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New Directions in China's Agricultural Lending

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Abstract

China has substantially boosted lending to farmers and agribusinesses in recent years. The balance of loans to farmers doubled between 2001 and 2005. Loans for agribusinesses and rural infrastructure rose as well. Rural credit cooperatives and banks that lend to agriculture are being reformed and commercialized but agricultural lending is still largely policy-driven. The boost in farm lending is one of several policy initiatives to aid farmers. Chinese agriculture remains dominated by extremely small farms using little physical capital, but rising investment is helping the sector diversify and is improving the quality and safety of agricultural produce. The campaign to inject capital into rural China is enabled by an abundant supply of domestic savings and large inflows of foreign investment. The agricultural lending campaign is likely to continue as long as China's economy continues growing.

Keywords: China, agricultural, loans, rural, finance, banks, credit cooperatives, credit, investment, policy, farms, farmers, micro loans, ERS, USDA

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Introduction

China's rural financial institutions are channeling large volumes of financial capital to the country's agricultural sector as part of a comprehensive policy aimed at boosting the incomes of rural households.

China is trying simultaneously to remold rural banks and credit cooperatives into financial intermediaries that operate more like commercial banks and to pressure these institutions into funneling large amounts of cash to rural areas. Rural financial institutions have adopted many trappings of commercial banks, but they are still effectively controlled by the government, and lending decisions often reflect policy initiatives and development strategies.

The rapid rise in agricultural lending is one of many measures taken in recent years to solve China's "three rural problems," a phrase that refers to closing the widening gap between urban and rural incomes.[2] China has pushed its Rural Credit Cooperatives (RCCs) to make more loans to small farmers, and some loans from state-owned commercial and policy banks are earmarked for agribusinesses and agricultural infrastructure projects.

[2]"Three rurals" refers to rural people, rural areas, and agriculture. In Chinese, all three of these terms contain the character *nong*, which can be translated as either "rural" or "agriculture." "Solving the three rural problems" is a slogan adopted by the Communist Party to exhort officials to raise rural incomes, improve agricultural production, and develop rural areas. "Three rural problems" rhetoric has been widespread in news media and Communist Party documents, coinciding with the year-by-year widening of the gap between urban and rural incomes and signs of rural unrest.

This report describes China's agricultural lending policies and recent trends in lending to farms and agribusinesses. The report assesses the impacts on Chinese agricultural investment and input expenditures, and it describes the role of Chinese financial institutions in carrying out government policy.

Agricultural Lending Doubled in Four Years

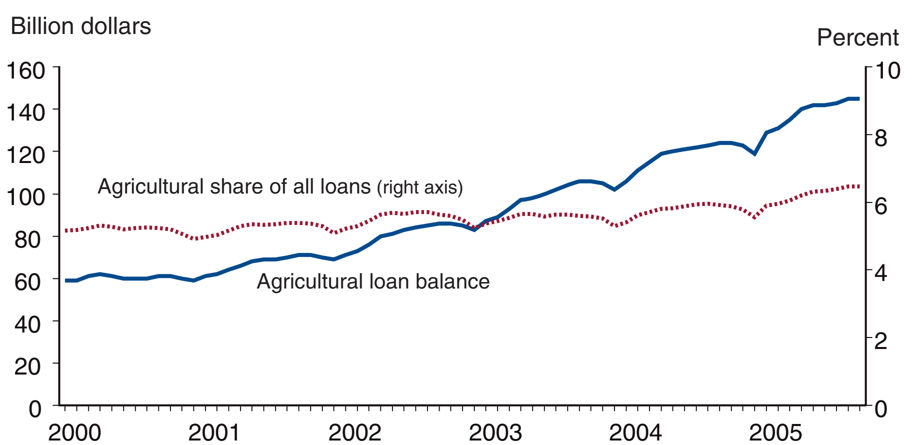
The balance of agricultural loans in China doubled in the 4 years from 2001-05 (fig. 1). China's agricultural loan balance reached the equivalent of $145 billion in September 2005, up $21 billion (17 percent) over the balance from a year earlier.[3] In mid-2005, the agricultural share of all loans reached 6.5 percent, a 1-percentage-point increase from earlier years. The increase in agriculture's share of lending is surprising, given the huge appetite for capital in other sectors of China's economy—lending and investment are growing at annual rates of 20 percent to 30 percent in real estate, manufacturing, electric utility, and transportation sectors. The Chinese financial system has a plentiful supply of capital generated by households' high savings rate, inflows of cash from foreign investment, and China's trade surplus. Chinese policymakers are utilizing the financial system's liquidity to recapitalize banks and rural credit cooperatives and to increase lending to small farmers and agribusinesses.

[3]All monetary values in this report were converted from Chinese yuan to U.S. dollars at the official exchange rate of 8.28 yuan per dollar that prevailed during the time period covered by the report. China revalued its currency to 8.11 yuan per dollar in July 2005 and now allows the value to fluctuate within a narrow band.

Over the past decade China has been commercializing its banks, but the role of financial institutions in carrying out rural policy is still evolving (Guo and He; Park and Sehrt). China has created separate policy banks to make loans for infrastructure, commodity procurement, and antipoverty measures, but lending decisions made by state-owned commercial banks and credit cooperatives are still guided by policies of the government and Communist Party. Chinese policymakers hold the view common in developing countries (Braverman and Guasch) that rural poverty can be solved by an infusion of cheap credit and they are attempting to reverse the historic outflow of funds from rural savers to urban borrowers (Huang, Rozelle, and Wang; He and Feng). Loans to improve infrastructure and provide production credit are also seen as a means of boosting grain production, another important priority for China's policymakers. The surge in agricultural lending is one of many policy initiatives designed to boost rural incomes in recent years (Gale, Lohmar, and Tuan).

Figure 1

China's agricultural loan balance, monthly, 2000-05



Source: Calculations by ERS based on data from Peoples Bank of China.

Lending to Small Farmers Surges

More than 80 percent of formal agricultural loans in China are made by the country's 30,000-plus Rural Credit Cooperatives (RCCs) (see box, "Sources of capital for agriculture in China"). During the 1990s, RCCs and banks were reluctant to lend to small farmers due to the high administrative cost and risk of such loans and a low ceiling on interest rates set by the central bank (Cheng and Xu). In 2001, China began a campaign to increase RCC lending to small farmers, and lending accelerated further following the issuance of a "Number 1 Document" in 2004 stating the government's intent to raise rural incomes and boost grain production. New "micro loan" programs grew quickly and, in 2004, the central bank injected funds into the RCCs to support increased production loans for grain producers (Du).

The balance of outstanding RCC agricultural loans more than doubled between 2001 and 2005. The balance reached the equivalent of $127 billion at the end of October 2005, up roughly $43 billion since the end of 2003, an increase of 48 percent in 18 months (fig. 2). The increase in the balance of outstanding loans reflects a sharp increase in the value of new loans issued. The number of new agricultural loans issued nearly doubled in 2 years, from $53 billion during 2001 to $99 billion during 2003.[4]

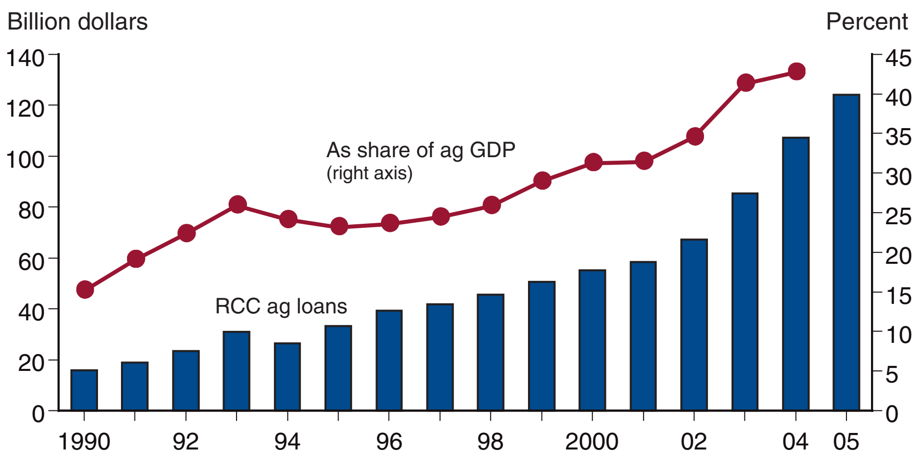
[4]Calculated by ERS using data reported by the China Financial Study Association, various issues. We have not found more recent data on new loans.

One of the innovations supporting increased RCC lending is a campaign to conduct villagewide credit evaluations. Committees composed of selected village residents rate the creditworthiness of all village households based on their income, past borrowing, repayment of loans, as well as reputation with neighbors. Each household is assigned to one of four or five risk classes and issued a certificate that can be redeemed at the local RCC for the loan amount set for their class.

In addition to increased conventional lending, China has implemented "micro loan" and joint-guarantee group-lending programs on a massive scale. There are few details about the programs. They appear to be partly modeled on

Figure 2

Rural Credit Cooperative agricultural loan balance, 1990-2005



Notes: Values converted to US dollars at official exchange rate for each year. 2004 and 2005 loan balances are as of October.

Source: Compiled by ERS from China Financial Study Association.

Sources of capital for agriculture in China

Individual savings and informal borrowing. Most farm investments and input purchases in rural China are financed by farmers' own savings. Most loans to rural households come from informal sources: family, friends, private money lenders, savings clubs, and pawnbrokers (Wang; Guo and He). Informal lending is not legal but it is widely tolerated in many areas.

Rural credit cooperatives (RCCs). Most formal loans to farm households are made by more than 30,000 rural credit cooperatives (RCCs). RCCs accept deposits from local residents and make loans to households, businesses, and other entities. RCCs were set up in agricultural communes in the late 1950s by requiring each farmer to make a small cash contribution. After collective agriculture was disbanded in the 1980s, RCCs continued as the rural arm of the state banking system with an RCC serving each of China's 40,000 townships. Reforms in 2003 and 2004 placed them under provincial governments and merged them into county- or provincial-level RCC unions (Xie). RCCs can only operate in their home township or county. Some of the stronger RCCs are being restructured as provincial rural commercial banks or cooperative banks, and some of those have recently attracted foreign investors. RCCs are cooperatives in name only. Their ownership is unclear and members do not necessarily have any say in management.

Agricultural Bank of China (ABC). Loans to agricultural enterprises come largely from the ABC, one of China's four state-owned commercial banks. It was created in the late 1970s to carry out rural policy, but became a commercial bank serving both urban and rural markets after reforms in 1994. The ABC lends to agricultural enterprises, rural cooperatives, and village organizations, but not usually to individual rural households.

Agricultural Development Bank of China (ADBC). Commodity procurement is supported by loans from the ADBC, formed in 1994 to relieve the ABC of its policy functions. The ADBC primarily lends to state-owned enterprises for procurement and storage of grain, cotton, and edible oils. The ADBC's role is diminishing as the government privatizes agricultural commodity marketing. The ADBC also makes loans for agribusiness and rural infrastructure.

Recent Reforms. Since the late 1990s, the government has taken numerous steps to reform and commercialize its banking system, but it was not until 2003 that it began a major reform of rural credit cooperatives. The ABC, like China's other state-owned banks, is being transformed into a profit-seeking commercial bank with the ultimate goal of being listed on overseas stock exchanges. The creation in 2003 of a bank regulator, the China Bank Regulatory Commission (CBRC), was an important reform of the financial sector.

In recent years, RCCs in several provinces have been reorganized as rural commercial or cooperative banks and most other RCCs have been merged into county- or provincial-level unions. They have been given more latitude to offer higher interest rates on deposits (to compete with post offices and banks) and adjust interest rates on loans within a band around rates set by the Peoples Bank of China. Credit reporting services have just begun operating, but evaluation of loan applications is problematic due to falsification or absence of financial records (many transactions are still conducted in cash), unfamiliarity with risk analysis, and latent cronyism.

Table 1
Balance of Rural Credit Cooperative loans to agricultural households

	December 2003	June 2005	Growth	
	Billion dollars			Percent
Agricultural loans	83.8	124.4	40.6	48
By type:				
Conventional loans	59.8	91.4	31.6	53
Micro loans	14.6	21.3	6.7	46
Joint guarantee loans	9.4	11.7	2.3	24

Note: Values converted to U.S. dollars assuming $1 = 8.28 yuan.

Source: Compiled by ERS from news reports and China Financial Study Association.

microfinance programs commonly used in other developing countries. A "micro loan" program provides small loans to rural households. Joint-guarantee borrowing programs form groups in which members guarantee one another's small loans, employing peer pressure to encourage repayment.[5]

The micro-loan program first initiated nationwide in China in 2001 had been implemented by 94 percent of RCCs by 2003 (China Financial Study Association). By 2003, the balance of micro loans had reached $14.6 billion spread over 52 million households (an average of $175 per household), about 25 percent of all rural households (table 1). Joint guarantee loans, also initiated in 2001, were made by about half of RCCs in 2003, and the loan balance under this program totaled $9.4 billion loaned to 9.5 million households (an average of $990 per household). By June 2005, the micro-loan balance had grown an additional 46 percent to $21.3 billion and joint-guarantee loans were up to $11.7 billion. By the third quarter of 2005, the two programs combined had extended loans to 70 million rural households (more than one-fourth of all rural households) and half of all rural households had received loans from RCCs (Han).[6]

The surge in agricultural lending has required a major infusion of cash. Loans from the Peoples Bank of China to RCCs supported the increase in agricultural lending, and the central government has committed roughly $20 billion to cleaning up old nonperforming loans in RCCs.[7] In 2003, about 37 percent of RCC loans were nonperforming—no interest or principal payments were being made—and the ratio was much higher in many individual RCCs.[8] Provisions of RCC reforms undertaken in 2003 and 2004 call for provincial governments to contribute an equivalent amount to cleaning up nonperforming loans. From 2003 through September 2005, the nonperforming loan rate fell from 37 percent to 15 percent, but the decline mostly reflects a 60-percent increase in the outstanding loan balance. The absolute decline in nonperforming loans—excluding government cleanup funds—was about $7 billion, equivalent to about 4 percent of the nonperforming loan balance before RCC reforms began in 2003 (Li).

Little Impact on Agricultural Sector

An infusion of cash into China's agricultural sector of the magnitude suggested by statistics on agricultural lending would have a major impact on agricultural production by enabling farmers to invest in fixed assets and finance purchases

[5]Unlike microfinance programs used in other countries, the Chinese programs do not focus primarily on lending to women, although one article reported that $30 million was loaned to a movement to promote prosperity of rural women in Heilongjiang Province during 2005 ("Rural Credit Cooperatives Issue 12.2 billion yuan in agricultural loans in the first half of 2005," Xinhua News Service, August 4, 2005). *http://www.hlj.xinhuanet.com/xw/2005-08/04/content_4796227.htm*

[6]A range of other important reforms are aimed at restructuring and strengthening RCCs. Reforms include large injections of capital from central and provincial governments, reduction in taxes on RCCs, consolidation of small units into countywide or provincial RCC unions, and raising the ceiling on interest rates that RCCs can charge for loans.

[7]This amount is small in comparison to the more than $260 billion China has injected into its four largest commercial banks since 1998 to clean up nonperforming loans.

[8]By comparison, nonperforming loan rates of large banks are typically 2 percent or less in developed countries. China has adopted international standards of classifying loans as nonperforming, but application of the standards is believed to be more liberal than in other countries.

of seeds, fertilizer, livestock, machinery, and other inputs. However, ERS analysis of statistics on the agricultural sector indicates that most of the loans were not spent on agricultural production.

The value of agricultural loans far exceeds spending in the agricultural sector. In 2003, RCCs issued new agricultural loans equivalent to $99 billion (table 2). Agricultural fixed-asset investment totaled just $13.5 billion that year and we estimate aggregate agricultural input expenditures at $51 billion (table 2). Thus, the value of "agricultural" loans issued that year ($99 billion) was more than 50 percent greater than the combined value of cash outlays on farm inputs and rural agricultural fixed-asset investment ($64.5 billion). The difference between loans and expenditures is probably even larger than this since most farmer investments and input purchases are typically funded by farmers' own savings and informal borrowing.[9] It is likely that less than half of "agricultural" loans actually financed expenditures supporting agricultural production.

[9]The increased RCC loans may have displaced some informal loans (Guo and He).

The large margin between "agricultural" loans and agricultural expenditures indicates that many or most "agricultural" loans in China are used for nonagricultural purposes such as house construction, school fees, health care costs, or nonfarm business expenses. "Agricultural" and "rural" are often used interchangeably in China, and loans to rural households may be classified as

Table 2
Comparison of agricultural loans and farm expenditures, 2003

Item		Total	
		Billion yuan	*Billion $*
Agricultural loans issued by rural credit cooperatives[1]		821	99.2
Rural fixed asset investment in agriculture[2]		112	13.5
	Yuan		
Per capita cash input expenditures for agriculture, forestry and fishing production[3]	551		
	Million		
Rural population[4]	768.5		
Estimated total cash input expenditures for agriculture[5]		424	51.1
Total cash expenditures on agriculture[6]		536	64.6

[1]China Financial Study Association, *China Financial Yearbook 2004*, p. 74. This is the value of new loans issued (fa fang), as distinct from the balance of outstanding loans (yu'e).

[2]China National Bureau of Statistics, *Rural Statistical Yearbook 2004*.

[3]China National Bureau of statistics, *Rural Household Survey Yearbook 2004*.

[4]China National Bureau of Statistics, *China Statistical Yearbook 2004*.

[5]Per capita expenditures times rural population.

[6]Fixed asset investment plus cash input expenditures.

Note: Values converted from Chinese yuan to US$ using official exchange rate of 8.28 yuan per dollar.

Sources: Calculations by ERS using data from China Financial Study Association and China National Bureau of Statistics.

"agricultural" even if they are not used for agricultural purposes. For example, Peoples Bank of China guidelines for micro loans specify that micro loans may be used for "agricultural production; purchase of small farming machinery; services before, during or after agricultural production; *or housing, medical service, education and consumption.*" The guidelines emphasize agricultural production, but the fourth category seems to allow loans to be used for nearly any purpose. China National Bureau of Statistics estimates of rural investment indicate that agriculture accounts for about 25 percent of rural households' investment in fixed assets; about 60 percent is spent on house construction. There are many anecdotal reports of borrowing to pay for childrens' school fees and health care expenses.[10]

While not all "agricultural" loans support agriculture, the lending program probably has contributed to growth and modernization of the sector. Visits to the Chinese countryside provide evidence of growth in the form of newly constructed greenhouses, livestock facilities, farm equipment, use of new seed varieties, improved livestock breeds, increasing use of commercial animal feed, research and extension centers, wholesale market facilities, processing and cold storage companies. The quality and standardization of farm products is being improved and farms are diversifying into new enterprises. Irrigation, water management, and other infrastructure are improving.

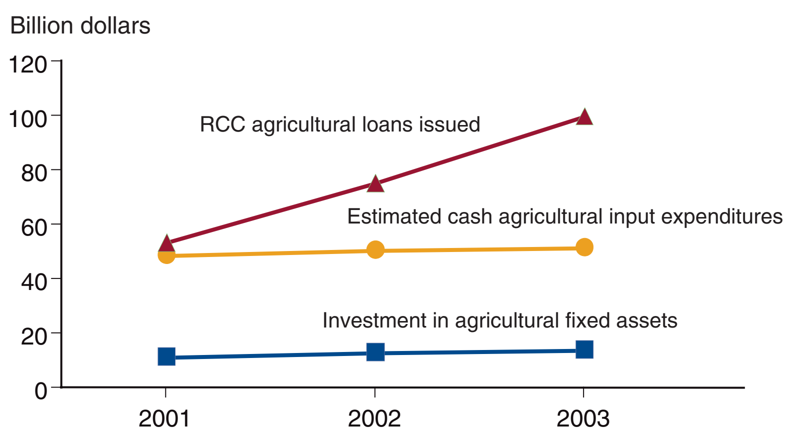
Aggregate statistics indicate that agricultural investment has increased in recent years, but the increase was much smaller than the rise in agricultural lending. Rural investment in agricultural fixed assets rose 24 percent, from $11 billion per year in 2001 to $13.5 billion in 2003 (fig. 3). Estimated agricultural input expenditures rose from $48 billion in 2001 to $51 billion in 2003—an increase of 6 percent.[11]

The increase in agricultural loans during this period was far larger than the increase in expenditures on agriculture. Agricultural loans issued shot up from $53 billion in 2001 to $99 billion in 2003. The increase in agricultural loans suggests that the amount loaned to farmers each year increased $46 billion between 2001 and 2003, but the expenditures on agriculture (input

[10]Goodman describes the situation of a farmer who borrows $250 each year to pay his son's school fees and borrows $100 from family and friends each year to make payments on the loans. The balance of the farmer's loans totaled $1,250.

[11]Input expenditures rose sharply in 2004 due to surging prices for fuel and fertilizers.

Figure 3
Comparison of agricultural loans and expenditures, 2001-03



Source: Estimates by ERS based on data from China Financial Study Association and China National Bureau of Statistics.

expenses and fixed asset investments combined) rose by only $5.5 billion. The large disparity between these numbers suggests that very little of the new lending actually supported agricultural production.

Chinese farms have very low levels of capital investment and the lending program has done little to change that. Nearly all farms are uniformly small, averaging roughly two acres of cropland split into multiple plots and nearly three laborers per acre. Farmers invest mainly in small items, such as purchase of equipment (chemical sprayers, tools, small carts or tractors), purchase of breeding or feeder livestock, and construction of wells, small greenhouses or other structures. The value of fixed assets per farm in China averages about $500. Investments in large machines are typically made by entrepreneurs or village collectives that specialize in custom farming operations.[12]

[12]In 2004, China began to offer subsidies for purchase of farm machinery in selected counties (Gale, Lohmar, and Tuan).

China's collective land-ownership system is a major constraint on farm borrowing and investment. Farmland is owned collectively by villages and distributed on an egalitarian basis among village members. It cannot be bought or sold, although in some villages land can be rented to other farmers. The lack of land ownership leaves farmers with little collateral to secure long-term loans. The absence of land markets prevents most farmers from consolidating land into larger operations that can achieve economies of scale.

In addition to onfarm investments, China needs infrastructure investments aimed at addressing China's serious water-scarcity issues (Lohmar, et al., 2003), improvements in land fertility (Wu, Liu, and Davis), food safety and inspection systems, and upgrades of wholesale markets and market information systems.

China's farm investment is still low in comparison to the sector's output despite the surge in agricultural lending. The ratio of agricultural investment to agricultural gross domestic product (GDP) was just 11 percent in 2004, quite low in comparison to the 52 percent investment-GDP ratio for the entire Chinese economy (table 3). While it is not surprising that agriculture has a lower rate of investment than other sectors where returns may be higher, the 11-percent ratio of investment to output seems very low. Annual net investment in U.S. farms (as measured by the inflation-adjusted increase in farm assets) averaged 24 percent of farm output (measured by gross value added) between 1993 and 2003.

Snapshot of Agricultural Loans

It is difficult to evaluate China's agricultural lending since very little statistical information on lending, repayment of loans, or issuance of new loans is

Table 3
China's fixed asset investment and GDP, 2004

Item	Total	Agricultural sector
	Billion dollars	
Fixed asset investment	851	28
Gross domestic product (GDP)	1,650	251
	Percent	
Investment-GDP ratio	52	11

Source: ERS calculations based on data from China National Bureau of Statistics.

released. A survey conducted by the Chinese Academy of Agricultural Sciences during July 2005 provides a current snapshot of the extent of borrowing by Chinese farmers (Zhu and Hu). The survey included interviews with 256 farm households in the Qingdao, Yantai, and Weifang areas of Shandong Province, one of the most active provinces in agricultural lending. The surveyed farms specialized in high-value products: poultry, vegetables, and fruit. This survey provides a rare glimpse of recent agricultural borrowing. The sample is not nationally representative since it is drawn from one of China's most prosperous agricultural regions.

According to the survey, 37.5 percent of farms applied for loans during 2004 and all applicants received a loan.[13] Only half of the loans were obtained from an RCC or bank; the other half were obtained from family and friends. Thus, informal channels remain a dominant source of credit even after the rapid growth in RCC lending. Interest rates averaged about 9 percent per year. Nearly all of the loans were short-term. About 60 percent of loans had a maturity of 1 year, and 35 percent had maturities of less than 1 year. Only 5 percent of loans were for periods exceeding a year.

About three-fourths of the loans were used for agricultural expenses. About one in four "agricultural loans" were used for nonagricultural purposes including nonagricultural businesses, health or education expenses, weddings, and funerals.

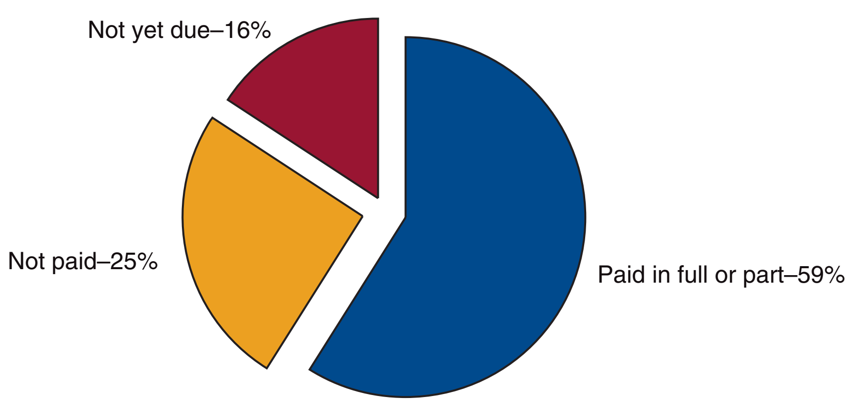
At the time of the interviews, borrowers had a high delinquency rate by standards typical in commercial banking. About half of loans had been paid back in their entirety and another 5 percent had been partially paid back (fig. 4). Another 16 percent of loans were not yet due, but 25 percent of loans had not been repaid at all. If the loans that are not yet due are subtracted, the nonpayment rate as a percentage of loans that had already come due is 30 percent.

Agribusiness and Rural Infrastructure Lending

China also has aggressively boosted lending to rural infrastructure projects and agribusinesses. These loans are made by one of China's four state-

Figure 4

Repayment of agricultural loans, Shandong Province, 2005



Note: Based on 96 loans reported by farm households in Shandong Province, July 2005.

Source: Zhu and Hu.

[13]The 100-percent approval rate may reflect the whole village-credit evaluation system discussed earlier in this report, although it is not known whether the system was implemented in the sampled regions. All households deemed to be credit-worthy are awarded a certificate that can be redeemed for a loan. Thus, a household classified as credit worthy is automatically entitled to a loan.

owned commercial banks, the Agricultural Bank of China (ABC); by policy banks such as the Agricultural Development Bank of China (ADBC) and China Development Bank (CDB); and by RCCs.[14]

Lending classified as "agricultural" includes a host of rural infrastructure construction, water management, poverty alleviation and other rural projects. Major infrastructure programs include construction of rural roads and drinking water projects. Considerable investment is required to support China's policy of developing towns and small cities to absorb rural population that would otherwise migrate to large cities (Gale and Dai). Central government announcements indicate that rural infrastructure investment will be a major policy emphasis in 2006.

Loans for "agricultural industrialization" have the most direct impact on agriculture. Under this program, agribusiness enterprises meeting criteria for size, technological sophistication, and potential to benefit farmers are granted "dragon head enterprise" status, giving them access to preferential loans. Financial support for dragon head enterprises is central to the country's agricultural industrialization strategy that promotes vertical and horizontal coordination between small farmers and agribusinesses. The ABC launched its agricultural industrialization lending program in 2002, and lent 40 billion yuan ($4.8 billion) in 2003. The CDB's lending for agricultural industrialization was $400 million in 2003. In 2005, the CDB also initiated a lending program aimed at strengthening China's largest agricultural chemical company.[15] The ADBC began its agricultural industrialization lending program in 2004.

The CDB and ADBC specialize in policy lending. The ADBC has a large balance of $83.3 billion in outstanding loans (table 4) but the balance includes more than $35 billion in nonperforming loans from earlier years (He and Feng). In 2003, ADBC made new loans of $11.7 billion which financed procurement of 90 million tons of grain and 600,000 tons of fats and oils by state marketing enterprises and it made loans for grain storage totaling $5.6 billion (China Financial Study Association). ADBC loans are also an important factor in cotton procurement. The CDB lends primarily for large nonagricultural infrastructure projects. Commercial banks are obliged to engage in policy lending for projects included in 5-year development plans (see box, "Large agricultural investment projects"). Government support and subsidies for the projects can make policy loans attractive (Shih; Yi).

[14]The sum of "agricultural loans" reported by RCCs and the ABC exceeds the "agricultural loan" total reported by the Peoples Bank of China shown in figure 1. The Peoples Bank of China may include only loans to agricultural households.

[15]Xinhua News Service, "China Development Bank to Support the Development of Agricultural Chemicals Industry," news release, March 3, 2005.

Table 4

Balance of agricultural loans to agribusiness, government, and other nonhousehold organizations, by lender, 2003

Lender	Balance, 2003
	Billion dollars
Agricultural Development Bank of China	83.3
Agricultural Bank of China	55.2
Rural Credit Cooperatives	17.7
China Development Bank	0.4

Note: Table shows balance of loans at end of 2003.
Source: Compiled by ERS from China Financial Study Association.

Large agricultural investment projects

Agricultural officials in nearly every Chinese province are undertaking large multimillion-dollar agricultural projects that reflect priorities set in government development plans. Many projects involve vertical integration, high technology, or development of organic or ecological production zones. Most are funded by loans from Chinese banks. Examples from various news reports include:

- an "Agricultural Technology Jump Plan" initiated by the Ministries of Agriculture and Finance in 2000. The plan focuses on application of new wheat varieties and other technologies to raise yields and quality of wheat harvested. Pilot projects developed technical standards, created brand names, and linked production areas with research institutes and processors.
- the Shenyang Agricultural Development Zone, planned as a "dairy town" consisting of an ice cream and juice manufacturers and a cow breeding operation. Located in Liaoning Province, investment is $120 million.
- The Liaoyang "123" agricultural industrialization project in Liaoning Province that involves development of 10 "pollution free" agricultural production bases (one of which will produce organic broccoli for export), 20 modern agricultural parks, and 30 agricultural enterprises.
- a series of loans between 2005 and 2007 from the Agricultural Development Bank to Hubei Province totaling $3.6 billion to support agricultural production, marketing, and technology upgrades.
- the establishment of 20 key agricultural enterprises, including production of Chinese gooseberries, is part of Hunan Province's plans to invest $568 million.
- a High-Tech Agriculture Demonstration Park in a new satellite city of the capital of Jilin Province. The park will house research and development centers affiliated with universities and research institutes to promote agricultural industrialization and technology dissemination (local government investment is $840 million).
- a "computerized agriculture" effort, which would apply information technology to agriculture. News reports say it has been adopted on farms covering more than 3 million hectares of farmland in 14 provinces. The one example given is the army-owned Xinjiang Production Corps, a massive cotton farm in western China.
- the development of a grain production base in Xinjiang Uygur Autonomous Region. The plan includes cultivating arid land and boosting grain production to 11.5 million tons from the current 8.4 million tons.
- the reclamation of 3,800 hectares (1,540 acres) of swamp land on the southeastern coast of Zhejiang Province. The reclamation will be financed by a 22-million yuan ($2.7-million) loan from the China Development Bank. Half of the land will be allocated to local farmers and half will be auctioned off.

Lending Remains Policy-Driven

While China's rural financial institutions are encouraged to operate like commercial banks, they still have strong links to the centrally planned economy and serve as cashiers to fund government policies.[16] The nationwide campaign to increase lending to rural households reflects central government policies of raising rural incomes and boosting grain production. Policy loans by banks support sectors targeted in development plans (such as agribusiness) and projects in impoverished regions.[17] While the Chinese government has created special policy banks, it also expects banks and credit cooperatives to make policy loans. The government also uses its influence over bank lending as a macroeconomic management tool. When the economy appeared to be overheating in mid-2004, the central bank ordered banks to cut back on lending to certain sectors in order to cool off the economy.

Financial institution reforms have reduced the influence of local officials over lending decisions, a practice that contributed to the buildup of nonperforming loans during the 1990s. However, banks and RCCs are still subject to Communist Party and government directives (Heilmann). The ABC remains state-owned and it is not clear who owns RCCs. Board members include representatives of the Communist Party and government. Board members and managers must have the approval of The China Bank Regulatory Commission (CBRC), also an arm of the government.

Chinese banks still receive instructions to make loans in support of policies set by the government (Shih). The CBRC, in addition to monitoring the performance of institutions, also issues guidance on government policy. For example, in 2004, the CBRC issued documents directing RCCs to expand group guarantee loans and gave instructions about how to manage the group-lending program (Xin). In January 2005, the Peoples Bank of China summoned representatives of commercial banks to a "guidance meeting" to instruct them to carry out policy directives to extend more credit to the rural economy and better serve the private sector and small and medium enterprises.

While rural financial institutions resemble commercial banks, the rural financial market is not driven by market forces and many barriers to intermediation of funds remain. Interest rates do not reflect capital scarcity and risk. Rates are set by the central bank and RCC loan rates are lower than rates charged by underground private lenders, suggesting that they are below market-clearing rates. RCCs are now allowed to set interest rates on loans up to double the officially set rate, but Zhou and Lin found that RCCs raised all rates to the new upper limit.

While the spread between loan and deposit rates is wide in comparison with spreads in U.S. commercial banks, Chinese institutions need a wider spread to compensate for their higher costs (*The Economist*). It does not appear that interest rates reflect the risk on loans. Zhou and Lin's investigation of RCCs in Fujian Province shows that rates on micro loans are set lower than

[16]Park and Sehrt's study of Chinese bank data from the 1990s found a surprisingly weak relationship between lending and economic fundamentals. They also found that policies strongly influenced lending.

[17]China has initiatives to develop western provinces and northeastern industrial regions that are supported by bank lending.

conventional loans to households and equal to rates for loans to enterprises with the best credit ratings.

There is little competition among lenders and the rural market is segmented by geography and type of borrower. RCCs must operate within their home county, where they have a monopoly on formal lending to rural households (Zhou and Lin). There is no competition among rural lenders in most regions; entry of new lenders in a geographic area is not permitted. Rural banks and RCCs are not allowed to fail.[18] Rural financial institutions cannot be taken over by another institution, although mergers of RCCs into larger unions may be designed to combine weak institutions with stronger ones.

[18]According to news reports, a run on eight RCCs in a remote area of Qinghai province during 2005 led to their closure, but an $8.5 million bailout from China's State Council allowed them to reopen. Nonperforming loan rates were reported to be as high as 96 percent in these RCCs.

New Nonperforming Loans Are a Concern

Many analysts and officials in China are concerned about "runaway credit"—that the fast pace of lending will lead to excess capacity, plunging output prices, and new nonperforming loans in the future (Yi). Most concerns are focused on manufacturing industries and real estate, but the speed and scale of growth in agricultural lending also raises concerns about whether the current lending campaign will eventually create a new batch of nonperforming loans.

Many agricultural loans are associated with campaigns led by local officials to boost production in a particular commodity or product. For example, *The Wall Street Journal* reported that an RCC was drained of capital after a village government in Hebei Province asked farmers to sign for loans of 20,000 yuan ($2,400) for greenhouses that were poorly built and flooded during the rainy season, contributing little to the farmers' income (Dolven and Kuhn). Two years later, officials from the local government and RCC began trying to collect the loans, but few borrowers had enough cash to make interest payments. Some withdrew their deposits from the RCC, fearing that their money would be seized to repay the loans. It is not clear what measures have been taken to prevent incidents like this from reoccurring in the new lending campaign.

There is considerable market risk associated with large sector-specific agricultural lending campaigns. The demand for many agricultural products is price inelastic, so a large surge in supply resulting from large investment in a particular sector can push down prices, erasing producer profits. In 2004, attractive hog prices in China induced an expansion of the hog sector, in turn leading to a sharp decline in prices during 2005. Frequent outbreaks of animal diseases also lead to losses for producers whose flocks or herds must be slaughtered. Very few farms have access to agricultural insurance.

It seems likely that a significant percentage of new agricultural loans will not be repaid, but it is impossible to evaluate since Chinese institutions still release very little financial data. New risk management and commercial lending practices are being adopted in China's banks, but local branches have staff with less training, close connections to local business and government officials, and a high degree of autonomy (*The Economist*). Thus, practices adopted by bank headquarters may not immediately filter down to the branches that actually make loans.

RCC reforms have reduced the involvement of local officials in lending, but there are still incidents of corruption. For example, in 2004, a group of farmers in Guizhou Province received notices to repay agricultural loans that they knew nothing about (China Central Television). The investigation alleged that village officials had used the farmers' identification cards to borrow the funds for a poverty eradication program in 2000. The funds were transferred to the village's agricultural development company and reportedly were spent on banquets and gifts. In another case, investigations of RCCs in Qinghai Province during 2005 alleged that shareholders had made large loans to themselves and associated companies which went into default, leaving the institutions insolvent (Xinhua News Agency).

Many of the most egregious practices of earlier decades have been eliminated. The CBRC now oversees the lending sector. New innovations such as group lending may raise repayment rates. Thus, nonperforming rates on new loans will probably not approach the 40 percent to 50 percent rates that prevailed in the 1990s. However, the large scale of lending and remaining flaws in the system suggests that nonperforming loan rates will be well above 1 percent to 2 percent rates common to commercial banks in developed countries.

Foreign Banks Unlikely To Affect Rural Finance

The entry of foreign banks in the China market as a result of China's WTO accession commitments may have important impacts on China's financial sector, but there will probably be little direct impact on rural finance. Foreign banks are allowed minority ownership in Chinese banks and limits on operations of foreign banks in China are scheduled to be lifted in December 2006.

The entry of foreign banks in the China market has been viewed as a potential threat to Chinese banks, but so far foreign banks have been a boon. Foreign banks have sought investments in domestic Chinese banks instead of trying to build their operations in China from the ground up. All of the major commercial banks in China have attracted foreign partners who have contributed both capital and, more importantly, management expertise. Foreign banks have invested in two rural commercial banks recently created by restructuring RCCs in the outlying counties of two of China's most dynamic cities. In 2005, the Dutch cooperative bank Rabobank and the World Bank's International Finance Corporation agreed to buy a 24.9 percent stake in the Hangzhou Rural Cooperative Bank. The Australia and New Zealand Banking Group committed to purchase a 19.9 percent share of the newly created Shanghai Rural Commercial Bank by the end of 2005.

Foreign banks have been attracted to prosperous areas along China's coast and areas surrounding major cities, and their entry as either partners or competitors will hasten the development of the financial sector in these regions. The vast rural hinterland in central and western China is not very attractive to commercial banks and will continue to be served by RCCs and Chinese banks.

Conclusions

Chinese policymakers have encouraged rural credit cooperatives and agricultural banks to make more "agricultural" loans, a measure aimed at injecting more cash into the rural economy in order to raise rural incomes and boost grain production. The value of agricultural loans from rural credit cooperatives ($99 billion issued in 2003) is 20 times the combined value of China's farm subsidies and agricultural tax reductions, estimated by Qian to be $5 billion in 2004. Agricultural loans are not subsidies unless they are made at subsidized interest rates or not paid back, but China has a history of low repayment rates on rural loans.

For the foreseeable future, China's agricultural sector will remain far behind its competitors in the United States and other developed countries in mechanization, livestock and plant genetics, and use of advanced production techniques. In some subsectors and regions, Chinese agriculture may become quite advanced as it responds to new demands from both overseas and domestic customers. But the sector as a whole will continue to be characterized by small-scale, labor-intensive operations due to the large population of farm laborers and collective land ownership. The short-term nature and small size of nearly all agricultural loans preclude use of loans to make investments in large fixed assets with a long payback period.

Many agricultural loans are not used directly to support agricultural production. Construction of basic infrastructure using policy loans will benefit agriculture by improving transportation, market infrastructure and availability of electricity. Loans supporting house construction, nonagricultural businesses, and education contribute to poverty alleviation.

China has been able to sustain injections of cash into the rural economy because it has a substantial, rapidly growing pool of capital to draw upon. As long as the saving rate remains high and China prevents movement of capital overseas, policymakers will be able to utilize the excess liquidity to inject cash into the rural economy, recapitalize rural banks, and increase spending on infrastructure and other priorities. The lending campaign will likely continue as long as China's strong economic growth generates enough liquidity to support the lending.

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