Paulson Policy Memorandum

Redesigning Agricultural Credit Delivery in China

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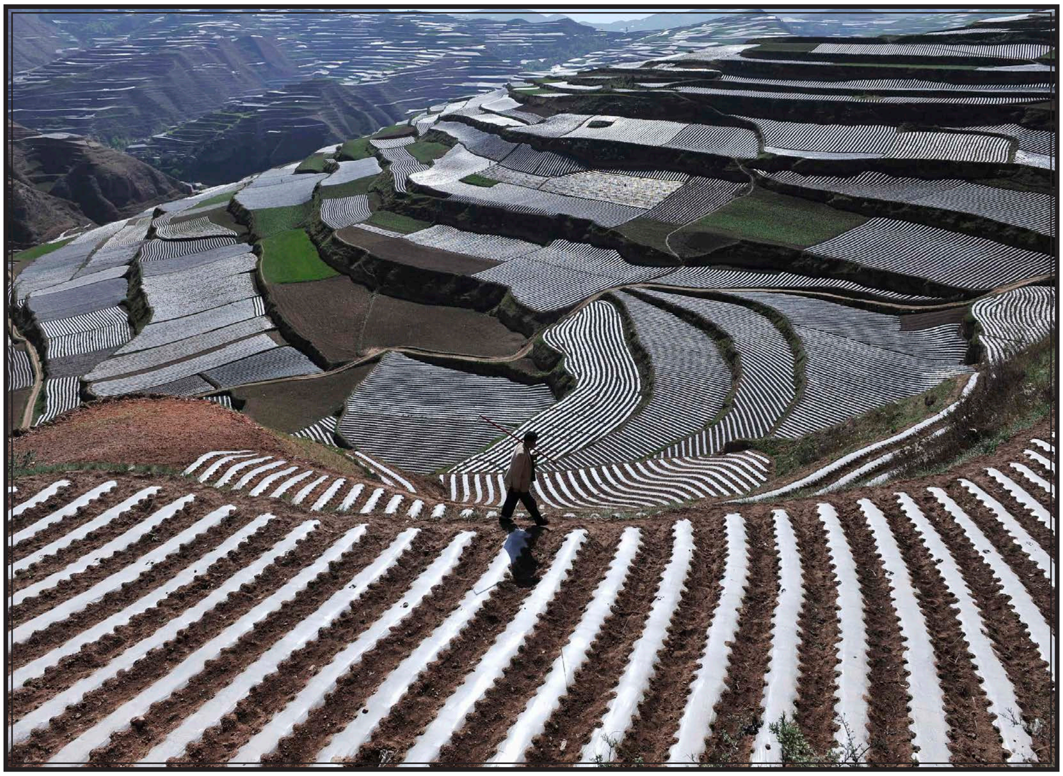

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Introduction

The rural credit financial delivery system in China is a blend of capitalistic, market-oriented finance and social responsibility. Under current reforms, many Rural Credit Cooperatives (RCCs) are converting to joint stock Rural Commercial Banks (RCBs) and, in the process of maximizing shareholder value, are in many instances reducing lending to farm households.

Recent reforms now permit village and township banks, branches of city banks, micro-credit companies and lending-only companies to make loans in rural areas. But increasing the overall supply of credit to rural areas does not necessarily imply an increase in the supply of credit to production agriculture or agriculturally related businesses. Indeed, there are many townships throughout China that still have no or limited access to formal credit.

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To be sure, China is actively seeking changes to its institutional structures, and at the highest levels has appointed offices for financial inclusion to promote policies and programs aimed at improving the breadth and depth of financial services to farmers, value chains, and agriculturally related businesses. These include direct support to transform mutual self-help groups to RCC supported cooperatives, the designations by RCCs of credit worthy villages, the use of tax laws to encourage joint stock village and commercial banks to establish branch offices in poverty zones, establishing a regulatory framework for mobile and Internet financial services, and, in what might be the most significant structural change in China's agricultural economy in recent years, the promulgation of laws to relax restrictions on transacting land use rights and issuing mortgages against land use rights.[1]

Yet despite these financial innovations and reforms, China still faces an ever-widening gap in urban-rural incomes. Deepening the financial markets has not resulted in the requisite spillover effects to reverse income inequality that economic theory predicts.

Moreover, the problems of income, capital, and productive inequality are directly related to China's broader goals of urbanization, increased commercialization of agriculture, and the development and streamlining of agricultural supply and value chains to meet domestic and global food demand.

The credit challenges facing China are daunting, with credit demand required at the intensive margin to increase productivity per unit of land and at the extensive margin to meet the demands of farm size expansion and agribusiness development. With about 250 million farm households representing about 750 million persons, the amount of capital required to achieve wins in all of these policy goals is substantially greater than the amount that China's commercialized credit system is able, or indeed willing, to provide.

This memorandum explores whether the genesis of rural credit as described above is healthy for agriculture and rural lending. On the merits of economic efficiency, the answer is probably yes. But an uncoordinated system of costly rural credit delivery will likely be unattractive to many financial institutions and thus may prove to be a hindrance to the development of the formal financial sector as a whole. In terms of social responsibility, uncoordinated agricultural lending can lead to technical and allocation inefficiencies that can only exacerbate the problems that policy is attempting to resolve.

Should China consider a nationally coordinated approach to delivery of agricultural credit as is found with the American Farm Credit System or Canadian Farm Credit Corporation (FCC) and government supported credit elsewhere? While acknowledging the very real political and economic sensitivities and difficulties, this memo argues for a new government-sponsored enterprise for sourcing, coordinating, and distributing agricultural credit, drawing in part off the experience of the *Nong Ben Ju*—a program from the mid-1930s.

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What Was The *Nong Ben Ju*?

Initiated in 1936, *Nong Ben Ju* was a program of agricultural development designed to coordinate agricultural activities at the micro and macro levels, including the provision of agricultural credit.[2] Administered through the Agricultural Credit Administration, it was to be the culmination of many years of effort to bring agriculture, agricultural development, and agricultural reconstruction into the financial system.

Nong Ben Ju included elements of the German-based Raiffesen system toward agricultural cooperation and the American Farm Credit System. But in many respects, *Nong Ben Ju* went further in the sense that it aimed not just to promote access to credit and to support financial institutions for agriculture, but also to promote and direct Chinese agricultural policy with a very visible hand.

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In terms of farm credit, *Nong Ben Ju* was designed around a tripartite funding program, including direct transfers from the government, capital contributions from the four policy banks of the era backed by commercial paper (including the Farmers Bank of China, founded in 1933 and one of the four largest banks of the Republican period), and the issuance of bonds secured by the assets of system banks. Initial capital would be provided to rural savings and loans, cooperatives, and pawnshops.

To maintain liquidity and credit reserves, allowances were made for rediscounting and remortgaging farm loans. In addition, the Farm Credit Bank would promote a network of granaries and other storage facilities that would be able to make loans to farmers secured on future harvest.

For various reasons, not least of which the war with Japan that began in 1937, *Nong Ben Ju* did not come to fruition. Debate ensued as to whether such an entity should include commercial bank interests in making loans to non-agricultural enterprises or whether it should follow the American Farm Credit Administration and restrict credit activities to farms, agriculturally related businesses, and rural development.

Regardless of intent, by 1948 there was still no active legislation on an agricultural credit system in China, although it was quite clear that a system similar in design to the American cooperative system was held in favor during the Republican period. For example, the Committee for Planning on Agricultural Credit of the Farmers Bank of China sought to coordinate basic agricultural agencies and institutions.

This included unifying the agricultural credit system by centralizing the upper echelons of the system with the authority to issue (and secure) bonds to supplement deposit capital to make agricultural loans. The effort also focused on specializing meso-level financial institutions and organizations, as well as unifying banks, credit cooperatives, and savings and loans at the micro level.

With this brief history, it is evident that the competing objectives of a robust and efficient financial sector on the one hand, and ensuring farm households welfare, commercializing agriculture, and promoting rural development on the other, are not new to China.

A New System of Agricultural Finance in China

Historical experiences in Western agricultural finance suggest that it is often necessary to establish a publicly supported and regulated financial system for agriculture that operate in parallel and in tandem with a competitive banking system. Examples are numerous, including the Landschaft in Germany, the Credite Agricole in France, the Farm Credit Administration in the United States, and the FCC in Canada.[3]

Moreover, if Western experiences are to also hold true in China, then a system of agricultural lending will grow, develop, evolve, and mature with the agricultural economy.[4]

It isn't just the West, however. China itself had a similar idea of centralized coordination in the aforementioned *Nong Ben Ju*, though one that never actually materialized. The question, then, is whether it is time for China to again consider a new centralized and coordinated system for agricultural credit.

But before answering that question, a brief explanation of how the current systems work in the West and China is merited.

Role of RCCs in Agricultural Lending

The institutions with the farthest reach in rural China today are the RCCs and RCBs. The cooperatives structure, however, has been changing rapidly in recent years as they convert to banks, though these conversions are primarily for purposes of governance and access to capital. In most cases, the RCBs are not withdrawing entirely from rural lending but shoring up capital to increase lending.

The rural credit cooperative system in any contemporary Chinese province is managed by the provincial Rural Credit Cooperative Unions (RCCU) and regulated by the China Banking Regulatory Commission (CBRC) in Beijing. There is no federal coordination between RCCs in different provinces and regions. Since RCCs across China have similar goals, there may be an advantage to establishing a high-level federal entity based on regional characteristics.

Such a federation would need to be flexible enough so that any provincial RCCU can carry on its business as usual, but with a common goal of social responsibility that can be used to coordinate both agricultural and credit policy to rural areas across China.

Consider a comparative example: In the United States, the farm credit system was based on 12 regions, with each region comprised of multiple states. Local demand for credit was passed through to the regional land bank, and cumulative demand was then coordinated by the centralized Farm Credit Administration. Each region had autonomy in setting interest rates according to risk, but all regions were linked by a board of governors and a common law.

The FCC of Canada, however, operates in a slightly different way. FCC offices are located in the agricultural growing regions that serve as local supply centers. Farmers' loan requests are made and approved through the provincial offices and in turn the loan request is forwarded to the federal FCC office, which provides the funds.

Such a system operates outside of the normal banking system but it also competes with that system. From a social responsibility perspective, the system was designed so that farmers' access to credit was not contingent on the number of rural banks, the deposits in those banks, or prevailing economic conditions. This ensured that farmers always had a source for credit.

As indicated, both the existing Canadian and American farm credit systems must compete with their respective commercial lenders in terms of interest rates and service delivery and are subject to the same lending standards as the commercial banks.

In China today, three central players dominate rural and agricultural lending: the RCCs, the Agricultural Bank of China (ABC)—one of the big four banks—and the Agricultural Development Bank of China (ADBC). Micro credit corporations, village and township banks, and credit-only financial institutions also have some influence. Current Chinese policy encourages the RCCs to convert to RCBs within the next few years, though clearly not all are able to do so.

The ABC was, until its recent public listing, wholly state owned but has not operated as a policy bank in recent years. But the central government still retains some degree of influence to encourage ABC to boost lending to agriculture. The only true policy bank is the ADBC, but its mandate is to finance rural infrastructure and certain commodity sectors beyond the farm gate—for example, for processing.

How Would Such a System Work in China?

Drawing lessons from the West and from its own history, China needs to set up a unique and dedicated system of agricultural credit for good and bad years. This would be a permanent but flexible system that is fluid from the bottom up and the top down in a coordinated way. Such a system would preserve the autonomy of the participating rural financial institutes at the local/micro level, integrate the rural banks at the meso level, and create a new government entity at the macro level.

The general structure of this integrated system, comprised of new entities, is detailed below (see Figure 1).

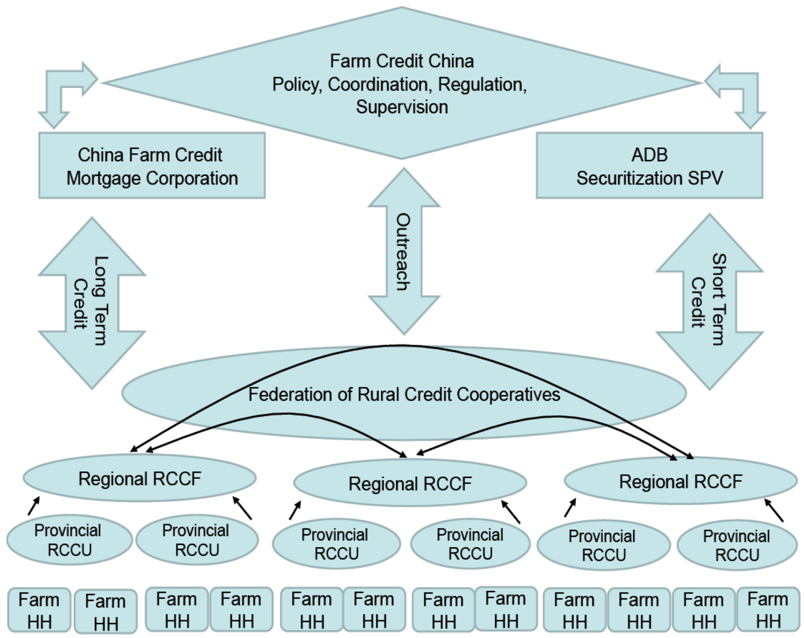
• Farm Credit China: This would be a national oversight institution, a parastatal organization with the sole purpose of recommending policy, coordinating the farm credit system, providing regulatory guidance, and supervising the system banks. Many of these activities are already housed within the CBRC, so there may be potential to leverage synergies by placing this entity within the CBRC.

• China Farm Credit Mortgage Corporation: This entity would establish a bond market to increase access to long-term credit for agricultural and food businesses and ultimately to raise the capital for transactions in land and forestry user rights, should such transactions be permitted in the future.

• Federation of Rural Credit Cooperatives (FRCC): This would be a publicly supported, central-level organizational body composed of regional Rural Credit Cooperatives Federations (RCCF) that acting as the intermediary between the provincial RCCU and Farm Credit China.

The regional RCCF would be a body comprised of the executive members from two or more provincial RCCUs. The purpose of the RCCF would be to gather information, disseminate outreach, and direct policy for a multi-provincial agricultural region. In some sense, this structure is analogous to the US Federal Reserve system of regionally based branches.

Figure 1. A Schematic for a Modified Credit System for Rural China



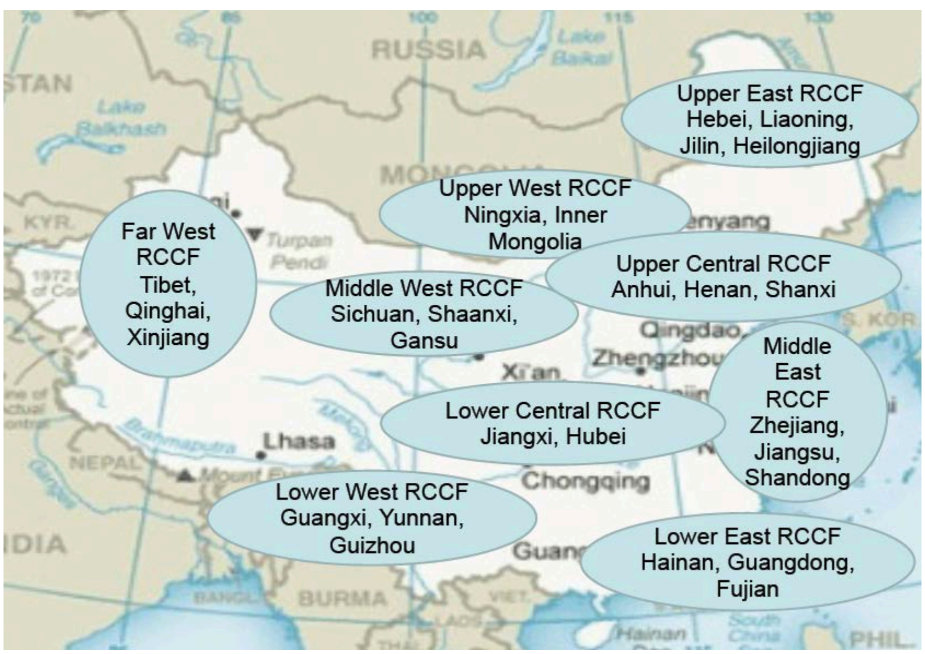
Source: Author.

The advantage to defining regional RCCFs would be to reduce the number of independent policy recommendations feeding into the FRCC. In addition, by defining regional authority, public policy can avoid the "one-size-fits-all" approach, thereby permitting, as in Canada, targeted credit policies to regions with reasonably homogenous agricultural conditions and risks.

In addition to these three entities we recommend an expansion of the mandate of the ADBC to securitize surplus deposits through a special purpose vehicle (SPV) in order to supply short term credit to high-demand/ low supply areas. The SPV is a unique entity that acts as an aggregator on behalf of RCCs or other financial institutions with excess deposits in low demand areas, and RCCs or banks in high demand areas but with loan to deposit ratios at or near the regulatory maximum.

Securitization in this context can refer to certificates of deposit and repurchase agreements issued by borrowing institutions that are performance-secured by mortgages/ loans receivable. Reserve capital in the SPV can be accumulated through small fees or interest charges, and by government-sponsored performance insurance (see more details below).

Figure 2. Proposed RCCF Groupings



Source: Author.

Geographic Representation of RCCFs

Based on the propsed structure, nine separate RCCFs covering the lower, middle, and upper regions of east, central, and western China (see Figure 2).[5] Of course, these provincial demarcations are discretionary and in fact should be designed around the principles of contiguous states and common crop portfolios, topography, agronomic conditions—including weather patterns—and industrial patterns.

The RCCFs would meet quarterly each year to ensure that changing conditions are dealt with expeditiously. Such meetings should involve the gathering of intelligence from each provincial RCCU member on credit conditions, causes, and effects. In as much as confidentiality and private business information can be maintained, aggregate data would be compiled and any recommendation for centralized action recorded. Such action could include policy recommendations on credit, credit products, additional assistance, emergency and disaster aid, research, and survey work, among others.

On a rotating basis, the chairs of each RCCF would meet collectively with the central FRCC on a quarterly basis and within 30 days of the regional RCCF meeting. At this meeting, the credit and ground conditions of each region would be presented and compared. Common elements could then be synthesized into a common policy framework for action.

The policy framework, including estimates for short- and long-term credit facilities, would be passed on to Farm Credit China which would negotiate recommendations with the central government, including the Ministry of Agriculture, People's Bank of China (PBOC)—the central bank—and CBRC. Briefs would also be provided to ADBC and the China Farm Credit Mortgage Corporation.

Interlinked Financing of SMEs with Securitized Financial instruments

One of the advantages of having such a farm credit system is that it would have the flexibility to coordinate, syndicate, and originate large money loans to small and medium-sized enterprises (SMEs). Currently, the ability of SMEs to access short-term working capital is inadequate (see Figure 3).

A typical SME in China may have thousands of farm households providing goods and services under contract. As part of the contracting process, however, many firms, such as food firms, require a vertical linkage between the processing plant and the farm household to ensure that the quality of goods being produced is homogenous and satisfies specific growing, cultivation, best management practices,and times for delivery and payment, among others.

To do this, SMEs must provide many of the inputs to the farmers on account, which means that vast amounts of short-

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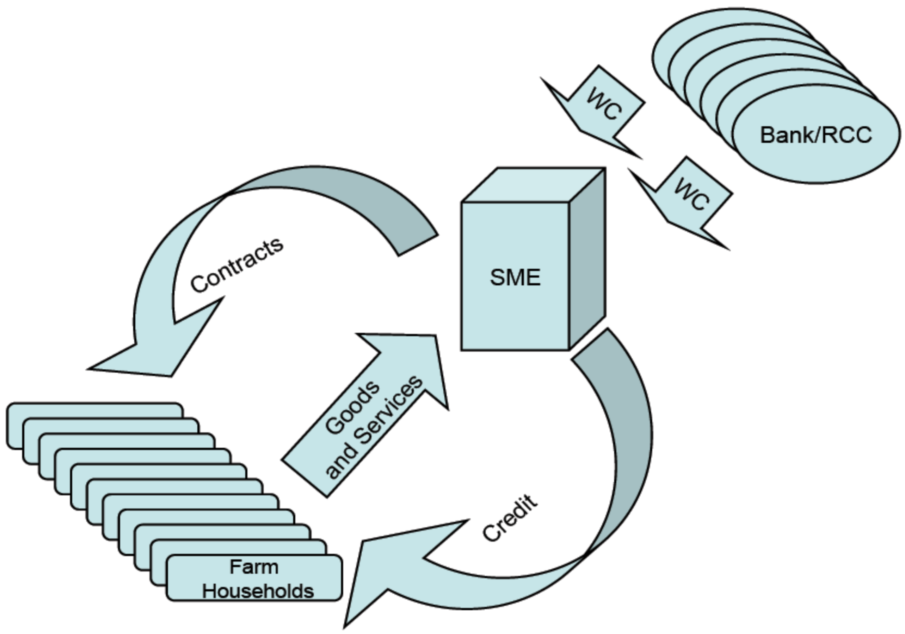
Figure 3. How Agribusiness Firms Currently Contract with Farm Households



Source: Author.

term working capital are being tied up in direct and indirect credit facilities to farmers.

To meet these needs, SMEs in China must deal with many farmers, each of which requires some form of security or guarantee. For the most part, financial institutions will not lend against accounts receivables or other factors. This means that the pledge is often in terms of the physical plant. Using long-term physical assets to secure short-term debt on a revolving basis does not satisfy the liquidity matching principle and in fact reduces the ability of the SME to acquire long-term credit facilities.

In essence, SMEs must take on a role that should and could be fulfilled by the RCC. But because of the risk in dealing with farmers, even when farmers have a bona fide contract, lending to farmers is believed to be prohibitive.

In addition to farmer risks, some RCCs or RCCUs simply would not have enough deposits to lend out to all of the farmers who have production contracts with an SME. To obtain the credit would, in some cases, require negotiating with multiple RCCs and banks in order to borrow the necessary funds to lend out. But these loans would not be viewed as riskless and would require some market adjustment for risk.

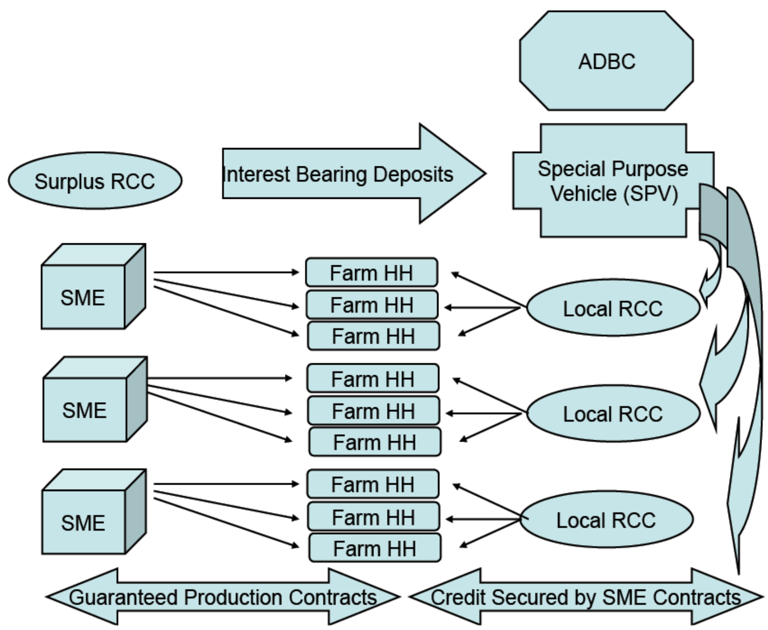
A new system can be put in place and work more effectively in addressing these challenges (see Figure 4). For instance, one potential solution is to use an already existing policy bank, such as the ADBC, for this purpose. As noted above, ADBC could create an SPV for financing the farm household-linked working capital requirements of SMEs. This SPV could in turn be financed through short-term interest bearing deposits from RCCs (or other banks), as well as funds from the PBOC and specially allocated poverty alleviation funds.

SMEs would be required to sign a production contract with the farmer, stipulating the product to be delivered, the quality standard of the product, including propagation and cultivation requirements, the dates by which the product is to be received and the quantities expected, and a stated price. The contract would also stipulate the inputs required—and the cost of those inputs if purchased from an SME or its suppliers.

The contract standard should be preapproved by the ADBC and the managers of the SPV. It should also have regional portability so that the contract will be recognized as chattel by RCCs in regions different from where the SME is located. The contract should also stipulate certain punishments and penalties for farmers not fulfilling the terms of the contracts.

With the contract in hand, the farmer could then receive from the local RCC an advance on delivery no greater than half the contract value. The loan awarded would be recorded and forwarded under

Figure 4. Proposed System of Agricultural Finance



Source: Author.

seal to the SME, which would then pay the RCC directly from the grower proceeds.

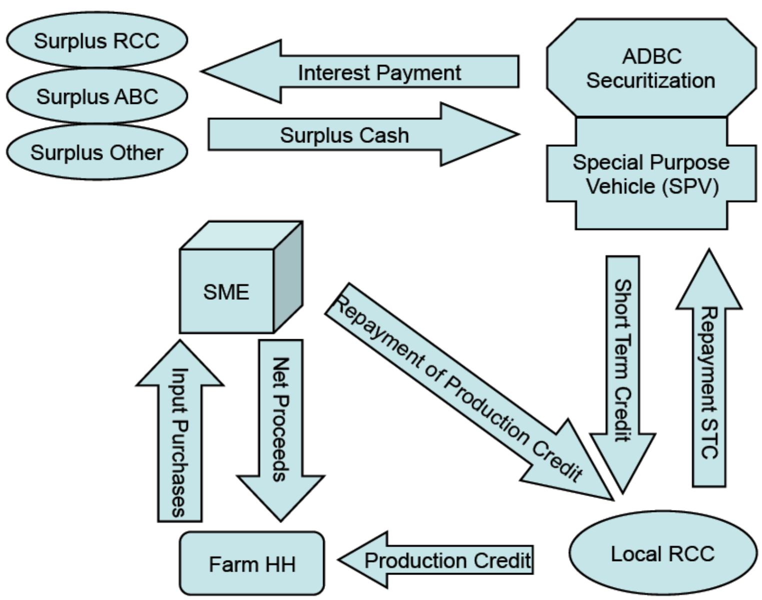
Figure 5 shows the flow of funds to SMEs. While the securitization of SME working capital will take place among RCCs because of their extensive network in rural areas, there is no reason to exclude other financial institutions including the ABC. Funds would be transferred from the surplus banks to the ADBC, which securitizes the funds through the SPV into an interest-bearing note. To encourage investment, this note should be of Tier 1 quality.

The terms of the contract determine the amount of production credit required. Once the contract is authorized, the farmer takes the authorized contract to the local RCC, which then advances funds equal to the maximum of the actual anticipated costs of production, or 50 percent (or some other predetermined rate) of the contract value (contract price times contract quantity). When the farmer delivers on the contract, the SME returns full principal and interest to the local RCC, and then the net proceeds to the farmer. The local RCC delivers the payment, less fees and interest, to the SPV. The SPV then pays interest to the surplus banks holding the balance for redemption of the securitized notes or for further reinvestment.

Meeting Long-Term Credit Needs

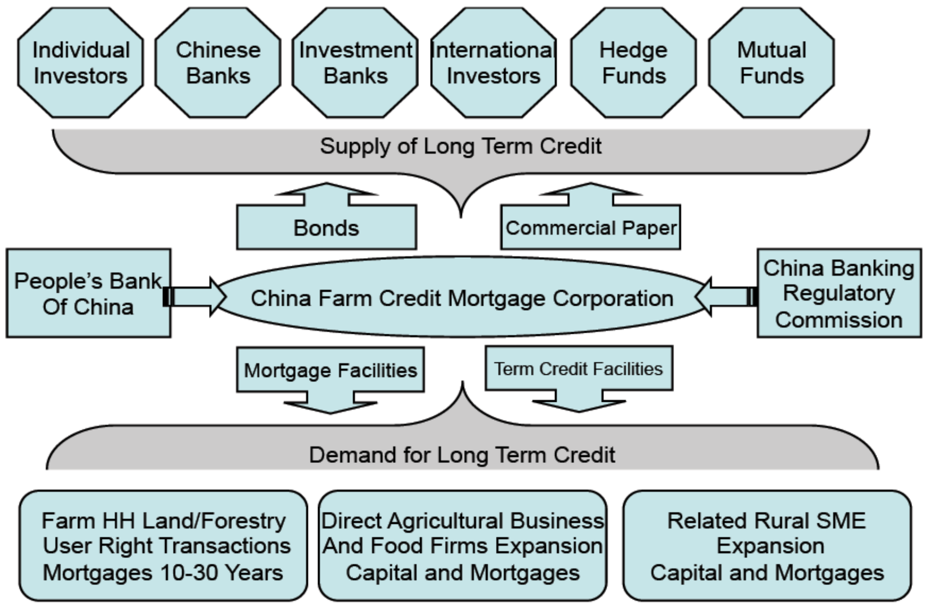
If there is one thing to be learned from the European and US experiences, it is

Figure 5. Cash Flow Transactions of Proposed Financing of SMEs



Source: Author.

Figure 6. Solution to the Problem of Long Term Credit in Rural China



Source: Author.

that in developing a financial sector, the growth of the agricultural economy was constrained by the issuance of long-term mortgages and amortization. The same is true in China today. At the farm level in China, capital is restricted to short terms of usually less than three years, which requires capital investment decisions be postponed until enough savings can be accumulated. This is costly not just to the farmer but also to the sustainable growth of the agricultural economy.

Likewise, many agribusiness, food, and forestry firms cannot get long-term debt for capital expansion and must delay growth until accumulated retentions are sufficient to underwrite the capital costs. This is costly not only to shareholders, but also the development of domestic and export markets for agricultural products. Similar constraints hold for other rural SMEs involved in a large number of manufacturing processes.

Concept and Structure of the China Farm Credit Mortgage Corporation

In the United States, bonds are issued on behalf of rural stakeholders and secured by the value of the underlying land and assets. There is a simple structure where farmers and agricultural businesses demand credit through the local farm credit banks, which, upon due diligence, make a request for funds to the farm credit funding corporation.

The corporation issues bonds to the public through a network of investment banks and brokerages, and the proceeds are funneled through the farm credit systems to the farm credit banks, which then issue the mortgages or notes.

Figure 6 depicts the creation of a new but similar structure for China, which would be called the China Farm Credit Mortgage Corporation (CFCMC). (In an alternative scenario, an existing institution such as ADBC can be used.)

CFCMC would be regulated by the CBRC and brought under the political influence of the PBOC. The main function of the CFCMC would be to act as the integrator between long-term credit demand and supply. It would issue bonds secured by the agricultural real estate assets on which the mortgages and credit instruments are based, record all account information and track market conditions, redeem bonds, pay coupon interest, audit credit quality with respect to underlying security values, and transfer money between investors and lenders.

Investors can also buy long-term bonds ranging from 5 to 30 years, which would typically be issued to the public through investment banks at a daily auction (bid-ask) and at an appropriate discount to ensure that the investment banks receive a reasonable return.

But the CFCMC could also issue bonds directly to the public and other legal entities. Depending upon the terms required by the demanding businesses and the risk quality of the securities provided, the CFCMC could also issue commercial paper with adjusted terms and market price of risk. The coupons would be tied closely to the posted rates of the RCC, ABC, and other rural lenders. But because of the inherent risks of term credit and the time value of money, it is anticipated that coupons would be 100 to 300 basis points (2-3 percent) higher than the legal rates on operating credit in the same markets.

The prospective CFCMC would act as a clearinghouse in what might be best described as an over-the-counter market (OTC) for agricultural and rural credit. But its interface with the general investment community would ensure that the bonds would ultimately find a correct market price.

The investment community will ultimately arbitrage between the risks and returns of CFCMC-issued financial instruments and alternative investment opportunities to determine the market price for the bonds. But it should also be recognized that as an investment vehicle, a CFCMC bond would not, in general, be highly correlated with the market pool of investments because the general inelasticity for food demand ensures that, above all others, the food economy will never suffer a full economic collapse.

While it is unclear as to how, ultimately, an agricultural land market would work through transactions on land-use rights, the general trend is that productive agricultural land rises in the long run. However, agricultural land price bubbles have periodically occurred in the West, and so it is important that Chinese regulators identify any emergent price bubbles and price the security value of the bonds prudentially and accordingly.

Conclusion and Recommendations

Proposing a new government-sponsored enterprise for sourcing, coordinating, and distributing agricultural credit is to some extent daring. It is an idea undoubtedly fraught with political and economic sensitivities and difficulties in modern China. But like *Nong Ben Ju* of the Republican era, which was seen as an imperative in years past, the rural-urban divide in terms of access to credit must be dealt with not in a piecemeal manner, but in a systematic way and on a national level.

What this memorandum ultimately recommends is that the current network of RCCs and other agricultural financial institutions across China be nested under a single umbrella. This is not to suggest in any way that the nature of these institutions should change in terms of structure and governance nor that the cooperative standard or the bank standard be altered from its present course. But the system must not be so rigid that it prevents innovations that are effective in one region from reaching other areas. Moreover, the rules that bind financial institutions at the provincial level need to be relaxed so that the same set of regulations holds for all.

The rural-urban divide in terms of access to credit must be dealt with not in a piecemeal manner, but in a systematic way and on a national level.

A new system could also assist in the transformation of the RCCs, especially those in the most economically troubled areas of China. Of course, there is question of whether perpetually loss-making RCCs should continue to exist at all, but in closing inefficient RCCs, the number of underserved areas would increase. Put differently, until a sound system of credit emerges in China, the social benefits of keeping remote and unprofitable RCCs operating, even at a cost to the public, may well be warranted in the interim.

In the longer term, however, which may in fact be measured within years, the FRCC can establish policies and pilot new programs to serve these areas. One possibility is that the system facilitates mergers and acquisitions (M&As) so that well-run RCCs acquire the assets of poorly run RCCs. Capital for M&A could be obtained from within the system. Other RCCs may recognize synergies between themselves, so they would merge to create larger, more cost efficient delivery systems. If it is more efficient to convert RCCs into joint stock Rural Credit Banks, as is the current trend in China, then this should not materially affect the basic coordinating mechanism.

Another advantage of a new, systemic approach would be to encourage and facilitate information sharing. The

CBRC has already initiated a program in Guangxi province through which a risk rating questionnaire is completed by all potential borrowers, entered into a computer system, and shared between ABC and RCC. Leveraging information technology and information exchange can dramatically improve transparency and accuracy on the credit worthiness and risk rating of clients. As indicated, measures are already in place to construct such a system.

What is proposed here is a template and should be viewed as such. The proposed new entities, of course, are not fixed, and neither are the proposed regional clusters. The functionality of long and short-term securitization can be modified as well. Moreover, while this memo has focused only on RCCs and RCBs, there is no reason why this system cannot also include the ABC.

Ultimately, however, it is quite evident that credit delivery to Chinese farmers and rural businesses needs to be examined through a different lens. The system-wide approach proposed here can, at a minimum, serve as a useful blueprint from which a new rural credit system could emerge.

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