7% each year on the average (at constant prices) from 1977 till 1991; then they began their downward course. On the other hand, tontine-funded loans initiated their decay from the very beginning of the period. This situation illustrates firstly that managers were unwilling to link any longer their lending business with the tontine business – in other words they deem appropriate to operate as "modern" bankers are supposed to do –; secondly that patrons were reluctant to give up their old tontine habits in spite of new banking services seemingly as advantageous as tontine ones.

Table 10. Banking and tontine transactions

(%)	Amount of	transactions	Depo	sits	Loans		
	Banking	Tontines	Banking	Tontines	Banking	Tontines	
1977	53.3	46.7	73.8	26.2	32.4	67.6	
1983	85.6	14.4	89.4	10.6	81.2	18.8	
1984	88.4	11.6	91.0	9.0	85.5	14.5	
1987	94.8	5.2	95.5	4.5	94.0	6.0	
1991	94.7	5.3	96.6	3.4	97.9	2.1	
1992	98.2	1.8	97.7	2.3	98.6	1.4	
1995	99.7	0.3	99.6	0.4	99.7	0.3	

Sources: Jiceng jinrong, n° 14, 1987, p. 280; n° 26, 1993 p. 260; n° 32, 1996, p. 382-383.

This hundred years' long march from informal micro-finance institutions to banking institutions teaches us that the modernisation of the financial sector does not necessarily have to make its way ahead of the socio-economic development of a country. Nor the financial sector has to uniquely provide a "modern" and "formal" facet. Mainstream economists support that financial deepening is the chief propellant of growth; it might be a mere tautology if the growth of a given country's economy is identified with that of its formal sector and if the financial deepening means the creation and promotion of "modern" financial institutions serving this formal sector. The "Taiwan miracle" – as well as the Japanese and Korean ones – shows convincingly that economic development – not growth – does not depend on the sole deepening of their modern financial sectors. On the contrary, it might more heavily depend on the deepening of their "traditional", "ethnical", "informal" or whatever their financial webs are baptised. It is precisely here where the concept of "financial deepening" takes all of its dimension: assume the informal financial sector as a springboard towards the formal financial sector.

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ANNEX

ANALYSIS OF THE SUPPLY AND DEMAND FOR CREDIT FUNDS FOR PEASANT HOUSEHOLDS

By Fan Chen

Abstract

The design and successful implementation of financial reforms depend on a thorough understanding of the financial market and, in particular, an understanding of the demand for credit by peasant households, the use of funds, the acceptability of interest rates and knowledge of the sources, both formal and informal, of credit supply. The present analysis is based on our investigation in January 2002 of 472 peasant households in two administrative villages in Xichong County in Sichuan Province. It focuses on peasant households with differing economic circumstances with respect to (1) credit supply and the ability to obtain credit; (2) participation in the credit market; (3) use of credit funds; and (4) income structure and demand for credit.

1. The supply of credit funds to peasant households

Peasant households' assessment of credit supply

Of the 472 peasant households investigated, 24 households (5.1% of the total) had obtained formal loans in 2001 or had borrowed before 2001 and not yet repaid the loan. Of the 448 peasant households which had not obtained formal loans, 38% considered they could obtain formal loans from rural credit co-operatives (RCCs). Therefore, and not taking into account the amount of the loan undertaken, 41% of all peasant households had obtained or indicated that they were capable of obtaining a formal loan. Those who did not obtain formal loans, 49% indicated that they could not obtain it and a further 14% could not determine whether or not they might obtain it. With regard to informal private loans, 87% of peasant households considered they could obtain one (Table 1).

Table 1. Assessment by peasant households with regard to obtaining formal and informal loans

Item	Peasant households obtaining formal loans	Peasant households not obtaining formal loans	Total
Total number of peasant households	24	448	472
Ratio (%)	5.08	94.92	100.00
Able to obtain formal loans (%)	35.00	38.00	37.80
Unable to obtain formal loans (%)	60.83	47.94	48.64
Unable to determine ability to obtain formal loans (%)	4.17	14.06	13.56
Able to obtain informal loans (%)	54.17	89.06	87.29

In order to further understand the relationship between peasant households and the RCCs, we investigated the degree of understanding of peasant households with regard to the RCCs loans. Of the 467 households replying to this question, 41% did not know the conditions for the RCCs loans, 31% believed that the RCCs loans required both mortgages and guarantees, and 18% considered that the

RCCs mortgages needed a guarantee but not a mortgage. Only 5% of peasant households considered that the RCCs loans did not require any mortgage or guarantee (Table 2).

Table 2. Assessment by peasant households of the conditions of the RCCs for extending loans

	No. of peasant households	Percentage
Requiring mortgage but no guarantee	26	5.57
Requiring guarantee but no mortgage	83	17.77
Requiring mortgage and guarantee	144	30.84
Requiring no mortgage or guarantee	22	4.71
Did not know	192	41.11
Total	467	100

The ability of peasant households to obtain credit

If the ability of peasant households to obtain credit is considered, consideration must be given to the maximum amount of loans that can be borrowed by peasants in the current circumstances, including the amount of credit obtainable and already obtained. The amount of credit already borrowed could be computed directly. As for the maximum amount of credit that can be borrowed, we mainly asked peasant households what was the maximum amount they could borrow directly if there was an urgent need for borrowing (such as serious illness). It can be seen from Table 3 that, as family assets of peasant households increase, the amount of the formal and informal loans that a peasant household receives both rose. However, with regard to the respective proportions of the two sources of loans in the total amount of loans, the average informal loan that peasant households received was 2 953 Yuan per household, accounting for 61% of the total loans, 1.5 times the average amount of formal credit (1 854 Yuan, or 30% of the total loan). At the same time, when combined with the peasant household wealth status, it can be seen that the amounts which the average household in the wealthiest group can obtain through formal and informal credit are 2 981 Yuan and 5 257 Yuan respectively, while the average per household for those in the lowest group is 1 053 Yuan and 1 752 Yuan respectively (Table 3). The ratio of informal loan ability as a proportion of total loan ability, unrelated to the amount of rural household family wealth, is around 60% for each group without exception. For the sample households, the total average annual family income in 2001 was 5 121 Yuan while the total loan ability obtained by each household was just 4 806 Yuan on average, roughly equivalent to its annual total income.

Table 3. Peasant households' ability for obtaining loans, by wealth group in 2001 (Yuan/ household)

Wealth group		Household ability for obtaining loans							
	Form	nal	Inform	nal	Total				
	Amount	%	Amount	%	– amount				
Top 25%	2 981 (5 426)	36	5 257 (8 767)	64	8 237 (13 208)				
Second25%	1 835 (1 703)	42	2 535 (2 567)	58	4 370 (3 204)				
Third 25%	1 546 (1 867)	41	2 267 (2 809)	59	3 813 (4 050)				
Lowest 25%	1 053 (1 367)	38	1 752 (2 805)	62	2 805 (3 328)				
Average	1 854 (3 141)	39	2 953 (5 147)	61	4 806 (7 547)				

N.B. data in brackets is standard deviation (similarly below).

Summing up the results of the above analysis, it can be seen that 40% of peasant households consider that they can obtain formal loans but that the amount of the loans is limited. In poverty-stricken areas, informal loans have an important influence on the ability of peasant households to obtain loans and, therefore, it can be understood that the operating mechanisms of informal loans have some positive significance in improving the market for formal loans. We will further analyse these two credit markets below.

The supply of formal loans

All formal loans obtained by peasant households in the samples were supplied by the RCCs. Over half of them were loans without requiring any form of mortgage or guarantee. However, the main form of collateral for loans was not a mortgage but a guarantee, while almost all mortgage loans were real estate mortgages (Table 4). There was significant divergence in the actual conditions for peasant households to obtain loans from the RCCs from what the majority of peasant households understood to be the conditions for such loans, which shows that there are basically no effective channels of communication between the RCCs and peasant households.

The average distance between peasant households and the RCCs was about 5 km, taking about one hour for the round trip. The ratio of peasant households with deposits in the RCCs was not high (18%), but this is far higher than the ratio for deposits in other banks. The assessment by peasant households of the security of the RCCs and banks was very high (Table 5). As the grass-roots business network of the Agricultural Bank of China (ABC) was amalgamated, peasants in the western regions became increasingly dependant on the RCCs for loans. Hence, the question of how to make the RCCs provide effective financial services has become more pronounced.

Table 4. Conditions for loans (2001)

Loan organisation	Number of loans	Ratio of loans without mortgages	Ratio of loans mortgaged against deposits	Ratio of other mortgaged loans	Ratio of guaranteed loans
Rural Credit Cooperatives	21	57.3	0	9.5	33.3
Agricultural Bank / Agricultural Development Bank	0	0	0	0	0
Total	21	57.3	0	9.5	33.3

Table 5. Rural credit co-operatives and other financial institutions

	Credit co-operatives	Bank
Distance from village (km)	4.82	-
	(1.69)	-
Time for round trip (minutes)	60.54	-
	(53.87)	-
Ratio of peasant households with deposit (%)	18.28	0.22
* Reliability	1.11	1.05
	(0.32)	(0.22)

N.B. "-" indicates no information

The supply of informal loans

The main sources of informal loans for peasant households are relatives, friends and inhabitants of the same village. The frequency of borrowings from relatives accounts for 82% of the total. Whether a relative or not, those making loans are mainly male and involved in agriculture. The vast majority of those with family ties who make loans do not live in the same village, the average distance being 22 km while 2/3 of the loan providers who are not relatives live in the same village, the average distance being only 4 km. Of those involved in borrowing with someone with family ties, only 14% are relatively well-off by local standards while the figure is 39% when there are no family ties. Over the last three years, the amount lent between relatives is 2 475 Yuan, much higher than the amount for non-relatives (888 Yuan). It can be seen that, in the local informal loan market, peasant households mainly rely on family relationships. Not only is the frequency of borrowing greater, the total amount is also high. When individuals lend, they basically do not ask for interest and, if they do, the average monthly rate is 1%. In relation to the amount borrowed, the amount loaned by peasant households is very small. When there are dealings with relatives, the value of presents received within three years by peasant households is higher than the value of presents they have given but, when dealings are not with relatives, the value of presents given by peasant households is higher than for presents they received. Help with farm work between relatives is more frequent than that between non-relatives. However, whether a relative or not, help with work between them and the borrowers is basically balanced (Table 6).

Low income households borrow money more from nearby lenders (the average distance is 19 km) while high income households borrow mainly from leaders far away (average distance 27 km). Those

^{*} The reliability score is the security assessment of financial institutions by peasant households where 1 = maximum security and 4 = minimum security.

extending loans to high-income peasant households are mainly involved in non-agricultural work. Low-income peasants mainly borrow from relatives (93% of the number of loans).

Table 6. Informal borrowing and relationship between borrowers (2001)

	Unit	Relative	Non-relative	Total
Ratio of frequency of borrowing	%	82.47	17.54	100
Ratio of male lenders	%	70.0	77.8	71.7
Ratio of lenders mainly involved in agriculture	%	50.6	60.9	53.4
Ratio of economically better-off lenders	%	14.3	39.1	19.8
Ratio of lenders from the same village	%	19	65.2	30.1
Ratio of borrowing with interest	%	3.45	0	2.59
Average rate of interest	0.1% / month	10	-	10
Distance from lender	km	21.80	3.8	17.7
		(51.6)	(8.8)	(46.2)
mount borrowed over last 3 years	Yuan	2 475.3	887.5	2 116.4
		(3 711.2	(770.7)	(3 340.4)
)		
mount lent over last 3 years	Yuan		0	50.0
		50.0	(0)	(57.7)
resents received over last 3 years	Yuan	(57.7)	0	130.1
		130.1	(0)	(124.2)
resents given over last 3 years	Yuan	(124.2)	66.7	85.0
		91.1	(28.9)	(60.1)
lelp with work received over last 3 years	Day	(67.7)	5.5	10.1
		11.0	(6.4)	(6.0)
lelp with work given over last 3 years	Day	(5.8)	6.0	10.2
		12.0	(3.6)	(8.0)
		(8.5)		

The survey data reveals that 45% of peasant households express mutual trust when they engage in loan transactions. It is interesting to note that this ratio falls as the wealth status of the households involved increases. At the same time, 55% of peasant households considered that the level of trust between villagers had increased over the past five years. Forty-two per cent of peasant households were unwilling to provide loan guarantees to other households, and the proportion increased the poorer the household. This is probably related to their inability to provide guarantees. Twenty-four per cent of peasant households considered that fellow villagers could provide them with guarantees. The better the wealth situation of a peasant household, the easier it was to find guarantors (Table 7). The above analysis demonstrates the problem faced by low income peasant households; although they are more optimistic about the credit relations between peasant households, they are less able to provide loan guarantees for others and find it more difficult to find offers of guarantees for themselves. The development of methods for obtaining loans and loan products will provide more help to the low-income population than to other income groups.

Table 7. Assessment by peasant households of their own and other villagers' credit status

	Ratio of mutual trust at time of loan	Ratio of those unwilling to guarantee loans for fellow villagers	Ratio of fellow villagers who would guarantee loans	Ratio of increased trust over last five years
	%	%	%	%
Top 25% wealth group	41.03	39.32	27.97	58.12
2 nd 25% wealth group	42.37	41.53	25.42	54.70
3 rd 25% wealth group	47.46	42.37	22.88	52.54
Lowest 25% wealth group	48.31	47.46	17.80	55.93
Average	44.80	42.68	23.52	55.32

2. Analysis of the demand for credit funds by peasant households

A comprehensive analysis of rural credit market needs to cover not only supply of loans but also factors influencing peasant households' demand for loans. It is also important to verify whether demand for credit by peasant households in the poor western regions of China is met by adequate supply.

Participation by peasant households in the credit market

The proportion of peasant households in the most prosperous and impoverished groups participating in the credit market were the same at 33%, which contrasts with a lower percentage of borrowing by the second and the third groups (Table 8). A possible explanation from the perspective of loan use is that prosperous peasant households are mainly involved in private activities and other non-agricultural operations, while impoverished peasant households need more credit in order to resolve the requirements of basic production and daily life as well as off-farm activities. With regard to the composition of the loans, the proportion of the most prosperous peasant households participating in formal borrowings is highest at 10%, while for the most impoverished ones, the ratio is the second highest at 6%. The ratio for the second and third wealth groups is lowest.

Table 8. Participation in the credit market by peasant households, by wealth group (%)

Wealth group	Number of households	Without credit	Formal credit only	Informal credit only	Both types of credit
Top 25%	118	67	3	24	7
2 nd 25%	118	74	2	25	0
3 rd 25%	118	78	2	19	2
Lowest 25%	118	67	4	27	2
Average	472	71	3	24	3

In all the cases analysed, an average amount of formal and informal loans for the wealthiest peasant households exceeded averages for the other three groups. However, the number of loans was not necessarily high which shows that if prosperous peasant households borrow, the amount borrowed is always relatively large. As for the other three groups, the difference is not considerable. The average amount borrowed by peasant households in the poorest group was 771.4 Yuan and the average number of loans was 0.47, higher than for the second and third groups. In the formal loan market, the average amount of borrowing and the number of loans for poorest households was also higher than for the second group (Table 9).

Table 9. Average number and amounts of loans for peasants in different wealth groups in 2001

	Name	Top 25%	wealth group	2 nd 25% w	ealth group	3 rd 25% w	ealth group		25% wealth oup	7	otal
		Number	Amount Yuan	Number	Amount Yuan	Number	Amount Yuan	Number	Amount Yuan	Number	Amount Yuan
Total loans	All peasant households	0.75 (1.40)	3 816.1 (11 444.3)	0.45 (0.94)	768.6 (1 873.6)	0.32 (0.74)	730.1 (2 680.0)	0.47 (0.83)	771.4 (1 901.2)	0.50 (1.02)	1 521.6 (6 169.0)
	Those with loans	2.26 (1.58)	11 546.2 (17 532.9)	1.71 (1.08)	2 925.8 (2 657.0)	1.46 (0.89)	3 313.5 (4 908.4)	1.41 (0.87)	2 334.1 (2 701.2)	1.73 (1.22)	5 319.9 (10 625.3)
Formal loans	All peasant households	0.13 (1.42)	805.1 (4 794.9)	0.02 (0.13)	22.9 (229.8)	0.05 (0.31)	122.0 (873.4)	0.08 (0.35)	64.9 (340.0)	0.07 (0.32)	253.7 (2 465.8)
	Those with formal loans	0.42 (0.49)	8 125.0 (12 960.1)	1.00 (0.00)	1350.0 (1 174.7)	1.50 (0.88)	3 600.0 (3 190.1)	1.22 (0.63)	2 184.4 (2 903.8)	1.33 (0.61)	4 972.6 (9 328.4)
Informal loans	All peasant households	0.62 (1.21)	3 011.0 (7 589.1)	0.43 (0.93)	745.8 (1 868.6)	0.27 (0.63)	608.1 (2 121.1)	0.39 (0.75)	706.5 (1 884.8)	0.43 (0.92)	1 267.8 (4 276.8)
	Those with informal loans	0.98 (1.37)	9 064.6 (10 558.5)	1.76 (1.35)	2 824.2 (2 679.2)	1.31 (0.72)	2 951.9 (3 730.0)	1.44 (0.85)	2 793.2 (3 903.0)	1.66 (1.17)	4 750.5 (7 112.7)

The aspiration of peasant households for loans

Unlike informal loans, there are certain requirements with regard to conditions for formal loans, including the borrower's credit worthiness and ability to repay. This imposes some limitations on borrowing capacity by peasant households and in particular by the poorest ones. In addition, asymmetry of information and failure to understand the RCCs mean that many peasant households dare not obtain loans from the RCCs. Therefore, in order to evaluate the real demand for loans by peasant households and the extent to which it is met, we asked the sampled households whether or not they would be willing to borrow from the RCCs at the current interest rate if no mortgage or guarantee was required and what would be their ability to pay interest rate.

It can be seen from Table 10 that, on average, 71% of peasant households stated they would be willing to borrow in these circumstances and in all wealth groups the share was above 50%. This shows that mortgages and guarantees have a considerable influence on the obtaining of formal loans. A possible explanation is that since land is under collective ownership and cannot be mortgaged, it is very difficult for peasant households to provide a collateral requirement of the RCCs, which is most often a certificate of deposit. Moreover, as seen above, less than one-fourth of peasant households consider they can find a local guarantor.

On average, the maximum interest rate peasant households would accept to pay was 9.22%. The poorest households were willing to accept an even higher interest rate at 10%, showing that those poor households whose aspiration for loans have not been satisfied demonstrate a strong interest in obtaining RCC loans. At the same time, of the 29% of peasant households unwilling to borrow, the share of those with no demand at any level of interest rate was 72%, showing that 21% of peasant households have absolutely no need for new loans and that only 8% of households with loan aspirations are constrained by current levels of interest rates.

Table 10. Borrowing aspirations of peasant households in different wealth groups

Wealth group	Willing to borrow from the RCCs at present interest rates if no mortgage or guarantee required?				If yes, maximum interest rate willing to pay	If no, ratio of households with no demand at any rate of interest	If no, maximum interest rate willing to pay
•	Yes		No		- - %	%	%
•	No. of households	%	No. of households	%	- 70	70	70
Top 25%	83	70	35	30	9.07	66	3.33
2 nd 25%	100	85	18	15	9.09	78	4.75
3 rd 25%	83	70	35	30	8.83	83	3.5
Lowest 25%	68	58	50	42	10.00	66	4.18
Average	334	71	138	29	9.22	72	3.87

In Table 11, time and expenses were used to compare the costs of formal and informal loans for peasant households. Where time is concerned, the number of journeys they had to make for each formal loan was greater than for an informal one. Although the time spent on each occasion was less than for informal loans, it is worth noting that there were considerable differences between peasant households in the amount of time spent on informal loans. As for expenses, peasant households spent more for informal loans than for formal loans, but there were considerable differences between peasant households in their travelling expenses. In summary, there was no great difference in the cost of

formal and informal loans for peasant households and it was not a major factor affecting their loan aspirations.

Table 11. Costs of loans for peasant households

	Average	Formal loans	Informal loans
No. of loans	234	32	202
No. of journeys for each loan	1.39	1.50	1.38
	(1.00)	(0.67)	(1.04)
Time spent each time (minutes)	78.88	77.94	79.03
	(98.30)	(73.47)	(101.83)
Travelling expenses each time (Yuan)	4.06	2.44	4.32
	(11.88)	(1.68)	(12.76)
Other costs each time (Yuan)	1.58	2.19	1.49
, ,	(6.54)	(9.41)	(5.99)

Hence, the above analysis indicates that the RCCs' requirements related to mortgages and guarantees constrained farmers' aspirations to borrow, while interest rates and other loan costs were not major constraining factors.

Use of loans

The sampled households borrowed most frequently for everyday consumption, which accounted for 42.7% of the total number of loans, followed by loans for housing and production. Medical treatment and children's education were the most frequent consumption-related purposes for which peasants borrowed money. However, in terms of the amounts borrowed, 35.2% was for housing and 25.9% for both production and everyday consumption (Table 12). It can be seen that although peasant households do not frequently borrow for production, the amounts borrowed are large, while loans for consumption are frequent but amounts small.

The amounts borrowed by the wealthiest households for chemical fertilisers and other inputs for crop production (0.6% of total loans) are much lower than for the other three groups of households (4.4%, 1.4% and 2.8%). Prosperous households borrow more for housing and private business while poorest ones tend to borrow more for everyday consumption especially for medical treatment and children's education. It is worth noting that the expenditure from loans by the poorest households on private activities and off-farm jobs is higher than for the second and third groups. This provides some explanation to the participation in the credit market by peasant households in different wealth groups (Table 8).

Table 12. Utilisation structure of the overall borrowing in 2001 (%)

Item	Top 2	25%	2 nd 2	25%	3 rd 2	:5%	Lowes	t 25%	To	tal
	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt
Production	17.0	34.3	22.6	8.8	7.9	1.7	29.1	24.1	19.7	25.9
Of which:										
Purchase of	0.0	0.0	1.9	0.2	2.6	0.2	1.8	0.9	1.3	0.2
chemical fertiliser										
Purchase of other	5.7	0.6	13.2	4.2	2.6	1.2	9.1	1.9	7.7	1.3
inputs for crop										
production Animal husbandry	2.3	6.4	0.0	0.0	0.0	0.0	7.3	2.4	2.6	4.3
Forestry	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private activities	8.0	26.9	7.5	4.4	0.0	0.0	3.6	13.7	5.6	19.1
Off-farm Work	1.1	0.4	0.0	0.0	2.6	0.3	7.3	5.3	2.6	1.0
• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	0.0	0.0		0.0		0.0		
Consumption	25.0	16.2	50.9	48.4	63.2	43.6	49.1	35.0	42.7	25.9
Of which:										
purchase of grain	0.0	0.0	1.9	0.1	2.6	1.2	1.8	0.2	1.3	0.2
or everyday										
products	4.4	0.4	4.0	4.4	5 0	4.0	4.0	0.4	0.4	0.7
Weddings and funerals	1.1	0.4	1.9	1.1	5.3	1.9	1.8	0.1	2.1	0.7
Children's	14.8	5.2	20.8	21.1	10.5	10.0	10.9	9.6	14.5	8.3
education	14.0	5.2	20.0	21.1	10.5	10.0	10.9	9.0	14.5	0.3
Medical care	9.1	10.5	26.4	26.1	44.7	30.6	34.5	25.2	24.8	16.8
Housing	51.1	38.5	17.0	29.2	13.2	23.8	18.2	35.7	29.5	35.2
Repayment of	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1
other loans										
Other	5.7	10.9	9.4	13.6	15.8	30.9	3.6	5.2	7.7	12.9

Taking Tables 13 and 14 together, it can be seen that formal loans are mainly used for production while informal loans are mainly used for consumption, especially on housing. 51.4% of the amount of formal loans (34.4% of the number of loans) is used for production, but only 20.8% of informal loans is used for this purpose (17.3% of the number of loans). However, whether loans are formal or informal, private activity is the main production use. As far as consumption is concerned, the shares of loans used for children's education and medical treatment are highest and roughly equal for both formal and informal loans. As far as housing construction is concerned, 39.3% of informal loans (32.2% of the number of loans) is used for this purpose, accounting for 93% of the total loans for housing. Only 15% of formal loans (12.5% of the number of loans) is used for house building, accounting for just 7% of all loans used for housing. Even though there are some differences in the utilisation of formal and informal loans, both are important for production and consumption. Overall, informal borrowing was the source of 67% of loans for production, 85% of loans for consumption and 93% of loans for housing.

Table 13. The use structure of formal and informal loans in 2001 (%)

lteres	Forma	al loans	Informal loans		
ltem	Number	Amount	Number	Amount	
Production	34.4	51.4	17.3	20.8	
Of which:					
Purchase of chemical fertiliser	3.1	0.2	1.0	0.2	
Purchase of other inputs for crop production	6.3	1.2	7.9	1.3	
Animal husbandry	12.5	5.6	1.0	4.1	
Private activities	6.3	41.8	5.4	14.6	
Off-farm work	6.3	2.8	2.0	0.6	
Consumption Of which:	43.8	24.0	42.6	26.3	
Purchase of grain or everyday products	0.0	0.0	1.5	0.2	
Weddings and funerals	3.1	0.3	2.0	0.7	
Children's education	12.5	7.6	14.9	8.5	
Medical care	28.1	16.1	24.3	16.9	
Housing	12.5	15.0	32.2	39.3	
Repayment of other loans	3.1	0.4	0.0	0.0	
Other	6.3	9.2	7.9	13.6	

N.B. Source of data was 32 formal loans in 24 households and 203 informal loans in 123 households.

Table 14. The use structure of formal and informal loans for different purposes

Item	Number of	Number of	Form	nal loans	Informal loans		
	peasant households	loans	No. %			Amount %	
Production	35	46	24	33	76	67	
Of which:							
Purchase of chemical fertiliser	3	3	33	17	67	83	
Purchase of other input for crop production	12	18	11	16	89	84	
Animal husbandry	5	6	67	21	33	79	
Private activities	9	13	15	36	85	64	
Off-farm work	6	6	33	46	67	54	
Consumption Of which:	65	100	14	15	86	85	
Purchase of grain or everyday products	3	3	0	0	100	100	
Weddings and funerals	5	5	20	6	80	94	
Children's education	18	34	12	15	88	85	
Medical care	39	58	16	16	84	84	
Housing	39	69	6	7	94	93	
Repayment of other loans	1	1	100	100	0	0	
Other	14	18	11	12	89	88	

The economic activities, cash flow and demand for credit of peasant households

In Table 15, we have broken down peasant households' income into four categories: income from crop production, livestock and fishing, wages, and private activities. Their shares in the total income, net income and cash income for different wealth groups have been analysed. The results show that the structure of income for the last three wealth groups is very similar, but that the share of wage income

for the poorest group is higher than for the other groups. The most significant difference between the wealthiest group and the other three groups is that the share of income from private activities is for the first group much higher than for the other three, while the share from crop production is much lower.

Table 15. Income structure (%)

Item	Crop production	Livestock and fishing	Waged activities	Private activity	Total (Yuan/household)	
Total income	1 898.2	1 039.0	1 615.4	474.5	5 027.1	
(Yuan/household)	(2938.3)	(2 251.8)	(2 142.3)	(8 092.4)	(9 152.2)	
Top 25% wealth group	28.0	15.6	27.9	28.6	5 814.3	
					(16 114.2)	
2 nd 25% wealth group	40.4	25.2	33.4	0.9	5 909.6	
					(7 070.1)	
3 rd 25% wealth group	43.1	19.7	33.7	3.6	4 862.3	
					(4 055.4)	
Lowest 25% wealth group	42.1	22.8	34.9	0.2	3 522.2	
					(2 531.3)	
Net income	1 336.4	294.2	1 527.0	78.7	3 236.3	
(Yuan/household)	(2874.2)	(2 136.0)	$(2\ 070.4)$	(1 012.5)	(4 387.2)	
Top 25% wealth group	35.2	` 7.7 ´	` 50.6 ´	6.4	3 034.7	
					(3 393.9)	
2 nd 25% wealth group	41.5	13.5	44.2	0.9	4 287.2	
g					(6 822.4)	
3 rd 25% wealth group	45.4	6.3	46.0	2.3	3 332.9	
3 25% wealth group	70.7	0.5	40.0	2.0	(3 646.8)	
L	40.0	0.7	50.0	0.0	,	
Lowest 25% wealth group	43.0	6.7	50.0	0.3	2 292.8	
O	004.4	7047	4.045.4	470.0	(2 015.8)	
Cash income	264.4	704.7	1 615.4	478.3	3 062.9	
(Yuan/household)	(585.7)	(2 258.4)	(2 142.3)	(8 100.2)	(8 625.7)	
Top 25% wealth group	5.3	12.7	40.3	41.7	4 022.8	
					(16 203.8)	
2 nd 25% wealth group	8.9	32.7	56.8	1.6	3 477.9	
•					(4 860.3)	
3 rd 25% wealth group	10.9	23.6	59.2	6.3	2 765.4	
5 2 5 / 6 11 5 4 11 11 11 11 11 11 11 11 11 11 11 11 1		_0.0	00.2	0.0	(2 561.0)	
Lowest 25% wealth group	11.5	26.2	61.9	0.4	1 985.3	
Lowest 25% wealth group	11.5	20.2	01.9	0.4		
-					(2 100.2)	
Ratio of expenditure in income (%)	38.8	87.0	7.1	42.9	40.9	

N.B. Income does not include transfer income.

The composition of the total income indicates that, on average, crop production accounts for 37.8% of the total, but apart from the ratio of 28% for the wealthiest group, the shares for other three groups are all above average. Private activities provide 9.4% of total income, but apart from the ratio of 28.6% for the wealthiest group, the shares for other three groups are all below average. Similar conclusions can be drawn from the structure of both net and cash income. Wage income is the major source of net and cash income. It is the main source of income for the poorest households and its share in every category of income is higher than for the other three groups of households.

However, by comparing income averages it is possible to overlook the relative importance of various economic activities for various categories of households. For example, almost all peasant households in the sample (99%) take part in crop production, but very few are involved in private activities (just 3%) (Table 16). Similarly, their capital requirements are different. In Table 15, we used

the proportion of expenditure to total income to reflect the extent of demand for circulating funds with respect to different economic activities. Of the four economic activities, the highest demand ratio was for livestock and fishing, which reached 87%, followed by private activities (42.9%), crop production (38.8%) and waged activity (7.1%). In Table 16, we also calculated the share of peasant households benefiting from loans by various types of economic activities. In general, it can be seen that the ratio is low in all cases. The ratio is highest at 3.2% for crop production and lowest for livestock and fish production. The lowest share for the latter is understandable as the main input is feed, mainly produced by the household and not purchased. The share of households from the two wealthiest groups using loans to participate in private activities is quite high (2.5%). Shares of those in the poorest group using loans to participate in crop production, livestock and fishing, and waged activities are quite high (5.08%, 2.54% and 3.39%, respectively) with a considerable gap between them and the other three groups.

Table 16. Peasant households by wealth group participating in different economic activities and their demand for loans

Number and ratio of peasant households participating in this activity	Total households	Crop production		Livestock and fishing		Wage activities		Private activities	
	No.	No.	Ratio	No.	Ratio	No.	Ratio	No.	Ratio
			%		%		%		%
Top 25% group	118	118	100	101	85.6	60	50.8	5	4.2
2 nd 25% wealth group	118	117	99	97	82.2	79	66.9	2	1.7
3 rd 25% wealth group	118	118	100	99	83.9	70	59.3	6	5.1
Lowest 25% wealth group	118	115	97	104	88.1	69	58.5	1	0.8
Total	472	468	99	401	85.0	278	58.9	14	3
No. and ratio of peasant households participating in activities with loans									
Top 25% wealth group	118	3	2.54	2	1.69	1	0.85	3	2.5
2 nd 25% wealth group	118	4	3.39	0	0.00	0	0.00	3	2.5
3 rd 25% wealth group	118	2	1.69	0	0.00	1	0.85	0	0.0
Lowest 25% wealth group	118	6	5.08	3	2.54	4	3.39	2	1.7
Total	472	15	3.18	5	1.06	6	1.27	8	1.7

Summarising the above analysis, we can see that the demand for loans by the wealthiest peasant households is mainly concentrated on private activities while it is spread across crop production, livestock and fish production and waged activities for the poorest households. Hence, taking into account just the number of peasant households demanding loans, the extent of demand for loans by the poorest is stronger than for other groups. This phenomenon is also confirmed by Table 16 showing the participation in the credit market by peasant households from different wealth groups. In the current state of the financial market, peasant households, particularly the poorest ones, rely on the informal financial market to satisfy their demand for funds while relatively high local wage income in cash provides conditions for borrowing between private individuals.

3. Conclusions and recommendations

This paper analyses the rural credit market in the surveyed farming area, focussing on the ability of peasant households to obtain credit, the sources and uses of credit funding, and aspirations for borrowing by different types of peasant households. Our empirical study shows that the extent of participation in the credit market by peasant households in the surveyed area was not high with only

29% of them borrowing from the formal or informal financial market in the year. Those who borrowed did so mainly from the informal financial market while the share of those obtaining loans from formal financial institutions was only 5%. Comparatively speaking, the participation by the poorest and wealthiest households was higher than for those with an intermediate economic status.

The source of all loans from the formal financial market was the RCCs. Half of RCC loans were obtained with mortgage or guarantee and another half without. The main source of loans to peasant households from the informal financial market was relatives, basically without interest and with no need for guarantees or mortgages. There is no clear distinction between the transaction costs paid by peasant households when obtaining formal loans (time spent, travelling and other expenses) and transaction costs paid when obtaining informal loans.

Formal loans to peasant households are mostly used for production while informal loans are mostly used for consumption. Private activity is the main reason for production borrowing while house building, medical treatment and children's education are the main reason for consumption borrowing. Private activity mostly leads the wealthiest peasant households to enter into the credit market while poorest ones mainly borrow money to cover expenditure for simple production and everyday consumption.

Even though there are currently not many peasant households receiving loans from the RCCs, the majority of them expressed a strong desire for loans. With current interest rate levels, if no mortgage or guarantee is required, 71% of peasant households would be willing to obtain loans from the RCCs. Peasant households with loan aspirations are willing to pay an average interest rate of 9.22%, which is much higher than the current commercial loan rates. Therefore, the reason why relatively few peasant households participate in the formal financial market is not because interest rates and other transaction costs are too high, but because they cannot meet the mortgage and guarantee requirements. Another important cause is that effective channels of communication and credit relations based on mutual trust have not been established between the RCCs and peasant households. Forty-one per cent of peasant households do not know the RCCs and loan conditions, while 31% consider that RCC loans require both mortgages and guarantees. Only 5% consider that RCC loans do not require mortgages and guarantees. In fact, half of the loans obtained by peasant households from the RCCs are loans without requiring mortgage or guarantee.

The dilemma currently faced by rural financial institutions in the Chinese countryside (especially in the western regions) is that much of the demand by peasant households is not fully met while the RCCs possess much capital which is not put to any rational use. In order to provide sustainable financial services to peasant households more effectively, the RCCs need to carry out a series of innovations to their financial systems and financial instruments (products).

Good credit relations should be established with peasant households by effective exchange of information and institutional building. First, peasant households should be able to fully understand the credit products and conditions for loans of the RCCs. Next, farmers should be made truly aware of the advantages of repaying loans on time and the harm of not so doing. This should be combined with the following measures to foster excellent credit awareness on the part of peasant households and to build a relationship of long-term mutually beneficial co-operation with the RCCs.

• Requirements of peasant households for mortgages and guarantees should be reduced. The incentives mechanism and other means of socialised supervision (such as group supervision and pressure of public opinion) should be used to guarantee the repayment of loans.

- The management information systems of the RCCs should be improved so that they can promptly track the status of a loan and the credit history of every borrower. This will provide the conditions for cultivating and identifying qualified loan customers.
- Interest rate should be appropriately raised so as to cover actual costs. At the same time, effective measures should be taken (the establishment of rapid customer recognition in management information systems, the prompt issuing of loans, etc.) to reduce the transaction costs for peasant households.
- On the basis of the cash flow situation of peasant households, flexible repayment systems should be adopted (single repayment and instalment repayment systems should be adopted depending on different situations) to reduce repayment risks for peasant households and to increase the recovery rate.
- Methods of granting consumption loans to peasant households should be investigated in order to meet their actual demand. Whether or not peasant households repay loans is not primarily determined by the utilisation of the loan, but mostly by whether there is a motivation and pressure to repay.
- More convenient and flexible means of savings should be provided to motivate more peasant households to save (neighbourhood savings, easy withdrawals of money, appropriate rates of interest, etc.). The mobilisation of more savings will not only increase the credit funds of the RCCs but also foster financial awareness in peasant households.
- Internal incentives and management systems should be reformed so that managers and staff of the RCCs will be encouraged in improving their financial services to peasant households.
- The training of staff should be enhanced so that they fully understand the ideas, instruments and methods of modern finance (in particular development finance) and are able to introduce new financial instruments and management mechanisms on the basis of local conditions.

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PRACTICAL EXPERIENCE WITH RURAL COMMERCIAL BANKS: A CASE STUDY OF THE REFORM OF RURAL CREDIT CO-OPERATIVES IN CHINA'S JIANGSU PROVINCE

By Liangbiao Chen

Abstract

At the end of 2001, three rural credit co-operatives (RCCs) in Jiangsu province were reorganised into rural commercial banks (RCBs) in accordance with the pilot reform scheme approved by the State Council. This reform marked a breakthrough in the long-standing perception that rural banks should be organised on co-operative basis. The pilot reform explored the possibility of RCCs' commercialisation by transforming them into joint-stock companies. It attracted wide public attention and provided important lessons for carrying out further reforms of rural finance.

1. Background

The reorganisation of the Zhangjiagang, Changshu and Jiangyin RCCs in Jiangsu province into RCBs by transforming them from a co-operative to a joint-stock system took place within a general reform of rural finance in China and under particular conditions of rural economic development in the southern part of Jiangsu province.

Driving force for the reform of the RCCs

The RCCs are an important component of China's financial system. They have always played a positive role in supporting rural economic development, meeting farmers' daily financial needs and assisting the development of rural small and medium-sized enterprises (SMEs). Since the foundation of the People's Republic of China, the RCCs have experienced numerous institutional changes, from initial farmers' mutual-aid organisations to become a part of the people's communes, and then from grass-root offices of the Agricultural Bank of China (ABC) to rural financial organisations with independent legal status. At the end of 2002, China's 35 544 RCCs with legal status had a total balance of deposits of RMB 1 987.6 billion, which accounted for 11.6% of total deposits of all financial institutions. RCCs' total balance of loans stood at RMB 1 393.8 billion, representing 10.6% of total loans. Of this amount, agricultural loans stood at RMB 557.9 billion, accounting for 77% of total agricultural loans granted by financial institutions.

The pilot reform of the RCCs in Jiangsu province began in August 2000. At that time, Jiangsu put forward a proposal that the majority of its RCCs would, over a period of 3-5 years, be transformed into independent financial institutions assuming their own risks and responsibility for their development. Under the scheme approved by the State Council, the pilot reforms are to be implemented in accordance with the requirements to "perfect the structure, transform the mechanism, resolve the problem of excessive burdens, strengthen management and improve the service". The objective is that, after conducting a general inventory of assets and clarifying the claims and liabilities situation and related obligations, the RCCs of a county (or city) should be merged into a single corporate entity. With this reform, the province's 1 658 grass-root RCCs and 81 RCC unions were merged to form 82 corporate entities. Thus, RCCs' standard of operational management and the risk-bearing capacity improved. On this basis, in September 2001 the Jiangsu Provincial RCC Union was set up in order to assume and perform professional management functions and to provide services for RCCs throughout

the province. Thanks to this reform, the assets situation and operating performance of the RCCs in Jiangsu province were upgraded. The reformed RCCs demonstrated much greater dynamism and farmers' confidence in them recovered. Compared to 2000, total deposits in Jiangsu's RCCs increased by 13.9%, reaching RMB 133.4 billion, while loans increased by 14.6%, reaching RMB 85.5 billion.

As the pilot reforms steadily advanced, however, a number of deep-rooted problems gradually emerged. These included lack of clarity over property rights, unclear allocation of managerial responsibilities, and the absence of owner entity to assume the operational risk. With these problems in mind, the government decided to launch the reform experiment in one of the most advanced provinces in China-Jiangsu to explore how to further reform of RCCs and to reorganise them into regional joint-stock commercial banks.

The requirements of economic development in South Jiangsu

In order to conduct smoothly reforms aimed at transforming the RCCs into RCBs, the province of Jiangsu has set four preconditions. (1) per capita GDP should be greater than RMB 10 000; (2) the RCC effective assets should exceed its liabilities and its total assets should exceed RMB 1 billion; (3) the commercial bank's registered capital must be not less than RMB 50 million and its shareholders must subscribe their shares in cash; (4) the share of the RCC's non-performing loans (NPLs) should be less than 25% and, of these, the two categories of bad debt should account for less than 10%, while its capital adequacy ratio should be above 8%. The region of Southern Jiangsu has clear advantages in meeting these conditions.

In terms of economic development, the region of Southern Jiangsu has in recent years consistently held a leading position both in Jiangsu and in China. In 2001 the municipality of Zhangjiagang achieved an annual GDP growth rate of 15%, reaching RMB 25 billion. Its annual fiscal revenue, ranked second in Jiangsu, stood at RMB 3.2 billion, a 56% increase over the previous year. The municipality of Changshu was for many years one of the "top counties (or cities)" in terms of economic strength in all of China. In 2000, its GDP was RMB 25.8 billion with a per capita GDP of RMB 24 800. In 2000, the municipality of Jiangyin, holding a leading position in China's counties (or cities), realised a GDP of RMB 32.8 billion. The RCCs in these three cities are profitable and relatively large in scale. They meet the four conditions described above.

At the end of October 2001, the RCCs in Zhangjiagang had total deposits of RMB 5.006 billion and loans of RMB 3.558 billion. In 2001 the RCCs in Changshu had total deposits of RMB 7.65 billion and loans of RMB 3.1 billion, with business income of RMB 440 million and NPLs rate of only 20.95%. Moreover, the share of agriculture in total GDP in the three cities is quite small: 3.5% for Zhangjiagang, 4% for Jiangyin and 5.9% for Changshu. At the same time, farmers' income is very high. For example, in 2001 farmers' per capita net income in Zhangjiagang was above RMB 5 000. Farmers' demand for small loans from RCCs is not great. For this reason, the RCCs have close relations with private enterprises as they have a basis for commercial operations. Because of these advantageous conditions, the RCCs in Zhangjiagang, Changshu and Jiangyin were chosen as the first group of institutions for the pilot reform.

2. The experiment

In general, since the RCCs in the three cities were reorganised into three RCBs, they operate very well. Up to the end of April 2002, the total balance of loans by Zhangjiagang RCB stood at RMB 3.52 billion, an increase by RMB 0.62 billion or +21.4% compared to the situation before its reorganisation. Agricultural loans, quite small, stood at just RMB 0.23 billion, an increase of 33.9% over the same period of previous year. In the period from January to April 2002, the cumulative

agricultural loans granted by Zhangjiagang RCB stood at RMB 0.28 billion. The total balance of deposits stood at 5.47 billion, an increase of 0.24 billion compared with the beginning of the same year. The NPLs ratio fell from 25% to 10.7%. Of the NPLs, all bad debts were completely written off after verification.

The Changshu RCB consists of headquarters, 41 branches, 68 agent offices and a network of 109 service offices. At the end of March 2002, its total assets amounted to RMB 11 billion. The Changshu RCB projected a net profit of RMB 30 million for 2002, with RMB 6 million already realised in the first quarter. The bank currently has a capital adequacy ratio of 13.76%, with a core capital adequacy ratio of 5.07%. The NPLs ratio declined from 20.95% before the reorganisation to 6.7% in 2002. The RCB occupied 28% of the total banking market business in Changshu, next to the Agricultural Bank of China (ABC).

The Jiangyin RCB comprises one head office, one international business office, seven business management offices and thirty branches. Up to the end of March 2002, the credit issued stood at more than RMB 4.78 billion, an increase by RMB 1 billion compared to the credit issued before its reorganisation. It now accounts for 40% of the total loans issued by the city's ten financial institutions. In the first quarter of 2002, apart from RMB 47 million of loans for agriculture and RMB 340 million for large-scale companies, the majority of the loans were granted to privately run SMEs. Those privately-run SMEs got the loans of RMB 3.576 billion, which accounted for 74.6% of the total bank's lending. Three factors contributed to the sound performance of the RCBs.

Firstly, the property rights have been clarified. Prior to the reorganisation, the RCCs in Zhangjiagang had 29 651 members. The average amount subscribed was RMB 414 per share. When the RCB was being set up, in accordance with the principle of voluntary subscription and voluntary withdrawal, those wishing to withdraw received RMB 1 414 for their original investment plus a dividend per share. Those wishing to retain their share in RCB were required to increase their shareholding by no less than RMB 1 000. According to the results of the accounting, the assets which had no clear property right in past years were used to resolve the NPLs of the RCCs. The established RCB has 1 764 of shareholders with an equity capital of RMB 88 million, of which corporate shareholders have 16 million or 18.18% of the equity capital. Private individuals hold 72 million (including 21.6 million held by the RCB staff) or 81.82%.

In terms of the shareholding structure, there is one striking feature in all three RCBs: the government does not hold shares. All shares are held by local private enterprises, individual businessmen, bank staff and farmers. This structure constitutes a private financial model of the RCB. From the RMB 100 million equity capital in the Changshu RCB, local large households engaged in agriculture or animal husbandry make up only 5%. RCB staff shareholdings account for about 22%, while individual businesses and joint-stock enterprises account for 55%. The corporate shareholders of the RCB are all successful private enterprises. Of the 21 RCB corporate shareholders in Changshu, eight were originally RCC customers with the credit grade AAAA. Others are among the top ten of the city's "top hundred enterprises". All of them are excellent private enterprises. The main corporate shareholder of Zhangjiagang's RCB is Jiangsu Guo Tai Guoji Group Ltd., which is a provincial-level foreign trading enterprise and one of the 23 key provincial enterprises. Its exports account for nearly one-half of the city's total. Because property rights have been clarified, the RCBs' corporate governance structure fully reflects the principles of the deconcentration of share ownership, the separation of property rights from managerial rights, and the responsibilities and risks assumed by the corporate body and the shareholders. The reorganised RCBs have a greater capacity for financing and for self-development. Their operating mechanisms are more flexible and their competitiveness on the financial markets is greatly enhanced.

Secondly, there has been a change in business approach. After the reorganisation, the RCBs no longer take the interest margin between farmer's deposits and loans as their main source of operation profit. With the change of business approach they compete on equal terms with other banks and financial institutions in actively expanding their business and supporting those private SMEs which are profitable and with growth potential. At the same time, the RCBs are taking positive steps to develop their intermediary business and nurture new sources of profit growth. Currently, income of domestic banks from intermediary business accounts for less than 10% of the banks' business income, far below the 80% for the banks abroad. After the pilot reform, all three RCBs took the development of intermediary business as their key operations. The RCBs in Zhangjiagang and in Jiangyin have already opened their international offices. The RCB in Changshu is taking positive steps to attract foreign participation, and to expand its investment bank business, such as financial derivatives and third-party securities business, investment fund management, IT consultancy, financial advice etc. It also plans to be listed in the domestic stock market in three to five years.

Thirdly, internal management has been strengthened. The approach adopted by RCB in Zhangjiagang is representative. For example, in order to reduce the risk on lending, the bank has implemented a "lending for life" system for its staff. Each lender is required to pay RMB 100 000 as a loan risk premium. Each month, lenders receive only living expenses. At the end of the year, they receive the whole unpaid salary for the year plus part of a bonus depending on the loan recovery situation. Upon retirement, the staff member receives back the loan risk premium plus the unpaid bonuses for the past years. If the lender has not been able to recover a loan, the loan risk premium is used to make up the loss of the unrecovered loan. In order to provide staff with a fair and transparent competitive environment, the RCB changes the lender's window on a rotational basis and calculates their daily business volume. The salary of staff is calculated on a piece-rate. The pressure on bank staff resulting from this strict management approach is effectively translated into risk awareness in the staff's attitude to lending. All lenders must carry out a careful risk assessment on each loan, leading to an improvement of RCB's loan quality.

In order to increase the volume of business, the bank evaluates the lender's performance with indicators such as the number of loans granted and the ability to generate profit. The former indicator intended to prevent a situation in which lenders lend little or nothing simply to avoid risk, while the latter intend to encourage lenders to actively seek for profitable lending opportunities in order to generate profits for the bank. By implementing internal management measures of the kind described above, the banks have managed to achieve a higher level of risk management and stimulated the staff involvement and initiative. Thus, the banks have steadily improved their operational performance and the quality of the services they provide.

3. Policy implications

• The reform of the RCCs should be designed and implemented according to the local conditions. Jiangsu Province's approach to transforming the RCCs into RCBs has proved to be a success. However, such a reform needs certain preconditions. If these conditions cannot be satisfied, the above-mentioned reform cannot achieve the anticipated goal. Further reforms of the RCCs will require taking measures that are adapted to various local conditions. "One model for all China" would not work in reality. In most regions, especially those specialising in the production of grain and cotton and in economically underdeveloped regions, the RCCs are still needed as the main community-based financial institutions in which farmers are the main shareholders. The RCCs should provide services to agriculture, farmers and the rural economy and perform according to the principles of operational autonomy, self-development, self-discipline and self-responsibility for own risks. The RCCs should play a key role in providing loans to farmers and rural enterprises in the countryside.

In some areas, where the rural secondary and tertiary sectors are developed and where farmers' income is high, and farmers have no much demand for loans for their crop production and animal husbandry, it may be possible to try to reform the RCCs by transforming them into RCBs. This kind of reform is conducive to clarifying property right, establishing a modern corporate governance structure, and resolving deep-rooted problems affecting the development of the RCCs.

- The key to the reform of the RCCs lies in clarifying property rights. Financial institutions are enterprises that manage money. Although the RCCs have their own special features, they must operate like the enterprises by assuming the responsibility for their own profit and loss. This is why property rights need to be clarified. Only when this has been done is it possible to establish a proper corporate governance structure in line with the demands of modern enterprises, to set up a system of mutual control among decision-making, management and supervision, and an operational mechanism combining the incentive and obligation. Only then is it possible to create an organisational form and corporate model for the RCCs that satisfy practical requirements. China's experience since reforming and opening up its economy shows that clarifying property rights and implementing company-oriented reform on the basis of the shareholder system are a relatively ideal option. For this reason, in accordance with the shareholding principle, the diversification of equity rights and investor pluralism are the key elements and mark a breakthrough in the creation of a new ownership model for the RCCs. In the coastal region with a relatively developed economy and a relatively high degree of integration between the urban and rural areas, the RCCs with relatively large and high-quality assets can introduce the shareholding system and set up commercialised financial institutions. In those areas where the conditions are currently not satisfied for the reform, a co-operative shareholding system could be operated, and gradually evolve towards a pure shareholding system. In economically underdeveloped regions, a mutual-aid co-operative system can be developed by encouraging local farmers, individuals, rural private enterprises and other economic entities to subscribe to the system.
- State assistance is an important factor in ensuring the successful reform of the RCCs. In order to resolve the problems of small scale and high operating costs of the RCCs, the State must provide appropriate support for the RCCs in terms of budget, tax, funding and interest rates, write off their bad debts and help the RCCs to gradually realise self-accumulation and self-development. As far as budgetary assistance is concerned, government should provide, over a period of ten years, funds to cover the interest loss caused by the implementation of guaranteed-value saving business (during the years with high inflation rate, government asked the financial institutions to pay a high interest rate to the savers in order to guarantee the money's real value). In terms of tax policy, government should temporarily exempt the corporation tax for RCCs in the western regions and reduce the tax for RCCs in the central and eastern regions by 50%. As for funding support, at the provincial (city, regional) level, an audit should be carried out on RCCs and where their assets do not cover their liabilities, the People's Bank of China should arrange a certain proportion of special-purpose reloans. The interest rate for these reloans should be set at half of the banks' reserve deposit rate. Eligible RCCs are allowed to take part in the capital market and to raise funds via interbank lending and borrowing. In those places where there is an active private borrowing and lending market, the RCCs are allowed to make their deposit and lending rates flexible.

THE CHALLENGES AND CONTRADICTIONS CURRENTLY FACED BY AGRICULTURAL INSURANCE IN CHINA AND SOME SOLUTIONS

By Na Li

Abstract

This essay begins with a brief introduction to the current situation of agricultural insurance in China. It then analyses the main challenges and contradictions facing agricultural insurance and, finally, proposes some solutions to accelerate its development.

1. The current situation of agricultural insurance in China

The restoration of agricultural insurance in China in 1982 was highly regarded by government departments at all levels and welcomed by peasants. It played an important compensatory role with regard to the stability and development of the rural economy. Following a pilot scheme, the development of Chinese agricultural insurance went through two phases, namely a transition from slow to rapid growth between 1985 and 1992, followed by a decline from 1993 onwards (Figure 1). By the end of 1992, income from agricultural insurance premiums had reached 817 million Yuan nationwide, accounting for 2.44% of the income from property insurance premiums for that year. However, by the end of 1997, income from agricultural insurance premiums accounted for 1.51% only of the income from property insurance premiums, a fall of 38.12% compared with the end of 1992. From 1998 to the present, the decline in agricultural insurance was even more serious¹. By 2000, income from agricultural insurance accounted for only 0.31% of income from property insurance.

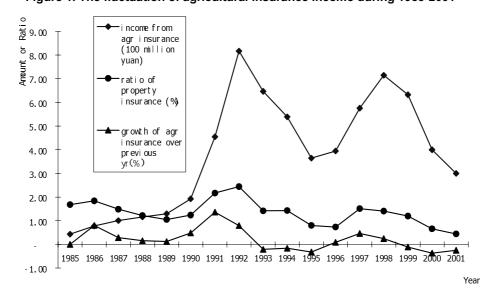


Figure 1. The fluctuation of agricultural insurance income during 1985-2001

Source: Chinese Statistical Yearbook, Beijing, China Statistical Publishing House, various issues.

^{1.} Data complied from the *Chinese Statistical Yearbook*, selected years.

Currently, with the exception of the People's Insurance Company of China (PICC) and the China United Insurance Company (CUIC), which are organisations with genuine rural insurance operations, there has been no real involvement by other property insurance companies. However, with the support of local governments, some organisations have become involved in actual local conditions and have carried out fruitful explorations into the reform of the operational mechanisms of agricultural insurance. Various models have appeared which have promoted the development of agricultural insurance such as agricultural insurance risk foundations, rural mutual aid insurance societies, insurance co-operatives, co-insurance with local government and relevant departments and experimental agricultural insurance areas. The state has also put some supportive and protective policies into effect such as the exemption from business tax of insurance activities with respect to agriculture, forestry, livestock and fisheries. After the tax system was reformed, the exemption from business tax of insurance for crop production and animal husbandry was put in practice. At the same time, government departments in some areas gave policy support to agricultural insurance and subsidised premiums, allowing surpluses to be kept as a risk fund for agricultural insurance. For example, the government of the Xinjiang Uighur Autonomous Region has a preferential policy of exemption from all taxes and uses a part of the funds in its budget as an agricultural risk fund. Shanghai Municipality has established an Agricultural Insurance Promotion Committee (AIPC) and uses the surplus from peasant insurance funds as an agricultural risk fund after deducting compensation and operating costs. It has also implemented a reward measure: if no compensation is paid during the term of the insurance, a bonus of 10–30% of the premium is made to the insured party.

Agricultural insurance has spread to the domains of agriculture, forestry, animal husbandry and fisheries. The types of risk funds have increased from the number developed for the pilot schemes in 1982, when there were just a few such as insurance for live pigs and large farm animals, to almost 100 types of risk today, including insurance for cotton, paddy rice, tobacco, chickens, rabbits, sheep, prawn and scallop breeding. Moreover, new risk types are constantly being developed, such as insurance for large plastic greenhouses, sea walls and embankments and for the elimination of toxins from sweet potatoes. This has greatly encouraged the expansion of agricultural science and technology.

2. The challenges faced by agricultural insurance in China

The challenge of foreign insurance groups entering the domestic agricultural insurance market

China has become a member of the World Trade Organization (WTO) and must, as a member state, abolish all restrictive measures on foreign insurance capital in the Chinese market. The inflow of foreign capital is bound to grow and foreign insurance groups are making preparations to secure a space for their operations in Chinese agricultural insurance. Mr. Boucher, head of the international department of the French insurance group AXA has said, "China has an agricultural population of 700 million, any insurance company which overlooks this enormous agricultural insurance market is making a mistake." AXA has already set its sights on China's agricultural insurance market and other insurance companies have also expressed their hope to gradually develop their business in China.

The majority of insurance companies in China, however, do not engage in agricultural insurance considering it unprofitable due to the high degree of risks, difficulties in collecting premiums and the complexity of claims settlement. Apart from the agricultural insurance business of the CUIC, which has maintained an excellent growth momentum, the agricultural insurance business of other insurance companies is shrinking, leading to a general decline in this sector. In particular, since the PICC, one of the main bodies in the agricultural insurance business, was transformed into a commercial company, it has insisted on putting economic benefits first. The implementation of autonomous management and full financial responsibility, together with internal and external pressures, have meant that the

company's subsidiary organisations have closed down agricultural insurance offices one after the other. Agricultural insurance is facing the predicament of a serious imbalance of supply and demand. The development of the Chinese agricultural insurance market is tending to shrink and, faced with the enormous challenge of competition from insurance companies with foreign capital, there are no grounds for optimism with regard to the prospects for the development of Chinese agricultural insurance.

The challenge of traditional attitudes

As a result of the growth of the rural economy, modern agriculture is creating greater demands for agricultural insurance. However, the agricultural insurance system in China is incomplete, the level of available insurance remains low and cannot meet the requirements of the development of agricultural production within the WTO framework. Several traditional attitudes must be overcome in order to make agricultural insurance acceptable to peasants. First, there is the superstitious mentality of a considerable number of peasants that treat insurance as a taboo. Second, they trust in luck. When meteorological disasters and disasters involving insect pests and plant diseases occur, they believe these are exceptional occurrences that will not affect them; in other words, they lack foresight. Third, to a certain extent they consider that storing grain against famine and raising children to guarantee their old age are effective measures to withstand all manner of hazards and they are unwilling to get involved in insurance. Finally, the knowledge of agricultural insurance is not well disseminated to farmers, peasants lack a thorough understanding of it and, in general, their awareness of the existence of insurance is weak.

The challenge of moral hazards

As the pace of the market economy reforms accelerates, the market economy is like a "two-edged sword". It brings market with prosperity but also moral hazards, such as fraud, breach of contract, speculation and trickery. Such moral hazards exist in any insurance operation and for agricultural insurance operations the challenge is even more pronounced. When an agricultural insurance contract is signed, since peasants may intend to make false claims, insurance companies find it difficult to impose different charges in accordance with the actual risks for different peasants. That is to say, it is difficult to determine their marginal costs and they can only charge on the basis of average risks. On the other hand, since peasants may, after being insured, reduce their efforts to prevent disasters, thereby increasing the risks of disaster, what is known as an "unfavourable influence" appears. Institutional and property rights economists frequently summarise these motives as "moral hazards".

All parties concerned with the agricultural insurance (insurance company, insured, etc.) are driven by the maximisation of profit. Nowadays, such pursuit of profit is both rational and legal, but inevitably leads to the emergence of moral hazards. It may be said that moral hazards are the product of the easing of institutional restrictions and, in particular, of agricultural insurance institutions. In the end, there may arise a situation of "fewer and fewer enterprises involved in agricultural insurance, but more and more peasants participating in it". At present, the agricultural insurance system in China remains in the hands of the state, as it was in the 1980s, with the flavour of a planned economy. A new system is still under consideration and this situation has created a vacuum.

The challenge of insufficient insurance capital

As agricultural insurance is characterised by high risks and difficulties with the provision of commercial products, only the PICC and the CUIC undertook agricultural insurance business. After 1996, as competition in the insurance market intensified and the PICC underwent a commercialisation reform, the state no longer provided capital subsidies in respect of agricultural insurance where the

risks were categorised as policy-related, nor was there any policy support. In addition, the compensation rate for agricultural insurance in recent years remained at around 90%. Having been transformed into commercial insurance companies, and under the premises of autonomous management and full financial responsibility, the insurance companies did not want to be engaged in agricultural insurance. Some types of insurance with great social benefits but excessively high compensation rate had to be discontinued in some places because of insufficient insurance capital. As a result, it was not possible to offer the farmers any security.

The challenge of low benefits from agricultural insurance

From an analysis of microeconomic performance, agricultural insurance operations lack sufficient stimulus for development. The basic principle behind the insurance business is the law of large numbers, that is to say risks can only be shared when underwriting is widespread. Currently, since the spread of agricultural insurance is narrow and the amount small, the underwriting proportion is low. With the frequent occurrence of disasters in agriculture, the compensation rate of agricultural insurance remains high. The cumulative income from insurance premiums for agricultural insurance undertaken by the PICC between 1982 and 1993 was 2.8 billion Yuan while compensation paid was 3 billion Yuan. When costs are added, losses stood at 635 million Yuan; that is to say, for every 1 million Yuan of agricultural insurance there was a loss of 230 000 Yuan. It is clear that the agricultural insurance business remains difficult and that government support policy for this sector is not adjusted to its specificity. In addition, although the state has exempted providers of agricultural insurance from business tax, it still requires payment of income tax in years when there are surpluses. Hence, from an overall perspective, agricultural insurance operations remain a loss.

3. The main contradictions faced by agricultural insurance in China

The contradiction of the growth in needs for agricultural insurance and insufficient effective demand

China has made great progress in the past two decades in reducing poverty and increasing farmers' income. At present, problems of having enough to eat and to wear have been basically resolved for most peasants. However, the growth of farmers' income is very slow and depends on natural conditions. In recent years, the increase in natural risks in agriculture has been accompanied by increased needs for agricultural insurance. Since the 1990s, not only has China suffered from increasing numbers of natural disasters, but the proportion of farmland greatly affected has also increased. Every time a natural disaster or unforeseen event occurs, enormous loss of lives and property is caused, which seriously affects the steady growth of the rural economy and the stability of people's lives. The current social relief system in China is still not able to provide sufficient compensation for the losses caused. In 1998, China suffered the worst floods in 100 years, with direct economic loss reaching 166.6 billion Yuan, but the amount of compensation paid was less than 100 million Yuan. The rapid restoration of agricultural production after a disaster objectively demands the establishment of a new system of spreading agricultural risks and compensating loss. Agricultural insurance should be developed to meet this very demand.

Since Chinese peasant households operate on an extremely small scale, their effective insurance demand would be quite low. Moreover, peasant income is not stable and, with the permanently high level of agricultural production costs, it is difficult for peasants to make investment in production. Therefore, the economic basis for the voluntary purchase of agricultural insurance is weak. The small amount of disposable income and the lack of sufficient economic safeguards for agricultural insurance premiums are the objective barriers faced in the development of agricultural insurance.

Since there is an increase in natural risks in agriculture and the effective demand for agricultural insurance is insufficient, this inevitably results in the range of agricultural insurance being too narrow and the scale too small. It is difficult to satisfy the theory of the law of large numbers on which insurance operations rely. It is the contradiction between increased need for agricultural insurance and insufficient effective demand that leads to a concentration of risk for those involved in rural insurance operations, a relatively high compensation rate and the inability of commercial insurance companies to obtain direct economic benefits. It is, then, difficult to stimulate the effective supply of agricultural insurance. In the situation of short supply and depressed demand, the agricultural insurance business is developing slowly.

The contradiction between insufficient institutional supply and the demand for accelerated development of the agricultural insurance business

In China, the government, enterprises or peasants lack adequate recognition of agricultural insurance. The agricultural insurance business is not included in the overall agricultural development plan and no specific agricultural insurance laws and regulations have been formulated. Since the restoration in China in 1982 of the agricultural insurance business, all parties concerned (government, companies, etc.) have actively been exploring the organisational forms of agricultural insurance which can be summarised as follows: (1) independent operation by insurance companies; (2) joint operation by insurance companies and local government; (3) handling by insurance co-operatives and (4) operation by peasant mutual aid insurance organisations. These investigations are undoubtedly of benefit to the development of Chinese agricultural insurance. However, these decentralised organisations which lack risk funds are unable to meet the demand for the development of agricultural insurance on a large scale.

At present, vigorous development of agricultural insurance business is an irreversible trend. The contradiction of insufficient institutional supply and the demand for accelerated development of the agricultural insurance business can be expressed as follows.

- The system of insurance organisations currently in force cannot fully satisfy the needs of the government, insurers and insured parties. They cannot take on the full role of the mainstay of agricultural insurance.
- The relationship between policy insurance and commercial insurance is not handled well. The fundamental position of agriculture in the national economy, the public welfare nature of agricultural products and the actual status of Chinese agriculture have determined that agricultural insurance should be policy-related. This inevitably demands that policy insurance institutions should be established in the organisational design. However, the current system lacks this kind of key agricultural insurance organisation. The Chinese government has never clearly indicated that agricultural insurance is a policy insurance and, therefore, agricultural insurance still works in accordance with the commercial insurance operational mode.
- The laws and regulations currently in force cannot be adapted to the development of agricultural insurance. Since the restoration of agricultural insurance, the long-term influence of the planned economy system has resulted in the impossibility to obtain the necessary policy support for the institutions engaged in agricultural insurance. Objectively, agricultural insurance business needs vigorous development but special laws on agricultural insurance have not yet appeared. The development of agricultural insurance lacks a favourable economic environment and state policies in support of agricultural insurance are few. Furthermore, the rational collection of agricultural insurance premiums has been equated in a

few places with the imposition of unjustified levies and fees on farmers. This has impeded the development of agricultural insurance. In addition, an important means of agricultural insurance, namely compulsory insurance, is in contraction with the provision of the Agricultural Law that "peasant households participate in insurance on a voluntary basis and no organisation may compel it". Such contradictions mean that agricultural insurance cannot be developed smoothly.

4. Some recommendations for further developing agricultural insurance in China

Conscientiously adopt measures to increase the level of effective demand for agricultural insurance

The development of the agricultural insurance business results from the joint action of all concerned parties. Farmers' participation is of crucial importance. Agricultural insurance needs investment funds by peasants. However, if they find it difficult to satisfy basic needs such as food and clothing, peasants will not participate in the insurance schemes. Therefore, all measures must be adopted to increase farmers' income and cash income in particular. Only when peasants become wealthy and a firm foundation for agricultural insurance to prosper is established, will there be any hope for resolving the contradiction between the increased need and insufficient effective demand for agricultural insurance.

During the ongoing market economy reforms in China, the gradual concentration of crop and livestock production by major producers is an inevitable trend. In this way, scale of economy can be realised and, as well, anticipated earnings from agricultural operations will be increased, which in turn would encourage more farmers to participate in the agricultural insurance operations.

Legislation should be improved and safeguards provided in law for the development of agricultural insurance

The United States, France and Spain promulgated and implemented an Agricultural Insurance Law many years ago and their governments actively support the development of agricultural insurance. This is not true in China and the Insurance Law currently in force does not cover agricultural insurance. Agricultural insurance needs special laws to guide and standardise its development. We propose that the state publish an Agricultural Insurance Law as soon as possible, together with supporting regulations with unequivocal provisions made regarding numerous problems, such as the organisational methods of agricultural insurance, the collection of premiums and compensation, and the role of government with regard to agricultural insurance. Such a law would enable the government to play an explicit role in the development of agricultural insurance. In addition, peasant awareness of such insurance would be increased.

Increase publicity for peasant awareness of insurance and train talented people for the agricultural insurance business

Agricultural insurance is a good device which benefits both the country and the population. However, in order that hundreds of millions of peasants in China understand, accept and participate in insurance schemes, an educational process is necessary. Therefore, an extensive publicity campaign should be undertaken so that peasants understand the nature, effects, advantages and the methods of participation in agricultural insurance. Organisational guidance needs to be strengthened and methods which integrate peasants on a voluntary basis with administrative organisations should be adopted. Every effort should be made to form a macro-environment and macroclimate for the development of agricultural insurance. Government at grass-roots level and insurance institutions should make their insurance publicity for peasants more dynamic. A strict distinction should be made between insurance

and unreasonable charges and levies on the peasants so that they understand that, for a small investment of capital in normal times they may obtain many times the amount as compensation when a disaster occurs. Raising the level of agricultural modernisation also provides an important basis for the development of agricultural insurance. Therefore, efforts should be made to change the peasants' mode of production and raise the scientific and technical content of agriculture so that agriculture develops towards specialisation and industrialisation.

The training of qualified people in the agricultural insurance business should be taken seriously with regular or occasional training courses on the insurance business in townships and towns so that at the grass-root level there are qualified people. Specialists working in agricultural insurance at the grass-root level should generally have knowledge of three aspects. The first is theoretical knowledge of insurance and of agricultural insurance. The second is basic knowledge of rural social economy and agricultural economic management. The third is knowledge of agricultural technology and of prevention and relief of agricultural disasters. Therefore, qualified persons in agricultural insurance should understand peasants and be able to communicate and co-operate with them. They should have a wealth of experience in agricultural production and know the insurance business with the ability of undertaking agricultural insurance work independently. There should be comprehensive borrowing of foreign experience in training high-ranking insurance specialists who should know the specificity of agricultural insurance market in China.

Policy-related agricultural insurance companies should be established so that the agricultural insurance business can keep on expanding with the help of commercialised operations

Since the 1980s, the theory and practice of insurance in China has begun to call for the establishment of specialised agricultural insurance companies and for the separation of policy-related insurance and commercial insurance. So far, however, this has not been put into effect. Therefore, the development of agricultural insurance in China will be a very long process. Agricultural insurance cannot be dealt with as commercial insurance which is planned in accordance with the characteristics of industry and commerce. In accordance with international practice, the agricultural insurance business should be separated from current commercial insurance and be run in accordance with the characteristics of agricultural insurance itself. If it is difficult to set up independent agricultural insurance companies in the short term, independent agricultural insurance operations can be established within commercial insurance companies. In the long term, independent agricultural insurance companies must be established which would run their agricultural insurance business as a policy-related business. Fundamentally, agricultural insurance should be an arrangement between the government and the peasants. Commercial insurance companies frequently proceed from commercial motives and it is difficult for them to harmonise economic with social benefits. The establishment of state agricultural insurance companies running a policy-related business will be advantageous for the formation of the specialist operational management, will enhance social benefits and, will facilitate the harmonisation of social and economic benefits.

A small part of the funds needed for the establishment of agricultural insurance companies can be drawn from commercial insurance companies, but the majority of funds should come from the former funds used to give support to agriculture outside the framework of the WTO agreement. In this way, agricultural development will be protected and supported, and there will be no conflict with the relevant WTO provisions.

An agricultural risk management fund should be created to guarantee capital support for the development of agricultural insurance

An agricultural risk management fund should be created. The risk is to some extent cyclical and the creation of an abundant fund is required to guarantee sustainable development of agricultural insurance schemes. Therefore, the state should provide budgetary support and allocate a part of taxes and profits of insurance companies to establish a rural insurance risk fund. This risk fund would be used to offset losses in years when major disasters occur so as to bring stability to agricultural insurance operations.

Agricultural insurance development funds should be established both at the national level and at the provincial or municipal levels to subsidise agricultural insurance expenditure. A variety of means and multiple channels should be adopted to raise such a fund. For example, part of the "agricultural risk funds" already established by the state and local governments should be set aside for it. One part should be incorporated from the expenses for disaster relief and flood control arranged annually by the Ministry of Civil Affairs and the Ministry of Water Conservancy. Another part should come from the voluntary contributions from all parties of society and the remaining part should be levied from the marketing of agricultural products. Agricultural insurance companies should be permitted to operate property insurance business for agro-food processing enterprises at the county level and below, village enterprises and peasant households. A tax reduction or exemption should be applied to agricultural insurance business and bodies involved in its operations. Financial subsidies should be provided for the insurance by the leading agricultural enterprises and to the insurance on activities such as crop and livestock production which have a special importance in the national economy and for people's livelihood. The government can also consider issuing agricultural insurance bonds.

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RURAL FINANCIAL SERVICES: THE SUPPLY AND DEMAND SITUATION, ISSUES AND STRATEGIES

By Ming Luo

Abstract

This paper begins with a study of the situation regarding the supply of and demand for rural financial services. It then analyses factors that have weakened rural financial services and explores ways in which the provision of services can be improved to enable rural finance to play a more effective role in strengthening the position of agriculture in the national economy, in increasing farmers' incomes and in promoting a stable development of the rural economy.

1. The supply situation in rural financial services and its special features

There has been a considerable improvement in rural financial services in China

Since the reforms and the opening-up era, the Chinese government has undertaken a series of reform measures to promote the growth of rural finance. There has been a considerable improvement in the supply of rural finance in China. Firstly, regarding the organisational structure, the rural financial service system has been gradually formed, which consists of policy-oriented finance, commercially oriented finance and co-operative finance. In particular, since the mid-1990s the rural financial system composed of three formal institutions, namely the Agricultural Development Bank of China (ADBC), the Agricultural Bank of China (ABC) and the rural credit co-operatives (RCCs), has steadily improved in terms of organisational structure and operational mechanism. At present, the framework for the provision of rural financial services has been developed and can meet the multi-level funding requirements for implementing strategic structural adjustments in agriculture. Secondly, there has been a gradual diversification of financial instruments and methods available for providing services, thus deepening and broadening the access to rural financial services. In particular, there have been steady improvements in lending methods, which have greatly increased the availability of credit to farmers and rural enterprises. Among the rural financial institutions, the RCCs have made particular efforts to introduce measures, such as multiple households co-guarantee loans, micro-finance loans, credit card system, credit rating system for farmers and rural enterprises, simplifying loan procedures, improving the credit facilities for towns and villages, etc., to allow farmers to obtain loans more easily. Thirdly, there has been a steady increase in the volume of rural loans. This reliable source of funding creates favourable conditions for increasing farmers' income, enhancing agricultural production and promoting rural development and structural adjustments in agriculture. The growth rate of the agricultural loans is higher than that of the gross output value of agriculture and the growth rate of farmers' net income. Fourthly, there has been an increase in the capacity of rural financial institutions to provide funding for agriculture. In 2001, the RCCs increased their deposits by RMB 200.8 billion. By inter-bank borrowing and the recovering of old loans, they have increased their funding to agriculture by over RMB 100 billion. The People's Bank of China (PBC) increased the amount of reloans by RMB 20 billion. Fifthly, rural financial institutions have increased their awareness for supporting the structural adjustments of agriculture. In line with the needs of strategic structural adjustments in Chinese agriculture, the RCCs in eastern, central and western regions have developed relevant priorities for providing funds.

Six asymmetries in the provision of rural financial services

- The rural financial institutions are mainly located in the east and in the cities. The distribution of financial institutions between the cities and countryside and between different regions cannot meet the demand for rural economic development and agricultural structural adjustments. In the developed east region, the distribution of rural financial service offices is relatively good, but for most rural inhabitants and rural enterprises in the underdeveloped central and western regions, available financial services come exclusively from the RCCs. Since the mid-1990s, China's RCCs have undertaken the closures and mergers of their local offices. In the period 1998-2001 alone, the number of the RCCs was cut by over 10 000, while staff numbers were reduced by nearly 40 000. At the end of 2001, the number of RCCs with legal entity status was reduced by a quarter compared with the number at the end of 1990. Between 1999 and 2001, the four large state-owned commercial banks closed over 30 000 branches in the poor provinces. The uneven regional distribution of the financial offices has become a major problem. The supply of financial services is seriously inadequate.
- A relatively low proportion of financial institutions' lending goes to agriculture and rural enterprises, which is not commensurate with agriculture's contribution to the national economy. Before the reforms, the proportion of agricultural loans in total loans by financial institutions was stable at around 13%. After 1978, it dropped to less than 10%. Since 1998, this proportion has fluctuated at around 5%. Lending to township and village enterprises (TVEs) remained at around 6%. In 2000, China's agriculture contributed 15.9% to total GDP and employed 50% of total labour. The rural population stood at 795.63 million, representing 62.3% of the total population. At the end of 2000, total loans by all financial institutions amounted to RMB 9 937.107 billion, of which agricultural loans accounted for only 4.92%, while loans to commerce and industry and to the construction industry accounted for 37.84%.
- The proportion of lending by rural financial institutions that goes to agriculture is relatively small. The RCCs are the main rural financial organisations. They are the only formal financial institution supplying credit to farmers and granting loans for agricultural production. Their role in supporting the "Three Nong" (agriculture, countryside and farmers) is irreplaceable by other financial institutions. However, statistics show that the proportion of the RCCs' loans to farmers is actually quite small.
- Farmers' contribution to saving is asymmetric with the loans they receive. Taking the RCCs as an example, at the beginning of 1980, the gap between farmers' deposits in and loans from RCCs was already large at 86%. It was reduced to 59% by 1984. However, over the twelve-year period from 1985 to 1997 it increased continuously. In 1998, it was somewhat down from the 1997 level, but still as high as 75%, meaning farmers' loans were equivalent to only 25% of their deposits. Farmers' deposit/loan gap provides a large source of funding for urban and rural industrialisation.
- The responsibilities to aid agriculture assumed by rural financial institutions are asymmetric with their assets. The RCCs are the main financial institutions dealing with agriculture and farmers and in quite a number of regions, the only institutions providing rural financial services. However, their operational performance is very poor with a large amount of non-performing loans (NPLs) accumulated. Therefore, they run large business losses and the quality of their assets is weak. Their funding capacity is not sufficient to support the "Three

Nong" nor are they able to fully meet the needs for funding the strategic structural adjustments in agriculture.

• The funding shortfall in rural economic development is asymmetric with the serious outflow of funds from the countryside. There are two channels through which funds flow out of the countryside: large deposit/loan gap and the absorption of rural funds through other commercial financial institutions and the postal office savings. Although the principal business of other commercial banks is not located in rural areas, they absorb part of their deposits from rural areas, and these deposits are not used for lending to rural economic agents. At the end of 2001 the balance of deposits of the postal savings system stood at RMB 591.1 billion. Of this amount, RMB 378.1 billion, or 64%, came from rural areas (county level or below). Postal savings funds have thus flowed directly out of the rural sector. The state-owned commercial banks absorb RMB 200 to 300 billion of savings from rural areas, but lend very little to rural agents. According to some estimates, the net outflow of funds via financial channels (including postal savings) since 1978 stands at about RMB 800 billion.

2. The demand for rural financial services in China and its special features

The demand situation for rural financial services

Since the reforms and the opening-up of the economy, there has been an increasing demand for financial services in rural China. In particular, the demand for credit by farmers has been constantly growing. During the 1980s, the average size of a loan was RMB 50-100. During the mid-1990s it rose to around RMB 200. By the end of the last century it had reached around RMB 1 000. In the developed regions, this amount commonly reached over RMB 5 000, sometimes even as high as RMB 30 000-50 000. The increase in the loan amounts demanded by farmers shows that the main purposes for loans are no longer limited to the purchase of seeds, chemical fertiliser or pesticides and the like, but now they include searching for new opportunities, reorientation of main activities, increasing the degree of specialisation and the scale of farming, adjusting the economic structure.

Features of the demand for rural financial services

- As a result of the reform of the rural economy, the demand for rural funds, which was formerly centralised, has now become more decentralised. The structural reforms of China's rural economy and the adjustments of land tenure system allowed farmers to obtain the use rights for land. Family-run businesses are becoming the basic form of operation in China's rural economy. The users of rural finance are no longer the collectivised units, but individual farming households, characterised by the decentralised and small scale of the finance required and by a strong seasonality in the demand for finance.
- The main type of financial service required by farmers is loans to meet their productive funding needs.
- Rural enterprises commonly suffer from a shortage of funds. Firstly, bank lending to rural enterprises is inadequate. Secondly, there is not enough finance for private enterprises. Ninety per cent of the initial capital required by private enterprises comes from self-financing. Thirdly, direct financing of rural enterprises on the financial market is inadequate. There are also quite considerable restrictions on the financing in the stock market. At the beginning of 2001 over one thousand rural enterprises in China met the conditions to be listed in the stock market, but only about forty (4%) actually listed.

Fourthly, there is a fairly high demand for development funds for the leading agricultural enterprises in their early development stages. However, the credit granted by financial institutions to such enterprises is very limited. The slowdown of growth rate of farmers' income, in particular since 1994, and decreasing return to TVEs investment constrain their ability to accumulate funds.

• The strategic structural adjustment in agriculture has placed new demands for rural financial services. Funding required for such adjustment is large and cannot be met simply by relying on accumulation from the "Three Nong". At the same time, because of the high risks involved in agricultural activities, ordinary banks are not willing to provide loans for such kind of investments. New methods and innovative ideas for rural financial services are called for to meet the demand for financial services to fund structural adjustments in agriculture.

3. Suggestions for improvements in the provision of rural financial services

- Redesign the types of "public financial products" provided by the government and gradually implement the commercialised operations for the policy-oriented credit business to agriculture. The scope of "private financial products" and "public financial products" should be clearly demarcated and, correspondingly, appropriate institutional arrangements should be made for the rural financial organisations. The ADBC should be transformed into a specialised rural credit guarantee bank, whose purpose would be to provide loan guarantees for the project credit scheme promoted by the government, but not to implement a subsidised credit project plan.
- Rural financial institutions should be treated equally with other financial institutions. They should enjoy full market operator status and be able to act in a genuinely autonomous manner and gain their corresponding share in the financial market through competition.
- A liberalised rural financial market system needs to be created. By transforming the rural financial market from a restricted, unofficial, traditional, and locally based into a comprehensive, official and national based one, China's traditional and closed rural finance system can be replaced by a modern and open one. Rural credit business needs to be developed by encouraging and promoting the participation from commercial and specialised banks, foreign-capital financial institutions, and non-banking financial institutions.
- From the perspective of macro-control and supervision, the central government should take certain policy measures to induce other financial institutions to take part in the rural financial market in order to meet the vast needs for funding the strategic structural adjustments in agriculture. As early as 1998, the PBC proposed that in order to guarantee the sources of funding for agriculture, no less than 10% of newly increased loans should be allocated to agriculture, 40% of the RCCs loans should be used for the crop production and the members of the RCCs should obtain more than 50% of loans granted by the RCCs. However, these regulations were not legally binding enough, and they are not really applied to the business of commercial banks.
- The controls on the rural financial market need to be relaxed and the rural financial institutions should be gradually diversified. The development of privately-run rural finance needs to be encouraged, paving the way for private capital to come into the rural financial market and for the development of non-government financial institutions. In particular, farmers should be encouraged to set up, on a voluntary basis, standardised new-style co-operative financial institutions to gradually create an efficient, competitive, diversified

system of rural financial institutions. Therefore, the RCCs' monopoly in many rural areas can be changed and the insufficient provision of financial services resulting from the withdrawal of offices by other financial institutions can be effectively improved.

- Private capital must be allowed to play its part in rural finance in China so as to develop small and medium-sized local private financial institutions and increase lending to private enterprises. China has entered a new period in which its economic growth is mainly driven by the private sector. Research by the World Bank shows that, if banks double the ratio of private sector credit to GDP, this will lead to the rise in long-term average economic growth by two percentage points. Moreover, the greater the credit ratio of the private sector (the more intensive the financial system becomes), the less the economy fluctuates. The main operation of small and medium-sized financial institutions is to issue small amount of loans. This is beneficial to the financing of peasant households and of rural and urban small and medium sized enterprises (SMEs). This point is also proved by the history of the development of small and medium-sized financial institutions in the United States. A study on the US banking service in the mid-1990s showed that the smaller the scale of the bank, the greater the proportion of its small loans in its total loans, and the higher the ratio of small loans to the total amount of its assets. For banks with assets lower than USD 100 million, small commercial loans accounted for 8.9% of the total amount of their assets, while this ratio was only 2.9% for banks with assets greater than USD 5 billion.
- Equal attention needs to be paid to rural commercial finance and to co-operative finance. In order to meet the needs for funding of the strategic structural adjustments in agriculture and to resolve the problems of rural finance in China, the commercial finance cannot replace the co-operative finance. Nor should the emphasis be solely on developing co-operative finance.
- Financial innovation should be developed to encourage a healthy growth in the micro-finance operations of the RCCs. There should be a gradual introduction of innovative lending methods, whereby the granting of micro-finance is combined with support to leading agricultural enterprises and to rural households engaged in commerce and industry. Foreign experience of classic micro-finance models should be used for innovations in financial instruments in China. The granting of micro-finance loans needs to be combined with support for the development of marketing activities and with the improvement of rural financial service system.

4. Suggestions for improvements in access to rural finance institutions

- In order to meet the demand for loans by farmers and rural enterprises, the scope of business of certain financial institutions needs to be restricted to the area of the "Three Nong". The ADBC, the ABC and the RCCs are the three main financial institutions providing services to China's agriculture and rural economy. The new system can only be gradually formulated and developed under the guiding principle of supporting and safeguarding Chinese agriculture and promoting rural economic development.
- Rural financial institutions should be allowed greater flexibility in setting the interest rates on lending, so as to increase the availability of credit for farmers and rural SMEs.
- The PBC should provide low interest rate for reloans to the rural finance institutions to encourage loans to rural areas. In 2000, the proportion of borrowing from the central bank in their total funding for the rural financial institutions was as follows: the ADBC 84.96%, the ABC 5.8% and the RCCs 2.87%. In 2001, the PBC increased reloans to the RCCs by

RMB 31.2 billion, equivalent to 22.37% of their total increased loans for the whole year (RMB 139.5 billion). In the spring of 2002, the PBC gave the RCCs RMB 26 billion of reloan quota.

- A strategy needs to be implemented to use credit to support a guaranteed minimum price for unlimited grain procurement. Among the existing measures taken by the Chinese government to support agriculture, the policy of unlimited grain procurement at a guaranteed minimum price has been the most beneficial to farmers. In the period 1994 to 2000, to ensure the implementation of this policy, the ADBC issued on a yearly basis RMB 200 billion of loans to the state-owned grain procurement bureaux. In 2000, the ADBC lent a total of RMB 582.947 billion for the purchase of agricultural products. The total balance of loans at the end of the year stood at RMB 730.396 billion, of which 230.747 billion was used as grain procurement loans.
- Rural financial institutions should be encouraged to increase their micro-finance lending and to introduce micro-finance co-guarantee schemes. In April 1999, the ABC formulated the Regulations of Management of ABC Micro-finance Loans to Aid the Poor, and in July 1999 the PBC released its Provisional Methods for Managing the Micro-finance of the RCCs. Together with the Guidelines on Administering the RCCs Co-guaranteed Loans to Farmers promulgated by the PBC in January 2000 and the Guidelines on Administering Micro-finance Loans to Farmers by the RCCs in December 2001, these regulations encourage directly the expansion of rural micro-finance loans.

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THE LIBERALISATION OF INTEREST RATES AND INCREASING FARMERS' INCOME IN CHINA

By Haihong Ouyang

Abstract

The liberalisation of interest rates is a major objective and an important component of the development of the financial system reforms in China. It will allow China to meet its WTO commitments, to actively promote the opening up of its finance market to the outside world and to have a system that is compatible with most other countries. The implementation of market-oriented reforms towards interest rates by rural credit co-operatives (RCCs) will require considerable adjustments to agricultural and rural development policies, and will transform external environment for agriculture and rural areas, thus creating conditions for a rise in farmers' incomes. It is important to correctly recognise the links between the liberalisation of interest rates and raising peasants' incomes, to objectively assess the progress of the market reform of RCCs' interest rates, and to explore the basic concepts of interest rate policy adjustments for agricultural loans under the principles of market economy. Such understanding will contribute to the full realisation of a prosperous rural society, to the unified planning of urban and rural socio-economic development and to the alleviation of difficulties in the provision of loans for agriculture and farmers.

1. The links between liberalising interest rate and increasing farmers' income

What does the liberalisation of interest rates involve?

Liberalisation of interest rates means that, under the market economy system, commercial financial institutions in the money markets determine the level of interest rates for capital in accordance with supply and demand. The essence of market-determined interest rates is thus that the policy decisions over these rates are made by commercial financial institutions. Interest rate levels are adjusted by commercial financial institutions on their own initiative and on their assessment of the state of funding and trends in the finance market. The central bank no longer determines the level of interest rates on the loans and deposits of financial institutions, but uses financial policy tools primarily to regulate, control and influence market interest rates through the open market, thereby indirectly influencing the level of interest rates. Once interest rates have been liberalised, rates for loans and deposits in the financing of enterprises and other economic entities are completely regulated by the market.

Under the planned economy system, interest rates were strictly controlled by the government. Finance guaranteed the requirements of public service, but also sought to guarantee the requirements of economic construction and to satisfy the enterprises' production requirements. This type interest rate control model had three key characteristics. The first was that rates were regulated and controlled "directly" and "administratively". The market was rejected and government "ran the whole financial show", with financial institutions forming a "second level budget administration". There was no true currency market and market interest rates. The second was that it was not possible to treat all the main economic bodies in the market without discrimination, with the state-owned economy receiving preferential service from financial administrations. The third characteristic was that it was not possible through such a system to ensure that financial institutions (especially state-owned commercial financial institutions) would act in accordance with the requirements of a market economy, that is each

institution would be self-managed, taking its own risks and responsible for both its successes and failures. After more than 20 years of reform, China has taken the first steps to having price formation and management mechanisms determined by the market. However, in the money market, the price mechanism is still heavily "administered". The money market generally continues to function in accordance with the regulation of interest rates formulated by the People's Bank of China (PBC) and implemented by commercial banks after the State Council's approval. At the same time, the transmission of interest rates is done generally through administrative management methods and implemented by commercial banks, supervised by branches of the PBC.

Liberalised interest rates clearly differ from administered rates, essentially in four key respects. The first is that the roles of government and market are distinguished, with the Central Bank working mainly through the open market to influence market rates, thereby making interest rates adjustments "indirect". The second is that the same treatment is extended to all. The interest rates provided by financial institutions are used by all the main economic entities in the market and financial services in accordance with their fundamental interests. The third relates to the nature of market adjustment. Changes in the level of interest rates directly reflect changes in money supply and demand. The fourth is that financial institutions are run as enterprises. They must operate by themselves, each bearing its own risks and responsible for its success or failure.

The relation between interest rates controls and increases in farmers' income

In the traditional model, the policies of stabilizing interest rates on agricultural loans and keeping them at a low level are aimed at reducing farmers' interest costs. Prior to the 1980s, it was normal for loan rates set by the Central Bank for peasant households, rural enterprises and rural development project to be lower by 0.5%–2% than were ordinary industrial and commercial loan rates. For example, in 1979-80, the industrial and commercial loan rate for circulating funds was 5.04%, whereas for agricultural enterprise production it was 2.16%, the difference between these being 2.88%. In periods when there was an upward adjustment in deposit and loan interest levels, agricultural rates adjustment lagged behind that of industrial and commercial credit rates (by six months to one year). Low interest loans were granted to rural enterprises run by poor peasant households and those in poor regions, with the government giving a subsidy to commercial banks (He, 2002). National finance invested in agricultural production had a notable effect in promoting an increase in rural income.

Chinese agriculture and the rural economy have entered a new stage of development. Agricultural interest rate policy has changed notably in several ways. First, agricultural loan rates are no longer overtly favoured as before. Secondly, policy-related loans are not working very well. Thirdly, rural financial institutions now have some flexibility in adjusting their interest rate level.

The negative effects of liberalising interest rates on increasing farmers' income

The most important consequence of the liberalisation of interest rates, in both developed and developing countries, has been that a situation of excessively high rates in real terms has developed (Tang, 2003). In China, it is difficult to liberalise interest rates in a situation where rural capital supply is seriously insufficient and the use of "indirect" methods by the government to regulate interest rates are the tools used to engender fundamental changes in the financial situation of its rural inhabitants. From a long-term perspective, liberalising interest rates would be conducive to raising the efficiency of capital allocation by rural financial institutions. It would help to promote the transformation of the operating mechanisms of the RCCs, strengthen their operational management and improve their operating performance. It will be also conducive to increase the deposits of rural financial institutions, strengthen their capacity to provide credit to support agriculture and assist in containing popular loans.

However, in the short term, it may have negative effects on the increase in farmers' income. This is the case for several reasons.

- First, liberalising the allocation of financial resources will aggravate the problem of the supply of rural credit not meeting demand.
- Secondly, the way the market operates in selecting how financial resources are obtained will
 aggravate unbalanced situations that presently exist both with respect to agriculture and other
 sectors of society, and also with regard to the various main economic entities providing
 capital to agriculture.
- Thirdly, with the profit-making tendency already observed in the distribution of financial resources, and with the supply of capital not meeting demand, market interest rates will rise, inevitably increasing the peasants' financial costs.

In summary, the adjustment of the current interest rate policy, the liberalisation of interest rates and the use of market economic principles to distribute rural capital resources will produce important changes to the external environment allowing for an increase in farmers' incomes. Nevertheless, for a brief period, the detrimental effects of this policy will be blatantly apparent. In the current and future periods, the important themes of the adjustment of agricultural financial policy are the correct handling of the relationship between liberalising interest rates and increasing peasant income, the strengthening of the macro-economic regulation of agricultural interest rates policy under market economic principles, the defence of peasant credit rights and interests, the stabilisation of rural household credit costs and increasing investment in agricultural credit.

2. Pilot projects for liberalising interest rates in the RCCs and an assessment

Liberalising interest rates: the basic direction of China's interest rate adjustment policy

The evolution of China's interest rate policy reflects the change of economic management. It can be broadly generalised as going through a development process of "first, a strict control system, then an administered system with certain flexibility, and then one of progressive liberalisation". Four stages can be distinguished.

The first stage was from the early 1950s to 1978. The system was modelled on the Soviet Union's (USSR) highly centralised, planned and command economy, with the government implementing a policy on credit rates of "State Council setting policy, the People's Bank administering and specialised banks implementing the policy". The features of this period with regard to interest rates on deposits and loans were that there were few terms, changes were small, interest rate levels were low and there was no flexibility in management.

In the second stage, from 1979-92, the policy on interest rates in macroeconomic regulation began to prevail. In 1979, China started implementing reforms of the economic administrative system, the idea being to make use of interest rates as an economic lever. This gradually gained approval and the interest rate policy began to be used in financial regulations.

The third stage, from 1993-2002, was a period of investigation into reforms that liberalised market rates. In relaxing interest rate administrative controls, strengthening supervision and using the rates as a lever to adjust and control the economy, the principal measures chosen were the following.

- Interest rate levels were raised and their terms were increased. In the period from 1979-1985, bank deposit rates were raised by the government consecutively on five occasions, basically to enable them to be restored to rational levels. At the same time, the number of interest rate terms was increased.
- Attention was given to the role of rates as economic levers. At the end of 1988 and in 1993, the country twice raised rates substantially to restrain inflation and economic overheating. In the second half of 1989 and in 1996, the country lowered interest rates several times to revive the economy. Between May 1996 and June 1999, the PBC reduced interest rates seven times, and deposit rates for the period fell within one year from 10.98% to 2.25%, while interest rates on loans fell from 12.06% to 5.85%. In addition, the State Council reintroduced on 1 November 1999 personal income tax on savings deposit interest.
- Base interest rates started to become a financial policy tool of the Central Bank. For example, in 1996 the PBC made a timely increase to the reloan rate, making it slightly higher than the legal loan rate of commercial banks for the same period, and achieved the anticipated objective of limiting commercial banks reloans.
- The rigid regulation of interest rates started to relax. The first element of this occurred on 1 June 1996 when the inter-bank loan market rate was set free, thus able to reflect the supply and demand situation of capital. The second element was when market invitations to tender for buy-back interest rates were put into effect, the liberalisation of interest rates on the open market was implemented. The third element was the frequent adjustments to financial institutions' interest rates on loans and also enlargements of the range of the flexibility of the rates. For example, in 1998 financial institutions were allowed to extend the range for floating the rate of the loan to medium and small enterprises from 10% up to 20%, and in 1999 financial institutions at county level and below were allowed to adjust credit rates upwards as much as 30%. The fourth element was the freeing of interest rates on the Renminbi (Chinese currency) loans of foreign banks and on the deposits of insurance companies for more than RMB 30 million or longer than five years. The fifth was a reform pilot project beginning in mid-December 2001 which liberalised the interest rates of the RCCs. In general, it can be said that, since the reform started, China has consistently directed its reforms towards the goal of liberalising interest rates.

The fourth stage occurred in 2003 with the liberalisation of interest rates on the market. On 20 February 2003, the PBC published the *Report on Implementation of Monetary Policy in 2002* which made clear the objectives of opening up China's interest rates to the market: "Market mechanisms will be established to determine the level of deposit and loan interest rates of financial institutions, and the Central Bank will regulate and guide market rates by using monetary policy tools, enabling the market mechanisms to play a leading role in allocating financial resources". The general conceptual approach underlying the reform is that the liberalisation of interest rates should begin with the money market and the sequencing of the reform of deposit and loan rates is that it affects first foreign currency, then domestic currency; first loans, then deposits; the long term should come first, then the short term. In more detail, the extent of flexibility of loans rates will first be enlarged, then completely freed; the rates for large amounts of long term deposits will be freed, then rates for small amounts and for current deposits. It is estimated that it will require 5-10 years to achieve the complete liberalisation of the interest rates for small amounts and for current deposits.

Liberalising the interest rate reforms of the RCCs: the stage of comprehensive pilot projects

In mid-December 2001, the PBC began to conduct pilot market rate reforms for the RCCs in areas where the capital supply could not meet demand, where capital to support agriculture was relatively scarce, and popular borrowing and lending were relatively active. The RCCs in the eight areas involved namely Rui'an and Cangnan in Zhejiang, Gannan in Heilongjiang, Tongyu and Taonan in Jilin, Lianjiang and Quanzhou in Fujian, and Zalantun in the Inner Mongolian Autonomous Region, and these were permitted to let interest rates to be flexible in their business networks located outside cities or towns. Deposit rates were permitted to adjust upwards by up to 30% and interest rates on loans could also be adjusted upwards by up to 100%. In 2003, each province throughout the country selected one or two counties or cities to take part in the pilot experiments of liberalising interest rates.

Within a short period, liberalisation of interest rates will produce a pattern of "high rates for savings, high rate for loans" for the RCCs

i) According to the law of supply and demand, the under-supply of funds will force the RCCs to charge high rates for loans

Interest rates are the price reflections of the capital. The RCCs are suppliers of monetary funds in the rural loan market and the farmers are fund demanders. When the supply of funds does not meet demand in rural area, the price will necessarily be drawn upwards and loan interest rates will rise. Thus with interest rates being liberalised and capital supply not meeting demand it is possible that the RCCs will issue loans at high rates. In this way, it is conducive for the RCCs to increase their revenue, as well as offers the possibility of reducing "rent seeking" activity under low interest rates circumstances, thus alleviating in part the difficulty of obtaining loans by farmers. In contrast to the situation when the rural demand for capital could not be met with low loan interest rates, farmers had more opportunities to obtain loans with which to invest and hence to earn income. Generally, the liberalisation of loan interest rates has increased the possibility of peasants obtaining credit and provided potential opportunities for increasing farmers' income and for rural development.

ii) The RCCs can restrain popular borrowing only by offering high rates to absorb savings

The RCCs must have stable sources of capital in order to enhance their capacity to issue credit, the available sources of capital come from the citizens' savings. After the liberalisation of the interest rates, the deposit interest rates will be determined by commercial financial institutions themselves in accordance with market supply and demand; therefore, the RCCs can absorb some popular capital by raising deposit interest rates. As rational economic agents, farmers take maximum profit as their operational objective. When they select where to save their money, the main factor to be considered are interest rates. Within a given rural area, there is a scramble for rural savings resources, mainly between the RCCs and popular financial institutions. Thus, only if the RCCs raise the interest rate on deposits can the capital flow to the informal popular finance sector be stopped.

iii) The co-existence of high earnings and high risks for the RCCs under the "high interest rates both for deposit and for loans" pattern

As stated above, loans at high interest rates bring in more income to the RCCs, but they also present higher risks. Under asymmetric information, moral hazards and some adverse selections cannot be avoided since the RCCs, after issuing a loan, cannot control the investment orientation of the peasant's capital. After obtaining loans with high interest rates, farmers can recover the cost of the loan and obtain income only if the anticipated profitability from their invested activity is higher than the interest rate. However, high revenues also imply a high risk. Whether or not peasants' investments

receive a high return directly determines the rate of recovery on loans by the RCCs. Peasants are limited by their own personal qualities, and to a certain extent it is very difficult for them to be sure of the investment orientation of funds. In such a situation, the RCCs are faced with a higher risk that recovery will prove to be impossible when the loan expires.

iv) "High interest rates both for deposit and for loans" can aggravate the tendency of funds not to be used in agriculture

If investments in agriculture cannot obtain average rates of return, farmers will not invest their funds obtained with high interest rates in agriculture nor add incremental investment in this area. This necessarily produces a tendency for investment to be used for non-agricultural purposes. On the one hand, the RCCs starting from their own interest necessarily choose loan-demanders offering the highest price. In competing for loans, farmers are at a disadvantage. On the other hand, the weakness of agriculture and its low profit levels mean that farmers obtaining loans do not want to invest in agriculture. The result is that loans are concentrated in non-agricultural production and there emerges a deviation from the policy objectives of strengthening agriculture.

v) "High interest rates both for deposit and for loans" may increase the cost of loans for peasant households

Loans are borrowed capital which must be repaid by peasant households when they become due. An increase in the interest rate of the loan implies an increase in the cost of capital for rural households and this is detrimental for farmers investing in agriculture.

There are some deviations when the RCCs implement the interest rates policy

The deviations include the high level of arbitrariness in operations and interest rates on loans which may vary from one person to the next. Secondly, interest rates on loans exceed the ceiling limits of the flexibility. Thirdly, if the loan repayment is overdue, variable additional rates or penalties may be applied; sometimes there are heavy penalties for breaking the rules and other times there are none.

There are several reasons for the above problems. One is that, driven by economic self-interest, extra income can be directly obtained by raising interest rates on loans even in a situation where costs and expenses are not increasing. The second is that a minority of the RCCs experiencing operational difficulties may hope that by increasing interest rates on loans they can make good any losses, maintain daily operations or increase their bad debt provision fund. A third is that supervision is insufficient. Given that points of view and of emphasis from different administrations vary, the county RCCs Union gives more attention in their reviews to economic indicators, and to the prevention and reduction of credit risks. The auditing organ, the PBC, is slow in its subsequent supervision and faced with severe limitations both in scope and in time.

The above problems generate the following negative effects. First, it runs counter to the national interest rates policy, making it difficult to maintain balance and stability in the same place and at the same time. Secondly, it damages the lawful rights and interests of borrowers and damages legal basis of financial institutions extending loans in accordance with the law. Thirdly, it runs counter to the service aims of the RCCs, adding to the peasants' burden. Fourth, although raising interest rates on loans may seem to bring some earnings to the RCCs, in fact it may damage normal and rational borrowing relationships and increase the pressure borne by the borrower. As a result, the flow of credit funds and business development are affected and the long-term interests of the RCCs are threatened. Fifth, flexible interest rates can lead creditors to engage in improper activities, sometimes to the extent of abusing their power for personal gain.

3. The basic views on adjusting agricultural interest rate policies

The aim of serving agriculture and peasants should be maintained by making policy-related, commercial and co-operative finance each perform their own functions and development in harmony

The main problems for rural finance at present are that, while rural capital is flowing into the cities in great quantities, the peasants have serious difficulties in getting loans; the availability of finance in counties is patchy, which affects their economic development. In the past, the main channels for rural capital were the Agricultural Bank of China (ABC), the Agricultural Development Bank of China (ADBC), rural co-operative foundations (RCFs), rural credit co-operatives (RCCs), state-owned commercial banks, popular lending and so on. Now, the ABC and other state-owned commercial banks withdraw branches at county level and below, the Industrial and Commercial Bank of China, the People's Construction Bank of China and the Bank of China have retrenched by 20%, 30% and 10% respectively and, at the same time they are withdrawing, they have called back jurisdiction over loans by offices at the county level. As a result, the four large state-owned commercial banks at the county level and below have become simple deposit-takers.

As a policy-related bank, the ADBC has almost a single function only, that is to supply funds for the purchase of agricultural products such as grain, cotton and oil. Its policy support for rural economic development is insufficient. The RCFs have ceased their operations while the deposits of the RCCs are still increasing, but the growth rate has declined. At present, a considerable number of peasants seeking funds for production and living needs rely on popular borrowing to meet their needs. The annual interest rate charged for such borrowing is generally more than 20% and sometimes as high as 50%. Moreover, Post Office Savings was established in 1986; its function was mainly to absorb deposits, which were later deposited into the PBC. The PBC returned some, but few, funds to the rural areas in the form of reloans to the RCCs.

Perfecting the rural financial system requires thorough analysis. The general approach is to support the aim of serving peasants, agriculture, the rural economy and economic development at the county level. Starting from the objective of favouring the retention of funds in the countryside, policy-related, commercial and co-operative finance should be developed with each performing its own function in mutual co-ordination and harmoniously. First, the aim of the ABC serving primarily the agriculture and the rural economies (including county areas) should be upheld, with county level branches implementing a secondary corporate system within the structure to resolve the problems of the current situation where the ABC branches are too widely dispersed and internal controls ineffective. It should increase encouragement for and restraint of the ABC offices at the grass-roots level. Secondly, in developed areas, the RCCs should either implement county level unified accounting or be transformed into rural commercial banks (RCBs) in the form of limited companies. This will resolve the current problem of some state-owned commercial banks at the county level and below which generally take in too many deposits while loans are scarce, allowing funds to flow into the rural areas. Third, in the new situation, the functions of the ADBC should be re-orientated with the use of policy-related financial funds adjusted flexibly to the market changes and with preferential interest rates applied for "public financial products". Fourth, interest rates on Post Office savings transferred to the Central Bank should be reduced and a mechanism for circulation among the ADBC, the RCCs and Post Office savings should be established, changing the present practice of Post Office savings funds being entirely transferred to the Central Bank. The ADBC should act as an intermediary between the RCCs and Post Office savings which will improve the flow-back of rural funds. Finally, popular capital should be allowed to enter the sphere of rural finance.

The mechanisms for managing interest rates within the RCCs should be perfected

A combined internal and external, three-in-one supervisory system should be implemented. On the basis of checking by county RCCs Unions and the normal supervision by the China Banking Regulatory Commission (CBRS), the power of state audit monitoring should be strengthened by implementing a combination of internal management and external supervision, as well as forming a management and supervision network. While paying close attention to the quality of credit assets, credit provision practices should be regulated and the national interest rates policy strictly enforced.

The establishment of sound, internal restraint mechanisms and a system of personnel management responsibility should be accelerated by making the RCCs more conscious of law enforcement. Standardised interest rates and a personnel responsibility system policy should be brought into the scope of the appraisal of the RCCs Unions.

The types of loan, time limits and interest rates should be announced in accordance with the current *General Rules on Loans* and other relevant laws and regulations. Details of operations should be revealed in order to raise the transparency of interest rate policies and enlarge the power of social supervision.

A new system of safeguards should be created

The legislative process on co-operative finance should be accelerated. China's laws on co-operative finance to date have been non-existent. This is detrimental to the protection of both the management and the rights and interests of the RCCs. The state should draw up a body of laws on co-operative finance as soon as possible and enact them.

An insurance system for rural deposits should be established. The RCCs should make payments into an insurance fund, according to a certain ratio of the balance of deposits. This would be used for settling claims by deposit holders when the RCCs are closed by law or go bankrupt. The insurance fund would be supervised by the PBC or the CBRC, and be subject to the management of credit co-operative departments at the provincial level. The fund would be drawn as a quarterly sum.

A rural loan guarantee fund system should be established. Following the development of agriculture and rural economy, the comprehensive agricultural development projects and the leading agricultural enterprises have a very high demand for the capital, but the current supply can badly meet this demand. Thus, the contradictions of supply and demand for funds become acute. Since it is difficult for loan borrowers to provide mortgages or guarantees, the operating risks of the RCCs are high and the funding requirements of borrowers are difficult to satisfy. To a certain extent, this restricts agricultural development and the structural adjustment of rural industries. In other words, there is a high need in rural areas to establish an effective guarantee organisation to resolve the difficulties for obtaining loans. With provincial finance departments as the main force supplemented by enterprise investment, a regional-based agricultural credit guarantee company scheme is worth exploring.

Co-operation between banks and insurance companies should be strengthened with the RCCs providing loans for agricultural development and insurance companies providing insurance for agricultural production to their mutual advantage and jointly supporting the development of the "Three Nong" (agriculture, countryside and farmers). When disasters and hazards occur in production, insurance claims settlement should be directly transferred to the relevant RCCs for loan repayment.

New support policy should be introduced

Casting off the historical burden shouldered by the RCCs not only depends on national policy support, but also on the support of local governments and the PBC. However, the fundamental way of resolving the problems of the RCCs lies in development. Thus, positive financial support should be provided. As for the additional interest payments resulting from the policy-related guarantee premium on savings, the central financial administration should make a special transfer of the whole amount to the RCCs through certain channels. The financial administrations at the provincial level should also arrange funds to support the development of the RCCs. For example, the province of Jiangsu gives back each year a certain ratio of paid taxes to the RCCs to cover losses. The tax reduction or exemption for some special items, such as the transfer of ownership of assets to cover loans and for handling the transfer of the assets of RCFs, is also feasible.

Long-term funding support should be implemented. With accumulative losses and bad debts or dead loans of the RCCs over the years as the base, the PBC should offer long-term, interest-free reloans of an annual equivalent amount or in accordance with a certain ratio. At the same time, interest rates on transferred deposits should be raised and interest on the RCCs transferred deposits and seasonal surplus funds should be calculated on the basis of the standard rate for deposits transferred from Post Office Savings to the PBC. This will increase the RCCs' developmental capacity through increased income, thereby achieving the goal of eliminating the historical losses and burden in the course of development.

Preferential tax policies should be provided. For agricultural loans and peasant household loans issued by the RCCs, a policy of exemption from business tax should be implemented. The provision fund ratio for preventing bad debt should be raised for the RCCs, further strengthening their capacity to cancel bad debts after verification. The RCCs also should be given more freedom for their financing. The RCCs with good operational results should be permitted to issue financial bonds and to raise funds from the stock market and securities market. The RCCs should be allowed to introduce new loan products and loans types in accordance with rural economic development trends and, implement a differential rate policy for borrowers, based on the extent of loan market risk.

Efforts should be made to improve support for agricultural credit

Between 1997 and 2002, the PBC supplied RMB 123.6 billion as reloans to support agriculture. Up to the end of December 2002, the balance of these reloans was 84.2 billion Yuan, an increase of RMB 26.5 billion over the previous year. Reloans to support agriculture are mainly directed to the major agricultural provinces, west and central regions and disaster areas. They have effectively resolved the problem of agricultural capital scarcity in those places and played an important role in aiding the RCCs to provide peasant households with micro-finance loans and co-guaranteed loans. At the end of October 2002, micro-finance loans to peasant households had increased by RMB 45.1 billion compared with the end of the previous year, accounting for 33% of increased agricultural loans. Co-guaranteed loans had increased by RMB 17.3 billion compared with the end of the previous year, accounting for 13% of increased agricultural loans. Over the past years, altogether 31 000 RCCs nationwide have started to operate micro-finance loans for peasant households, *i.e.* 89% of all RCCs. Co-guaranteed loans have been issued by17 000 RCCs, *i.e.* 49% of all RCCs. About 46.6 million peasant households obtained micro-finance loans and 10.3 million peasant households obtained co-guaranteed loans. Together, a total of 56.8 million households benefited, *i.e.* 49% of peasant households needing loans and 25% of all peasant households.

A contradiction still exists, however, between the interest rate policy for reloans to support agriculture and the income of the RCCs, as well as the interest payment burden of the peasants. With

the current rates of reloans to support agriculture and the generally high range of flexibility of rates to farmers, the profit margin for the RCCs is relatively low, making it difficult to provide farmers with loans of preferential rate. The current rates of reloans to support agriculture for six months and one year are 2.7% and 2.9%, respectively. If the loan rate for peasant households did not adjust upwards, the margin on loans issued to peasant households by the RCCs would only be 2.88% and 3.06%. However, the amount of agricultural loans to a single household is small, the loan issuing involves much effort and the input cost is high, while the effect of natural conditions is quite big and risks are quite high. If the "sunk" loan is to be considered, the profit margin of the RCCs is extremely low. This undoubtedly may influence the incentive to use this kind of reloans to invest in agriculture.

If the base rate for agricultural loans adjusts upwards by 50%, the margins on reloans extended to peasant households are 5.67% and 5.985%. Moreover, in the present administrative management and relevant regulations on the use of reloans to support agriculture, interest rates cannot be adjusted upwards, or if this is allowed only by very little. There is no clear specification of the range of the flexibility of interest rates on reloans extended to farmers. As a result, when the RCCs consider their own interests, they generally implement a 50% upward floating range of the interest rate for loans to farmers. Therefore, reloans to support agriculture give no preference to farmers where interest rates are concerned. The interest rate is still higher by 2% compared to the state bank loan rate. This cannot fully reflect state support for agriculture and for farmers. It is also difficult to obtain the dual benefits of support for rural economic development and the promotion of reducing losses and increasing profits of the RCCs by using reloans.

Provision of diversified credit services in response of the demand for agricultural structural adjustments

The agricultural economy is a diversified one. In implementing structural adjustments in agriculture, this diversity is reinforced. With regard to agricultural production, there are crop cultivation and livestock. There co-exist different operational modes such as individual farming, collective land contracts and "companies + peasant households". In the domain of production management, there are divisions of work between agricultural production, agricultural product marketing and processing. Diversification in the agricultural economy necessarily requires that the RCCs provide diversified financial services. Apart from account settlements, information consultancy, investment management, the RCCs should increase the credit products in the credit development and in diversifying their loan operations. Through initiating and operating various credit products, the RCCs can make a differential distinction between these varieties of products with regard to such aspects as the amount of loans, conditions for loans and interest levels. Not only is this conducive to the RCCs themselves to focus their support on agricultural production, processing and marketing, it is also conducive to carry out credit management and, most importantly it can make the governments and relevant departments at various levels, peasants and agricultural marketing enterprises completely understand the purpose and direction of rural credit policy. They know also clearly what is the direction of agricultural development encouraged and supported by the rural credit policy, thus can better undertake agricultural structural adjustment. In this sense, it can be said that the innovation of credit products is an important channel and means whereby the RCCs promote agricultural structural adjustment. Thus, the RCCs need to fully recognise the significance of the innovation of credit products, strengthen their awareness and continuously create credit products.

Firstly, in dealing with family undertakings, we should continue to supply "micro-finance agricultural loans" to peasant households towards the purchase of crops and animals, seeds and seedlings that will improve the yield and quality of agricultural products.

Secondly, with regard to the farmers carrying out the operation of scale in crop production and animal husbandry, credit products which match the characteristics of the scale operation should be developed. For example, the "loans for large scale land development" is developed to support joint plots of land contracts guiding farmers towards the scaled and intensified operations. For the agricultural products with local processing capacity and relatively good sales, if farmers implement large scale of production, they will easily obtain good economic benefits. For example, in Nake village of Long'an County, Yunnan Province, there are nearly 8 000 mu (1 mu = 1/15 hectare) of uncultivated land suitable for reclamation. The county's urban credit unions and the RCCs issued loans to peasants for contracting such lands with largest loan being 40 000 Yuan, farmers used loans to plant sugarcane and have obtained good economic benefits with loans issued each year basically all repaid on time. Since the start of 2002, these credit unions have continued to give loan support and, up to the end of June, the cumulative total of loans to this village for sugarcane was RMB 1.2 million.

Thirdly, funds should be raised to support agricultural processing and marketing enterprises. For those newly set up, locally-based agricultural processing and marketing enterprises, the RCCs Unions should provide circulating loans. For enterprises run by peasant households, not only should their rational demand for circulating funds be supported, but also pilot start-up loans should be granted in order to encourage them to leave agricultural production for industries and business activities. In the organisation of these types of loan, if the RCCs' funds are insufficient, they can apply for special reloan support from the Central Bank. Or coordinated mechanisms can be established among the financial institutions within the county which will then issue loans jointly, as is the case with bank consortiums.

Fourthly, the "counter guarantee loan" method should be used to support the "company + peasant household" production operations. In general, this model is a company supplying peasant households with production inputs and technology, while requiring that peasant households pay pledges. In the majority of cases, the pledges are paid from farmers' loans. This type of operational model is conducive to the realisation of the positive turnover of company funds. However, production and operational risks are borne by peasant households, and benefits and risks are not balanced between the company and the peasant households. Thus credits support should treat the "company + peasant household" as an inseparable body sharing benefits and risk. While the credit is provided to the peasant household, the company should provide peasant households with guarantees.

Fifthly, the establishment of a credit system should be strengthened and the range of credit loans expanded. For peasant households running business, those running large-scale productions, agricultural processing and marketing enterprises, the experience of agricultural micro-finance loans can be drawn upon. Their credit ratings can be assessed on the basis of comprehensive investigations. Those with a certain credit rating can be provided with credit loans for a certain amount and term. Credit procedures will thereby be simplified and the efficiency of credit support raised, satisfying the demand for financial services of good customers.

Sixthly, on the basis of different credit products, interest rate mechanisms should be used in a flexible manner to promote agricultural structural adjustment. As for the different credit products, the RCCs should implement differentiated interest rates according to their nature, administrative costs and risk grades. With regard to the same type of credit product, when the RCCs issue loans and sign borrowing contracts, they should specify the contract interest rates according to the highest range of flexibility of interest rate set by the Central Bank. After the loan is granted, the reliability of the borrower in implementing the contract can be considered to decide the level of interest rates. For example, for producers, if their agricultural products can meet market demand and they can pay back the loan on time, the upward range of interest rates can be lowered or the upward adjustment of interest rate is not applied.

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Agenda

WORKSHOP ON RURAL FINANCE AND CREDIT INFRASTRUCTURE IN CHINA

OECD, Paris, 13-14 October 2003

Monday, 13 October 2003

9:00-9:30 Opening of the Workshop: Mr. Kiyo Akasaka, Deputy Secretary-General, OECD Opening statement by Mr. ZHANG Hongyu, Deputy Director-General, MoA, China Opening statement by Mr. Norio Sato, First Secretary, Japanese Delegation to the OECD

SESSION I: Setting the framework: why is rural finance an issue in China?

Chair: Mr. Stefan Tangermann, Director AGR/OECD

Issues for discussion:

- Why is there a net outflow of finance from rural China?
- What are the main financing problems facing rural businessmen?
- What are the latest developments in rural finance and credit institutional reforms in China?
- What economy-wide reforms are needed to enhance access of rural population to finance?
- What reforms in the overall financial system and in financial regulatory policies are needed to establish a proper institutional framework for rural finance in China?

9:30-10:30 Presentations

	The creation of a favourable environment for investment in rural China: current situation and future prospects	Mr. HAN Jun, Director-General, DRC of the State Council, China
	Institutional issues and prerequisites for efficient savings mobilization and allocation in rural and lesser developed regions in China	Mr. David Scott, World Bank
	The system of Chinese rural financial organisations: achievements, shortcomings and institutional renewal	Mr. ZHANG Hongyu, Deputy Director-General, MoA, China
	Financial system and financial regulatory policies in China and their impact on rural finance reform	Mr. John Thompson, DAF/OECD
10:30-10:45	Tea/coffee break	
10:45-11:00	Discussants: Mr. MA Xiaohe, State Development and Reform Committee, China; Mr. Andrzej Kwiecinski, AGR/OECD	
11:00-12:30	General discussion	
12:30-14:30	Lunch break: buffet lunch hosted by the OECD	

SESSION II: Private and co-operative banking for China's rural areas

Chair: Mr. ZHANG Hongyu, Deputy Director-General, MoA, China

Issues for discussion:

- How to develop an operational banking system servicing economic agents in rural China?
- What should be done to facilitate banking for small-scale borrowers?
- What is the current role of credit co-operatives and what are the prospects for their development in the future in rural China?
- What is the role of the government in establishing sound financial institutions?

14:30-16:00 **Presentations**

14:30-16:00	Presentations			
	The difficulties and policy reform in China's rural finance	Mr. MA Xiaohe, Deputy Director-General, State Development and Reform Committee, China		
	Development of sustainable credit co-operatives in China	Mr. Gerard van Empel, Rabobank, The Netherlands		
	Rural banking in emerging Asian markets: lessons for China	Mr. Paul Dickie, New Zealand		
	The regulatory framework for rural credit co-operatives: the role of Chinese supervisory authorities	Mr. WANG Wenjun, Director, People's Bank of China, China		
	From old to new roles of government in establishing sound rural financial institutions	Mr. Jacob Yaron, World Bank		
16:00-16:15	Tea/coffee break			
16:15-16:30	Discussants: Mr. HE Guangwen, China Agricultural U Pissarides, European Bank for Reconstruction and Dev	•		
16:30-18:00	General discussion			

Tuesday, 14 October 2003

SESSION III: Complementary commercial credit schemes and institutions in rural areas

Chair: Mr. David Scott, World Bank

Issues for discussion:

- What are the benefits and limitations of non-bank lending for China?
- What kind of complementary financial arrangements (*e.g.* credit guarantee funds, agricultural insurance systems, vertical integration, manufacturer and trade credit) exist or could be developed in China which would be instrumental in addressing the credit problems in rural areas?
- Which successful examples and schemes from OECD and transition countries could be most suitable for China?

9:00-10:30 **Presentations**

	Economic and financial transformation of rural China and diversification of rural financial institutions	Mr. HE Guangwen, China Agricultural University, China		
	Challenges in government facilitated crop insurance	Mr. Jerry Skees, University of Kentucky, USA		
	Pre-conditions for successful contract farming and other trade/credit arrangements between agribusiness and farmers	Mr. Anthon Slangen, FAO		
	Innovations in micro-finance in South-East Asia	Mr. Ryu Fukui, Development Bank of Japan, Japan		
	Vertical contracting and farm finance: lessons from transition countries	Ms. Liesbeth Dries, Leuven University, Belgium		
10:30-10:45	Tea/coffee break			
10:45-11:00	Discussants: Mr. OUYANG Haihong, MoA, China; Mr. Fred Gale, ERS/USDA			
11:00-12:00	General discussion			

SESSION IV: Micro-credit institutions and arrangements for rural areas

Chair: Mr. HAN Jun, Director-General, DRC of the State Council, China

Issues for discussion:

- How to ease access to finance for small-scale farming and tiny businesses in rural areas, which lack collateral and are isolated from markets?
- What steps are needed to allow the spontaneously emerging rural micro-credit institutions to function properly within the overall financial system and overall financial regulatory policies?
- What are the examples and innovations that could be suggested to integrate informal institutions with more formal ones in line with the ongoing commercialisation of the rural economy?

12:00-12:45 **Presentations**

	Active informal financing in rural China: a case study of Rotating Savings and Credit Associations in a Chinese village	Mr. HU Biliang, RDI/CASS, China		
	Micro-finance, poverty alleviation, and financial reform in China	Mr. Albert Park, University of Michigan, USA		
	Attempts to implement micro-finance in rural China	Mr. DU Xiaoshan, Ford Foundation, China		
12:45-14:15	Lunch break: buffet lunch hosted by the OECD	r oundation, Cillia		
14:15-14:45	Presentations (continued)			
	Rural finance and micro-finance development in transition countries in South-East and East Asia	Mr. Ryu Fukui, Development Bank of Japan, Japan		
	Funding small businesses in Chinese Taipei: from informal micro-finance institutions to formal banking institutions	Mr. Thierry Pairault, CNRS, France		
14:45-15:00	Discussants: Mr. MA Xiaohe, SDRC, China; Mr. Ach Mr. Akira Konishi, DAF/OECD	im Fock, World Bank;		
15:00-16:00	General discussion			
16:00-16:15	Tea/coffee break			

<u>SESSION V</u>: Developing a sustainable and effective rural finance system in China: conclusions and policy recommendations

Chair: Mr. Neilson Conklin, ERS/USDA

Issues for discussion:

- What kind of institutional framework would be most suitable for rural finance in China?
- What steps are necessary in the medium term to develop such a framework?
- What are the preconditions for enhancing investment in rural areas?
- What is the link between the need for reform of rural finance and the on-going overall reform of the financial system in China?
- What should be the role of government within the reform process and thereafter?

16:15-16:45 **Summaries**

Mr. ZHANG Hongyu, Deputy Director-General, MoA, China Mr. Ken Ash, Deputy Director AGR/OECD

16:45-17:30 General discussion

17:30 Close of workshop

WORKSHOP ON RURAL FINANCE AND CREDIT INFRASTRUCTURE IN CHINA 13-14 October 2003, OECD, Paris

LIST OF PARTICIPANTS

AUSTRALIA

 Mr. Richard SISSON
 Tel: (33-1) 40 59 33 70

 Minister-Counsellor (Agriculture)
 Fax: (33-1) 40 59 33 94

Permanent Delegation of Australia to the OECD Email: richard.sisson@dfat.gov.au

4 rue Jean Rey 75015 Paris France

AUSTRIA

Ms. Christa BAUER

Attaché

Tel: (33-1) 53 92 23 42

Fax: (33-1) 40 50 87 05

Farman and Delegation of Austria to the OECD

Permanent Delegation of Austria to the OECD Email: christa.bauer@bka.gv.at

3, rue Albéric-Magnard F-75116 Paris

France

BELGIUM

Ms. Liesbeth DRIES Tel: (32-16) 326536 Research Associate Fax: (32-16) 326599

Research Group on Food Policy, Transition and Development & Department of Agricultural and

Environmental Economics

Leuven University Deberiotstraat 34 B-3000 Leuven

BRAZIL

Mr. Elisio CONTINI Tel: (33-4) 67 04 75 87 Coordinator Fax: (33-4) 67 04 75 90 Embrapa Labex Franca Email: contini@agropolis.fr

Avenue Agropolis

F-34394 Montpellier Cedex 5

France

Mr. Edilson GUIMARAES Tel: (55-61) 223 5909
Director of the Department of Agricultural Economy Fax: (55-61) 225 4726

Ministry of Agriculture, Livestock and Food Supply

Esplanada dos Ministérios, Bloco D, Sala 538

70043-900 Brasilia/DF

Email: edguima@agricultura.gov.br

CANADA

Mr. Brad GILMOUR

Team Leader – Asia Pacific and Technical Issues

International Agri-Food Analysis Agriculture and Agri-Food Canada

6th Floor

930 Carling Ave. K1A OC5 Ottawa

CHINA

Mr. CHEN Liangbiao

Director

Department for Sectoral Policy and Law

Ministry of Agriculture 11, Nongzhanguan Nanli

Beijing 100026

Mr. HAN Jun Director-General

Development Research Center of the

State Council

225, Chaoyangmennei Street

Beijing 100010

Mr. HE Guangwen

Director Center for Rural Finance & Investment Research

College of Economics and Management

China Agricultural University

Beijing Yuan Ming Yuan Xi Lu 2

Beijing 100094

Mr. MA Xiaohe

Deputy Director-General

State Development and Reform Committee

11B Jia, Xichengqu, MuXuDiBeiLi

Beijing 100038

Ms. LI Na

Division Chief

Department for Sectoral Policy and Law

Ministry of Agriculture 11, Nongzhanguan Nanli

Beijing 100026

Ms. LUO Ming Division Director

International Co-operative Department

Ministry of Agriculture

11, Nongzhanguan Nanli

Beijing 100026

Tel: (1-613) 759 7404

Fax: (1-613) 759 7036

Email: gilmourb@agr.gc.ca

Tel: (86-10) 6419 2732 Fax: (86-10) 6419 2777

Email: liangbchen@sohu.com

Tel: (86-10) 6523 7011 Fax: (86-10) 6523 7011

Email: hanjun@drc.gov.cn or hanjun@mx.cei.gov.cn

Tel: (86-10) 6289 3346, 13001035837

Fax: (86-10) 6289 3129

Email: heguangwen@sina.com

Tel: (86-10) 6390 8714 Fax: (86-10) 6390 8739

Email: pingzh@public.bta.net.cn or

mxhe2002@x263.net

Tel: (86-10) 6419 2782 Fax: (86-10) 6419 2777

Email: nanali8830@sohu.com

Tel: (86-10) 6419 2439 Fax: (86-10) 6419 2451

Email: luoming@mail.agri.gov.cn

Mr. OUYANG Haihong

Director

Department for Sectoral Policy and Law

Ministry of Agriculture 11, Nongzhanguan Nanli

Beijing 100026

Mr. ZHANG Hongyu Deputy Director-General

Department for Sectoral Policy and Law

Ministry of Agriculture 11, Nongzhanguan Nanli

Beijing 100026

FRANCE

Mr. Claude AUBERT Directeur de Recherche

Institut National de la Recherche

Agronomique (INRA)

Economie et Sociologie Rurales 65, boulevard de Brandebourg

94205 Ivry sur Seine

Mr. Thierry PAIRAULT Directeur de Recherche

CNRS

35, rue Pierre Brossolette

92400 Courbevoie

Mr. Georges WASZKIEL

Chef du Bureau des Relations Extérieures à l'UE

(BREUE)

Service des Relations Internationale Direction des Politiques Economique et

Internationale

Ministère de l'Agriculture, de l'Alimentation, de la

Pêche et des Affaires Rurales

3, rue Barbet de Jouy 75349 Paris 07 SP

GERMANY

Mr. Andreas KAPPES Project Manager Deutscher Genossenschafts-und

Raiffeisenverband e.V. Schellingstrasse 4

10785 Berlin

Mr. Daniel KOSS Graduate Student

University of Heidelberg

Raiffeisenstr. 3 59229 Ahlen Tel: (86-10) 6419 2729 Fax: (86-10) 6419 2777

Email: ouyang1966@sohu.com

Tel: (86-10) 6419 2738 Fax: (86-10) 6419 2777

Email: zhanghy@mail.agri.gov.cn

Tel: (33-1) 46 71 08 63 Fax: (33-1) 46 70 41 13

Email: Aubert.Cheng@wanadoo.fr

Tel: (33-1) 47 88 40 37 Fax: (33-1) 47 88 40 37 Email: pairault@ehess.fr

Tel: (33-1) 49 55 45 30 Fax: (33-1) 49 55 47 84

Email: georges.waszkiel@agriculture.gouv.fr

Tel: (49-228) 106 362 Fax: (49-228) 106 356 Email: A.Kappes@dgrv.de

Email: kossda@yahoo.com

Ms. Stephanie KUECH

Fellow/Postgraduate Program in International Affairs

Robert Bosch Foundation, German National Merit

Foundation Kamekestr. 19 50672 Koeln Tel: (49-221) 510 5362 Fax: (49-172) 26 555 81

Email: StephanieKuech@gmx.de

Mrs. Ulrike LASSMANN

Senior Project Manager Financial and

Private Sector Asia (China & Mongolia)

KfW Kreditanstalt für Wiederaufbau, Frankfurt

Palmengartenstrasse 5-9 D 60 325 Frankfurt Tel: (49-69) 7431 4132 Fax: (49-69) 7431 3609

Email: ulrike.lassmann@kfw.de

Dr. Wolfgang SALOMO Senior Co-operative Expert Deutscher Genossenschafts-und

Raiffeisenverband e.V. Schellingstrasse 4 10785 Berlin Tel: (49-431) 324 839 Fax: (49-431) 322 631 Email: salcons97@aol.com

HUNGARY

Dr. Iván RADÓ

Senior Counsellor Ministry of Agriculture and Rural Development

Kossuth Majos tér 11

H-1055 Budapest

Tel: (36-1) 301 4774 Fax: (36-1) 301 4662

Email: ivan.rado@fvm.hu

ITALY

Mr. Andrea PERUGINI

First Counsellor

Delegation of Italy to the OECD

50, rue de Varenne 75007 Paris

France

Tel: (33-1) 44 39 21 54

Fax: (33-1) 42 84 08 59

Email: perugini@rappocse.org

Ms. Carla DI PAOLA

Attaché

Agricultural Affairs

Permanent Delegation of Italy to the OECD

50, rue de Varenne

75007 Paris

France

Tel: (33-1) 44 39 21 61 Fax: (33-1) 42 84 08 59

Email: carla.dipaola@rappocse.org

JAPAN

Mr. Ryu FUKUI

Deputy Director General

International Cooperation Department

Development Bank of Japan 1-9-1, Otemachi, Chiyoda-ku

Tokyo 100-0004

Tel: (81-3) 3244 1998 Fax: (81-3) 3270 4099

Email: ryfukui@dbj.go.jp

Tel: (33-1) 53 76 61 71 Mr. Norio SATO First Secretary Fax: (33-1) 45 63 05 44 Permanent Delegation of Japan to the OECD Email: nsato@deljp-ocde.fr 11, avenue Hoche 75008 Paris France

NETHERLANDS

Mr. Gerard van EMPEL Tel: (31-30) 216 3670 Managing Director Fax: (31-30) 216 3677 Rabo International Advisory Services BV Email: RIAS@rn.rabobank.nl P.O. Box 17100 **UC B920**

3500 HG Utrecht Mr. Frans KRAGTEN Tel: (31-30) 216 2637

Director Multilateral Development Banks Fax: (31-30) 216 1992 Rabobank International Email: Frans.Kragten@rabobank.com Droeselaan 28, UCZ-6088

3521 CB Utrecht

NEW ZEALAND

Mr. Paul DICKIE Tel: (644) 463 5085 Associate Professor Fax: (644) 463 5084 Email: Paul.Dickie@vuw.ac.nz International Finance

Room 1003 Victoria Management School Victoria University of Wellington 23 Lambton Quay, P.O. Box 600

Wellington

UNITED KINGDOM

Mr. Richard BOULTER Tel: (44-20) 7023 0477 Fax: (44-20) 7023 0797 Team Leader Financial Sector Team, Policy Division Email: r-boulter@dfid.gov.uk

Department for International Development (DFID) 1, Palace Street

London SW1E 5HE

UNITED STATES

Division

Mr. Nielson CONKLIN Tel: (1-202) 694 5200 Director for the Market and Trade Economics Fax: (1-202) 694 5792 Email: NCONKLIN@ERS.USDA.GOV

Economic Research Service US Department of Agriculture

1800 M Street, NW Room N5120

Washington, DC 20036

Dr. Paul ELLINGER
Associate Professor
University of Illinois
803 Brighton
Urbana, IL 61801

Tel: (1-217) 333 5503 Fax: (1-217) 333 2312 Email: pellinge@uiuc.edu

Mr. Fred GALE

Economist

Economic Research Service

US Department of Agriculture

Room 5138

Tel: (1-202) 694 5215

Fax: (1-202) 694 5793

Email: FGALE@ERS.USDA.GOV

1800 M Street, NW Washington, DC 20036-5831

Lexington, KY 40546-0276

Pullman, WA 99164-6210

PO Box 646210

France

Mr. Albert PARK
Associate Professor and Associate Chair
Department of Economics
University of Michigan
Ann Arbor, MI 48109-1220

Tel: (1-734) 764 2363
Fax: (1-734) 764 2769
Email: alpark@umich.edu

Ms. Helen RECINOS
Advisor for Trade and Agriculture
Permanent Delegation of the United States to the OECD
19, rue de Franqueville
75116 Paris

Tel: (33-1) 45 24 74 28
Fax: (33-1) 45 24 74 84
Email: recinoshg2@state.gov

Mr. Jerry SKEES

Professor of Agricultural Economics

University of Kentucky

Tel: (1-859) 257 7262

Fax: (1-859) 257 7290

Email: jskees@uky.edu

310 Charles E. Barnhart Bldg.

Ms. Hong WANG
Associate Professor
Department of Agricultural and Resource Economics
Washington State University
Tel: (1-509) 335 8521
Fax: (1-509) 335 1173
Email: wanghong@wsu.edu

384

OTHER ORGANISATIONS

Asian Development Bank (ADB)

Mr. Tom MOYES Rural Financial Markets Specialist Asian Development Bank No. 6 ADB Avenue Mandaluyong City, 0401 Metro Manila Philippines

Ms. Betty WILKINSON
Microfinance Specialist
Governance, Finance, and Trade Division
East and Central Asia Department
Asian Development Bank
P.O. Box 789
Manila
Philippines

European Bank for Reconstruction and Development (EBRD)

Ms. Francesca PISSARIDES
Principal Economist
European Bank for Reconstruction and
Development
One Exchange Square
London EC2A 2JN
United Kindgom

FAO

Mr. Anthon SLANGEN
Senior Rural Finance Officer
Agricultural Management, Marketing and
Finance Service (AGSF)
Agricultural Support Systems Division
FAO
Viale delle Terme di Caracalla
00100 Rome
Italy

Tel: (63-2) 632 6406 Fax: (63-2) 636 2424 Email: rmoyes@adb.org

Tel: (63-2) 632 4664

Fax: (63-2) 632 2424

Email: bwilkinson@adb.org

Tel: (44-207) 338 6030 Fax: (44-207) 338 6110 Email: PissariF@ebrd.com

Tel: (39-06) 5705 4661 Fax: (39-06) 5705 6850

Email: Anthon.Slangen@fao.org

PlaNet Finance

Mr. Olivier ALLAIS Program Manager Asia-Pacific-CEE

PlaNet Finance

76, rue Faubourg Saint Denis

75010 Paris France

Ms. Amandine D'ARGOEUVES

Project Support Team PlaNet Finance

76, rue Faubourg Saint Denis

75010 Paris France

Ms. Rinako KUNISAWA

Communication/Fundraising Manager

PlaNet Finance China

No. 15 Xiwai Dajie Xinxing Dongxiang Zhouji Huaqiao Jiudian Rm N°1312

Beijing 100044

China

Ms. Amandine MONTEIL

Fundraising and Communication

Assistant/Asia Department

PlaNet Finance

76, rue Faubourg Saint Denis

75010 Paris France

Mr. Arnaud VENTURA

Executive Director

PlaNet Finance

76, rue Faubourg Saint Denis

75010 Paris France

World Bank

Mr. Achim FOCK

Senior Economist

World Bank

Room MC8-163 1818 H St., NW

Washington, DC 20433

USA

Tel: (33-1) 53 24 31 31 Fax: (33-1) 53 24 11 57

Email: oallais@planetfinance.org

Tel: (33-1) 53 24 31 31

Fax: (33-1) 53 24 11 57

Email: adargoeuves@planetfinance.org

Tel: (86-10) 88 36 39 46 / 7 Fax: (86-10) 88 36 39 44

Email: rkunisawa@planetfinance.org

Tel: (33-1) 53 24 31 31 Fax: (33-1) 53 24 11 57

Email: amonteil@planetfinance.org

Tel: (33-1) 53 24 31 31 Fax: (33-1) 53 24 11 57

Email: aventura@planetfinance.org

Tel: (1-202) 473 9974 Fax: (1-202) 522 1675

Email: afock@worldbank.org

Mrs. Renate KLOEPPINGER-TODD Tel: (1-202) 473 7921 Rural Finance Adviser Fax: (1-202) 522 3308 Email: rkloeppingertodd@worldbank.org

Agriculture & Rural Development Department

World Bank 1818 H St., NW Washington, DC 20433 **USA**

Mr. David SCOTT Tel: (1-202) 473 7481

Email: Dscott@worldbank.org Manager

China Financial Sector Program World Bank Room MC8-163 1818 H St., NW Washington, DC 20433

USA

Mr. Jacob YARON Tel: (1-202) 473 0416 Senior Rural Finance Adviser Fax: (1-202) 522 1557

EASFS World Bank Room MC8-245 1818 H St., NW Washington, DC 20433

USA

Email: Jyaron@worldbank.org

OTHER PARTICIPANTS

Mr. JIANG Guoli Student University of Amiens 94, av. Du Général de Gaulle 92140 Clamert

France

Ms. LIN Yue **DEA RCD EHESS EHESS** 33, avenue du Maréchal-lyautey 75016 Paris France

Tel: (33-1) 42 88 95 54

Tel: (33-6) 77 04 77 88

Email: Yorke-lin@hotmail.com

Email: JGLcoly@hotmail.com

OECD

2, rue André-Pascal 75775 Paris Cedex 16 France

Secretary-General's Office

Mr. Kiyo AKASAKA Deputy Secretary-General

Tel: (33-1) 45 24 80 30 Fax: (33-1) 44 30 63 54

Email: Kiyo.AKASAKA@oecd.org

Directorate for Financial and Enterprise Affairs

Mr. Akira KONISHI Head of Unit, Outreach Unit for Financial Sector Reform

Tel: (33-1) 45 24 18 38 Fax: (33-1) 45 24 18 33

Email: Akira.KONISHI@oecd.org

Mr. John THOMPSON Counsellor

Tel: (33-1) 45 24 76 16 Fax: (33-1) 45 24 91 51

Email: John.THOMPSON@oecd.org

Ms. Marjanna BERGMAN Assistant, Outreach Unit for Financial Sector Reform

Tel: (33-1) 45 24 78 59 Fax: (33-1) 45 24 18 33

Email: Marjanna.BERGMAN@oecd.org

Directorate for Food, Agriculture and Fisheries

Mr. Stefan TANGERMANN Director

Tel: (33-1) 45 24 95 00 Fax: (33-1) 45 24 78 34

Email: Stefan.TANGERMANN@oecd.org

Mr. Ken ASH Deputy Director

Tel: (33-1) 45 24 95 20 Fax: (33-1) 45 24 78 34 Email: Ken.ASH@oecd.org

Mr. Wayne JONES Head of Division, Agricultural Policies in

Non-Member Economies Tel: (33-1) 45 24 59 58 Fax: (33-1) 44 30 61 19

Email: Wayne.JONES@oecd.org

Mr. Andrzej KWIECINSKI Senior Analyst, Agricultural Policies in

Non-Member Economies Tel: (33-1) 45 24 95 08 Fax: (33-1) 44 30 61 19

Email: Andrzej.KWIECINSKI@oecd.org

Mr. Michael RYAN Analyst, Agricultural Policies in Non-Member Economies

Tel: (33-1) 45 24 85 58 Fax: (33-1) 44 30 61 19

Email: Michael.RYAN@oecd.org

Ms. Olga MELYUKHINA Consultant, Agricultural Policies in Non-Member Economies

Tel: (33-1) 45 24 95 61 Fax: (33-1) 44 30 61 19

Email: Olga.MELYUKHINA@oecd.org

Ms. Anita LARI Assistant, Agricultural Policies in Non-Member Economies

Tel: (33-1) 45 24 99 00 Fax: (33-1) 44 30 61 19 Email: Anita.LARI@oecd.org

Ms. Stefanie MILOWSKI Assistant, Agricultural Policies in Non-Member Economies

Tel: (33-1) 45 24 95 32 Fax: (33-1) 44 30 61 19

Email: Stefanie.MILOWSKI@oecd.org

Centre for Co-operation with Non-Members

Mr. Frédéric LANGER Head of Unit, Asia and China Programmes Unit

Tel: (33-1) 45 24 76 68 Fax: (33-1) 45 24 94 48

Email: Frederic.LANGER@oecd.org

Mr. Sean DOUGHERTY Administrator, China Programme

Tel: (33-1) 45 24 82 91 Fax: (33-1) 45 24 85 11

Email: Sean.DOUGHERTY@oecd.org

Directorate of Employment, Labour Market and Social Affairs

Ms. Marie-Ange MAURICE Consultant, Non-Member Economies and

International Migration Division

Tel: (33-1) 45 24 90 68 Fax: (33-1) 45 24 76 04

Email: Marie-Ange.MAURICE@oecd.org

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