

XI RURAL FINANCIAL MARKET DEVELOPMENT IN INDONESIA: MIXING MARKETS AND MANDATES

OVERVIEW OF THE FINANCIAL SYSTEM

Indonesia has a long history of deregulation of its economy and the financial sector, mixed with a high degree of State intervention designed to allocate credit on the basis of preferential programs. This mixed policy environment is attributed to more than 30 years of authoritarian rule in which policy decisions have been shaped by bureaucrats operating largely unconstrained by organized political action from societal groups. The State's domination of political life has been matched by its large presence in the marketplace. For example, the public sector was reported to account for 30 percent of GNP in 1988. The State banks have been shaped with little concern for the preferences of bankers, and they have accounted for 80 to 90 percent of all loans extended since the late 1960s. Credit subsidies have been allocated on the basis of economic priority. Agriculture, and particularly rice farmers, have been systematically favored as political leaders attempted to win friends and preserve mass support in the countryside (MacIntyre, 1993). This explains the persistence of State intervention as part of the movement towards market-oriented policies in the 1980s. The major exception to these generalizations is the freedom granted to rural financial institutions in recent years to set interest rates and design products that meet their requirements for sustainability.

The country has gone through several episodes of regulation followed by deregulation and re-regulation. Heavy State involvement in the economy began in the late 1950s with the nationalization of Netherlands-owned firms, the nationalization of banks, and the disappearance of foreign banks. After Suharto assumed power in 1966, some nationalized businesses were eventually returned to their former owners, efforts were made to attract foreign capital, and Bank Indonesia (BI) was returned to a more traditional central bank role, but closely tied to the Government. The five State commercial banks were assigned to serve particular sectors of the economy. Bank Rakyat Indonesia (BRI) was assigned rural development and smallholder agriculture, while Bank Bumi Daya was to serve estate agriculture and forestry. A major growth spurt occurred in the deposit base of the State banks beginning in 1968 when they were ordered to increase dramatically the interest rates on term deposits (MacIntyre, 1993).

Following the 1967–1968 banking reforms, State intervention in credit markets via BI influenced credit distribution in three ways. One was the direct provision of preferential loans to priority borrowers. The second was central bank control of the deposit and loan rates offered by the State banks, in which differing rates were set for borrowers according to economic priority. The third mechanism was through central bank preferential refinancing known as liquidity credits. The higher the priority of the economic sector, the higher the proportion of the loans eligible for rediscounting, and the lower the rate of interest charged by BI. The Bimas rice intensification program, for example, was eligible for 100 percent refinancing.

The first major financial deregulation occurred in 1970 with the adoption of a unified exchange rate and the opening of the capital account to the free inflow and outflow of funds (McLeod, 1999). To strengthen indigenous Indonesians, new programs for short-term (*Kredit Modal Kerja Permanen*, KMKP) and long-term (*Kredit Investasi Kecil*, KIK) loans were created, and the medium-term investment program KI (*Kredit Investasi*) was reserved for firms with indigenous majority ownership.

The inflationary pressure created by the inflow of funds, however, led to the introduction of credit ceilings for each bank on the assumption that tight restrictions on nonpriority sectors would encourage lending to priority groups. This added a fourth mechanism to the State's credit allocation arsenal. By 1982, it was estimated that the State banks were responsible for 83 percent of all outstanding loans, and central bank credit subsidies amounted to 50 percent of outstanding credit (MacIntyre, 1993).

The collapse in petroleum prices prompted the 1983 reforms that were introduced to mobilize private savings, replacing the oil-funded subsidized credit system. All four measures of credit allocation were altered: 1) credit ceilings were abolished, 2) State bank deposit and loan rates were deregulated, 3) central bank preferential refinancing was curtailed, and 4) the central bank's subsidized direct lending was also curtailed. An additional deregulatory package (PAKTO 88) was introduced in 1988. It eased the licensing of new private domestic and foreign banks, relaxed regulations on bank branching, and permitted banks to design their own saving deposits (McLeod, 1999). A new type of People's Credit Bank (*Bank Perkreditan Rakyat*, PBR) was created with special incentives granted to indigenous entrepreneurs to enter banking. In 1989, controls were removed on offshore borrowing by banks.

One of the last deregulatory reforms was the further reduction in subsidized loan programs in 1990, and an upward adjustment in refinance rates. However, banks were required to extend at least 20 percent of their total loans to small and medium enterprises. A new banking law in 1992 removed the distinction between development and savings banks. New private and foreign banks mushroomed in urban areas with the lowering of entry barriers, and a major expansion in small PBRs occurred in rural areas. By the end of the 1980s, private banks accounted for a third of all outstanding credit. Financial deepening began to grow at a rapid rate. The M_2 /GDP ratio (the ratio of money in circulation to GDP) ranged between 10 and 20 percent from 1970 to 1984, then climbed to almost 40 percent by 1990. The financial system had evolved so there was

greater competition between private and State banks and flows of credit and interest rates depended mainly on market forces (Chant and Pangestu, 1996).

Deregulation effectively ended in 1991, when liquidity loans to financial institutions began to expand and controls were reimposed on overseas borrowing by banks. The near collapse of some private banks and the 1994 scandal with *Bapindo*, the Indonesian Development Bank, prompted a wave of new prudential regulations, supposedly to prevent banking abuses. Credit controls were reimposed in an attempt to control inflation and, in December 1995, the central bank moved to exercise control over nonbank financial institutions. In 1996, the Government adopted the policy of being more selective in the licensing of new bank branches out of fear that excessive competition would emerge between banks.

Following devaluation of the Thai baht in July 1997, the rupiah came under speculative pressure and by April 1998 its value had fallen by 70 percent. The Government closed 16 private banks that failed to abide by prudential regulations. Inadequate capital and highly concentrated lending to companies with close ownership links with the banks were reported to be the principal concerns (McLeod, 1999). The political and economic crisis that followed continues to this day and has inspired several subsidized credit programs as part of the Government and donor response to the economic and social problems.

APPROACH TO RURAL AND AGRICULTURAL FINANCE

Indonesia has employed a variety of agricultural and rural development strategies that have influenced the evolution of rural financial markets. Rice self-sufficiency was the priority in the 1960s and early 1970s. The Fourth Five-Year Development Plan (1983–1989) aimed to make the villages self-supporting, while the Fifth Plan (1989–1994) emphasized rural poverty and the

poorest of the poor. Infrastructure investments were made and direct cash grants were given by the central Government to individual villages. Self-help groups and cooperatives were given special roles to support food self-sufficiency and small-scale rural enterprises. Programs were implemented to intensify agriculture, to stimulate rural nonfarm enterprises, and to increase rural employment (Teuku, 1994). Transmigration projects were implemented to create employment and reduce population density.

The country has developed an unusually rich and complex set of formal and informal financial organizations. Some have been explicitly linked to agricultural and rural development strategies, while others aimed to extend financial services into rural areas. The widespread network of government programs means there has been less scope for NGOs than in other Asian countries. Therefore, microfinance by NGOs is much less significant than elsewhere (McGuire, Conroy, and Thapa, 1998).

The Indonesian approach to the development of rural finance has evolved over time. First, in the 1970s and 1980s, the Government actively intervened in financial markets by creating a special program with regulated terms and conditions for every purpose that seemed important. In 1982, 19 categories of short-term credit were specified with seven different lending rates, three discount rates, and eight rediscount percentages (Gonzalez-Vega, 1982). This approach may have made a contribution to economic growth, but the price was high transaction costs. For example, one branch of BRI was found to manage 126 separate credit programs, each with its weekly, monthly, and quarterly reporting requirements, its terms and interest rates, and its procedures and criteria for borrower selection (Gonzalez-Vega, 1982). In recent years, the provision of financial services to the poor has become more important. But it has occurred more as the result of competition among financial institutions striving to provide market-oriented services than to an NGO-dominated attempt to reach the poor.

Second, both the national and provincial governments have employed a variety of grants, capital transfers, and subsidies to start and strengthen financial institutions. Usually

the goal was to avoid creating subsidy dependence and encourage sustainable financial intermediaries. The Government departed from this approach in recent years, however, and reverted to creating subsidized poverty-oriented projects. New government and donor programs created in the wake of the 1997 and 1998 crisis also employ subsidized credit.

There are some good descriptions of the major rural finance programs, but little formal analysis of the evolution of rural finance markets in the country (Gonzalez-Vega and Chaves, 1993). The *Badan Kredit Kecamatan* (BKK) system in Central Java and the nationwide BRI unit desa system are well documented, but many provincial and rural banks provide rural services along with government and donor programs. Although priority was given to State banks, 27 regional development banks were created in the Sukarno era, one for each province, and by 1970 there were nearly 300 People's Credit Banks at the district level (Lapenu, 1998). By 1981, Gonzalez-Vega (1982) estimated that almost 6,000 secondary banks and over 1,000 nonbank financial institutions, in addition to over 3,500 BRI unit desas, were operating in the country. Government-sponsored cooperative credit programs have also been important in some areas.

Two nationwide programs were specifically created to benefit the rural economy: the Bimas (*Bimbingan Massal*) rice intensification scheme, and the small investment (KIK) and permanent working capital (KMKP) schemes. Indonesia faced a growing rice deficit in the 1960s, and achieving rice self-sufficiency became a top priority. The green revolution offered new production opportunities but required huge investments in irrigation, and it was assumed that farmers had to be enticed with cheap credit to use purchased inputs for the new high-yielding varieties. To accelerate the green revolution, the Bimas rice intensification program was established in 1969. The BRI unit desas were selected to channel subsidized credit to rice farmers. Units were established on the basis of how many rice fields could be covered from a given location, and this area ranged from 600 to 2,000 ha (Patten and Rosengard, 1991). Each unit operated as a window of a district office rather than as a

separate financial entity, and the units had little authority to choose their clients.

The extension staff of the Ministry of Agriculture chose the borrowers by certifying those farmers who agreed to participate in all aspects of the Bimas program. BI supplied BRI with funds at 3 percent per year, while the farmers paid 12 percent, a rate below the annual inflation rate and the interest rate paid on small savings. The program covered 75 percent of loan losses, and provided an administrative subsidy for some of the unit *desa* costs. In 1974, a loan window was created primarily for nonfarm activities (*Kredit Mini*); in 1976 the unit *desas* were authorized to mobilize rural savings through the national saving program (TABANAS or *Tabungun Nasional*); and *Kredit Midi* was introduced in 1980 for making larger nonagricultural loans. All these loan programs carried a nominal annual interest rate of 12 percent.

The number of unit *desas* expanded quickly until a peak of 3,626 was reached in 1984 with a staff of over 14,000 (Patten and Rosengard, 1991). Total Bimas lending peaked at rupiah (Rp) 55 billion in the 1975-1976 planting season, fluctuated in the Rp35-50 billion range for several years, then fell to Rp14 billion by 1983-1984. The default rate rose steadily to reach almost 55 percent (Table XI.1). A factor that contributed to the high default rate was the periodic debt forgiveness programs, which created the expectation among borrowers that sooner or later unpaid loans would be pardoned (Gonzalez-Vega, 1982). Annual operating losses exceeded Rp20 billion in 1983 and 1984. The Bimas program ended in 1983. The country achieved rice self-sufficiency in 1984, but at a considerable cost by essentially bankrupting BRI (Martokoesoemo, 1994).

The second nationwide credit program, KIK/KMKP, was introduced in 1974 to improve credit access for small businesses, especially for indigenous Indonesians. The banks lent at a 12 percent nominal annual rate and the loans were refinanced by BI at 3 percent. In addition, 75 percent of the loan losses were insured by the State-owned loan insurance company

Table XI.1: Bimas Credit Statistics by Planting Season for Rice, 1970/71–1983/84

Planting season	Number of borrowers	Amount lent (Rp'000)	Amount overdue (Rp'000)	Default rate (%)
1970/71	1,326,714	8,454,655	283,918	3.36
1971	356,607	2,508,981	140,936	5.62
1971/72	1,181,770	7,306,117	215,123	2.94
1972	356,654	2,558,494	148,866	5.82
1972/73	1,714,733	12,772,340	624,828	4.89
1973	540,684	4,942,043	319,512	6.47
1973/74	2,550,242	31,550,210	2,586,425	8.20
1974	987,704	12,537,608	1,311,011	10.46
1974/75	2,615,451	40,558,848	3,483,830	8.59
1975	1,104,904	17,214,042	2,472,542	14.36
1975/76	2,476,963	55,074,430	5,242,564	9.52
1976	914,105	22,442,485	3,605,253	16.06
1976/77	2,089,933	48,871,790	7,026,623	14.38
1977	635,349	17,534,636	5,028,980	28.68
1977/78	1,799,120	44,550,076	6,176,217	13.86
1978	643,299	17,744,210	3,876,982	21.85
1978/78	1,403,017	42,235,323	6,740,321	15.96
1979	412,837	12,983,968	2,178,760	16.78
1979/80	1,161,317	36,313,088	5,389,251	14.84
1980	432,512	14,221,010	2,605,034	18.32
1980/81	1,087,330	35,094,157	7,876,394	22.44
1981	555,893	18,892,722	4,393,003	23.25
1981/82	1,104,280	43,609,046	15,314,124	35.12
1982	303,306	13,755,901	7,714,392	56.08
1982/83	900,600	45,597,802	22,285,583	48.87
1983	199,468	9,411,605	4,801,750	51.02
1983/84	363,555	14,081,566	7,679,457	54.54

Source: Reproduced from Patten and Rosengard (1991, p. 63).

(PT Askrinde)¹ with much of the insurance premium also paid by BI. Like Bimas, these programs encountered heavy losses, widespread fraud, and high default rates. Banks were under heavy pressure to disburse, often lending to new customers with no previous bank or business experience. These programs were terminated in 1990 as part of the Government's effort to cut subsidies (Martokoesoemo, 1994).

¹ No information was obtained about this company.

With the termination of Bimas, a modest small-farmer lending scheme (*Kredit Usaha Tani*, KUT) was introduced, to be handled by officially backed village cooperative units (*Koperasi Unit Desa*, KUD). It was one of the few programs to continue receiving 100 percent refinancing at 3 percent per annum from the central bank. It provided credit to farmers' groups at a subsidized 12 percent nominal rate per annum. By the end of 1993, KUT arrears had risen to some 17 percent of total loans disbursed since 1985 (Martokoesoemo, 1994). There is suspicion that this program tended to reach wealthier villages with better political connections.

Several other national and provincial efforts have expanded financial services into rural areas during the past two decades. Development banks have been set up in all provinces. In East Java, 220 KURKS (*Kredit Usaha Rakyat Kecil*, credit for activities of the poor) were organized as regional enterprises rather than banks. They were capitalized largely by the provincial governments (Lapenu, 1998). The PAKTO 88 reforms created the People's Credit Banks (*Bank Perkreditan Rakyat*, BPR), which required a minimum capital of only Rp50 million compared with Rp10 billion required for a primary bank at the time. These small partial service banks were intended to serve only rural areas, and by June 1998 a total of 2,227 existed, mainly in Java and Bali (Reille and Gallman, 1998). Other provinces developed other types of institutions known as LDKP (*Lembaga Dana dan Kredit Pedesaan*) or rural funds and credit institutions. The 1992 banking law required that they be closed if they did not obtain a BPR license within five years.

The major remaining directed credit program is *Kredit Usaha Kecil* (Credit for Small Activities, KUK) that was started in 1990 to support the development of indigenous small Indonesian businesses in the face of ethnic Chinese dominance of larger enterprises (McGuire, Conroy, and Thapa, 1998). All banks are required to lend at least 20 percent of their total loans to small and medium enterprises originally defined as firms with assets less than Rp600 million. Since 1997, the maximum loan allowable is Rp350 million (approximately \$145,000). Private commercial banks, especially those involved in corporate

lending and without extensive branch networks, have had difficulty in meeting this requirement, and one response has been to channel funds through the rural banks (BPRs). This led to the creation of the DABANAS Foundation as a joint enterprise of the Association of Indonesian Private Banks and the Association of Indonesian Rural Banks. It mobilizes funds from the commercial banks at the nominal annual rate of 16.5 percent, adds a one-percent fee, and lends the funds to the rural banks. It also provides banks with technical assistance and may eventually provide some regulatory and supervisory functions for the rural banks.

Two major rural poverty programs were created with little concern for their future sustainability (McGuire, Conroy, and Thapa, 1998). The first program is *Impres Desa Tertinggal* (IDT), an interministerial effort that commenced in 1993 with the goal of assisting backward villages. Initially 28,000 villages were identified to receive the following: 1) a capital injection of Rp20 million per year for up to 3 years for income-generating activities, 2) facilitators to help self-help groups become economically active, and 3) physical infrastructure up to the value of Rp100–130 million. The capital is essentially a revolving fund with local groups free to decide the terms of lending to members. By March 1997, over 120,000 self-help groups had been created with some 3.3 million members. After about three years of funding, about one third of the groups were judged ready to enter the PHBK project described below.

The second poverty initiative, the Prosperous Family Program created in 1996, is funded by a levy of 2 percent on the income earned by persons and corporations in excess of Rp100 million per year. It is implemented by BKKBN (the National Planning Coordination Board) which has an infrastructure in practically every village. Women's groups are set up and the poorest are enrolled initially in the TAKESRA savings scheme in which each woman receives a tiny initial grant of Rp2,000 (less than \$1.00), and a bonus of Rp2,000 if she saves Rp100 each month for six months. When they accumulate Rp25,000, the women become eligible for loans of Rp20,000 under the KUKESRA credit program at the subsidized

nominal rate of 6 percent per annum. Up to April 1997, some 9.8 million Indonesian families had received funding through this scheme. This number swamps the large BRI unit desa clientele of 2.3 million borrowers.

These two poverty programs represent a break from the pattern of establishing sustainable finance in rural areas. Neither program must set rates to cover costs and they depend on intensive support from government field staff. They sometimes overlap in areas in which other types of sustainable finance are being developed. The groups that participate are supposed to graduate to commercial funding sources, but that seems unrealistic given the expectations created among borrowers about access to subsidized funds.

Several other government and donor programs were initiated in recent years to expand banking services to the poor. For example, the Ministry of Agriculture encouraged the development of Grameen-type joint liability lending programs, and donor-funded projects have linked local self-help groups and village associations with financial institutions.

THE EVOLUTION AND CURRENT STATUS OF KEY RURAL FINANCIAL INSTITUTIONS AND PROGRAMS

Participants

There are no comprehensive data available on which to assess the overall performance of the rural financial system in Indonesia. Data are insufficient at the macro level to evaluate aggregate trends in the amount of agricultural or rural loans disbursed or outstanding, and to calculate the ratio of credit to agricultural GDP. Comprehensive micro studies have not been done to analyze which firms and households have access to formal and informal finance, and which do not. Therefore, this section is limited to discussing selected institutions and programs. Two key institutions have been analyzed in detail

by researchers. The first is BRI, which transformed itself after the collapse of Bimas, and the second is *Badan Kredit Kecamatan* (BKK) created in Central Java in 1972.² Both have undergone fundamental reforms with differing degrees of success. Information is also provided on the South Kalimantan BKK-type provincial bank and the PHBK credit project.

Discontinuation of Bimas meant that BRI faced the problem of what to do with the significant financial infrastructure of 3,600 unit desas and 14,000 employees. Closing the units would have wasted an important resource and destroyed the goodwill built up with their clientele. An important problem was the low interest rates charged on loans relative to the cost of funds in the Kredit Mini and Kredit Midi programs. The financial reforms of 1983, which liberalized interest rates, provided the opportunity to design new products and establish an appropriate pricing structure.

Following the collapse of Bimas, three key policy changes were introduced in 1983/84 to reform the unit desa system: 1) the units were transformed into full-service rural banks, 2) each unit would be treated as a discrete profit or loss center within BRI, and 3) they would be evaluated on profitability rather than on hectares covered or money lent. A new credit program, KUPEDES (*Kredit Umum Pedesaan* or General Rural Credit), was created to provide loans for a wide range of purposes. Nominal interest rates were set at a flat 1.5 percent per month on the original loan balance for working capital, and a flat 1 percent per month for investment loans. These terms worked out to effective rates of 2.6 and 1.7 percent per month, respectively. A portion of total interest payments would be rebated to borrowers who paid on time. Few restrictions would be placed on the use of borrowed funds but, unlike many of today's microfinance programs, collateral would be required to cover the value of the loan.

² Unless specific references are noted, the information presented about these two institutions is drawn from Patten and Rosengard (1991).

Changes were introduced in which each unit desa was treated as a separate accounting entity such that the staff could be held accountable for its performance. Demand for credit for other types of activities surpassed demand for agricultural production credit; some unit desas were converted into village service posts, and they released staff for reassignment to those unit desas that experienced a rapid growth in loan demand.

The SIMPEDES (*Simpanan Pedesaan*) savings instrument was introduced in the unit desa system in mid-1986 as an alternative to the national voluntary savings program (TAMADES). The design of SIMPEDES was based on market research with rural clients. It offered low interest rates on small savings, but higher rates for larger savings accounts. Unlimited withdrawals were permitted, savers were given coupons for participation in a semi-annual lottery, and the BRI guaranteed deposit safety. The first two features were attractive for rural savers and the savings volume subsequently grew relative to other higher-interest-rate products with withdrawal restrictions. Time deposit and giro (demand deposit) accounts were also created.

One of the unique features of the unit desas compared with other important microfinance organizations, such as the Grameen Bank and most NGOs in Bangladesh, is that they make individual loans based on collateral, often in the form of land, and loans are made for one to three years. Local village officials are involved in loan screening by acting as character references for the borrowers. Agricultural loans including livestock and fisheries are estimated to represent 18 percent of the total portfolio; 25 percent of the borrowers are women, and the units serve a large number of local savers and borrowers. All borrowers are charged an up-front penalty fee of 0.5 percent per month that is refunded if all payments are made on time. The proportion of loans in arrears in 1996 was only 3.64 percent. As such, the unit desa system ranks as one of the most effective rural financial institutions in a developing country.

The second, major well-studied financial institution, the provincial BKK system, was created in Central Java in 1972 to provide small, short-term loans to rural families primarily for

nonfarm productive purposes. The creation of this system was part of a set of activities sponsored by the provincial government to reduce dependence on agriculture, shift resources to targeted ethnic groups, and promote economic activities of the poor. The provincial government provided start-up capital through the Central Java Regional Development Bank (BPD), which also supervises BKK operations. Two hundred BKKs (units) were initially formed and the number eventually grew to almost 500. These units created over 3,000 (*pos desas*) village posts (out of a total of about 8,500 villages in the province) that are staffed once a week, usually on local market days. Unlike the original BRI design, the BKKs are locally administered and are financially autonomous. The system has political accountability because it is incorporated into the local government structure.

Six BKK loan products were created, ranging in maturity from 22 days with nominal monthly interest rate of 4.8 percent, to six months with monthly interest rate of 2.0 percent, the interest rate decreasing with length of loan period. As in BRI, loans are made to individuals. Savings are mandatory to provide capital for loans and instill the savings habit. In theory, access to savings is possible after full loan repayment but, due to fund shortages, many BKKs did not allow or encourage such withdrawals. An unfortunate concept was the creation in 1974 of a *khusus* (special) window for the credit programs of the province's *dinases* (technical service agencies), which included a wide range of agricultural and rural development activities. The clients were selected by the *dinases*, so the BKKs were in the position of being only a collection agency rather than screening their clients and building a long-term banking relationship. Furthermore, the BKKs were allowed to charge only a one-percent-per-month nominal interest rate.

The performance of the BKKs was not good in their early years. By 1979, many were nonviable and about a third had closed or were operating at low levels. A Provincial Area Development Project financed by the United States Agency for International Development, injected fresh capital and provided technical assistance, and the central Government provided a Rp3 billion loan to assist with rehabilitation and expansion.

Between 1981 and 1989, the number of weak BKKs (Class V) fell from 1,984 to 6. Beginning in 1986, several reforms were introduced, in part due to competition from other lenders. The maximum loan-size ceiling was raised, an interest rebate for loans paid on time was introduced, and the national voluntary savings program (TAMADES) was introduced on an experimental basis. To improve services, the system of village posts was expanded and by 1991 there were posts in roughly half the province's villages.

The South Kalimantan provincial government started a BKK-type program in 1985 (Ravicz, 1998). The province first created BKK units to accept deposits and they now number 34. After the 1992 banking law, the province began creating *Lembaga Pembiayaan Usaha Kecil* (LPUK) units that do not accept deposits. They now number 76, such that one or other of the two types is found in all the province's 109 subdistricts. The units rarely pay taxes and are not subject to the reserve requirements that apply to commercial banks. The provincial development bank (BPD) essentially makes all policy decisions, determines the products offered, selects the staff to be hired, and supervises them. Prospective borrowers must have a business or employment to obtain a loan. Loan terms vary between 10 weeks and 18 months. Nominal interest rates range from a low of 3.5 percent per month on a declining-balance basis to a high of one percent per week on the initial loan balance with a 10-percent savings requirement. Minimum loan sizes are about Rp50,000 (about \$20) with a maximum of Rp1 million (about \$440).

A major distinction compared with BRI and the Central Java BKK system is that in 1985 the South Kalimantan BKK system began experimenting with group lending in which "channeling groups" pass loan funds down to their members and forward repayments to the BKK unit. Each member is responsible for paying his/her share but, in the event of default, the remaining group members are liable for any unpaid amounts. Penalties are not charged for late payments nor are interest rebates given for on-time payment. Only the original 34 BKK units accept voluntary savings or require forced savings. Savings earn a nominal annual interest rate of 9 percent.

The *Program Hubungan Bank dan KSM* (PHBK) is an example of a donor program designed to increase access by the poor to financial services through group lending (Ravicz, 1998).³ It is sponsored by BI and the German Agency for Technical Cooperation (GTZ), and in 1989 it began to provide technical assistance to borrower groups, and to banks and NGOs that lend to the groups. Since 1992, no liquidity support has been provided for the loans. The program operates in several provinces and three lending models are used. In the first, borrower groups act as financial intermediaries (KSP) because they on-lend to members the funds provided to them by banks. NGOs identify and train groups but the banks retain the credit risk. The program pays the costs of the NGOs that provide training in bookkeeping and financial skills. Model two is similar except that the banks lend to the NGOs that on-lend to the groups and retain the credit risk. This model is now discouraged because few NGOs had the capacity to function as viable financial intermediaries. In model three, the banks lend to a channeling group (KPM), and the loans are usually divided equally among the members who are responsible for each other's loan repayments. The program trains the banks that are expected to organize and train the groups. Each group has a well-respected leader known to the bank prior to issuing the loan.

³ The Asian Development Bank has two projects underway that have financial components. The first is a \$25 million microcredit project, in which BI lends to rural banks (BPRs) and to regional development banks (BPDs) that on-lend to nonbank financial institutions and to NGOs. Each participating institution is free to on-lend to individuals and borrowing groups on the basis of commercial viability with terms and conditions set by market forces. The project aims to expand microenterprises for poverty alleviation. The second is a \$78 million project designed for rural income generation (cofinanced by the International Fund for Agricultural Development). It includes a savings and credit component operated by BRI. The project supports the creation of self-help groups composed of persons living below the poverty line. BRI provides a savings channel for the groups and group loans for productive activities.

Outreach

The transformation of the BRI unit desa system in 1983-1984 produced spectacular results in outreach and financial performance. The number of outstanding KUPeDES loans rose steadily from 360,000 in 1984 to over 1.6 million in 1989 (Table XI.2). SIMPEDES savings reached almost 70 percent of total savings by the end of 1989, while total unit desa savings exceeded the volume of total KUPeDES loans outstanding by 13 percent. The total number of savers roughly equaled the number of loans outstanding. Whereas the unit desas had produced substantial losses up to 1986, by 1991 they contributed about two thirds of total BRI profits (Robinson, 1992). Because of this positive experience, unit desas were opened in selected urban neighborhoods and achieved similar positive results.

Recently published data for the unit desas for 1996 show continuous growth (Charitoneko, Patten, and Yaron, 1998). The number of loans outstanding was 2.5 million with a total volume of \$1.7 billion. Average loan size was \$1,007 and the average outstanding loan balance was \$685. Minimum loan size was Rp25,000 (about \$11) and maximum was Rp25 million (\$11,000). Savings were even more impressive: 16.2 million savers (over 6 savers for each loan), Rp7.1 trillion in total savings (\$3.0 billion), and an average savings account balance of approximately \$184. A flat nominal interest rate of 1.5 percent per month was still charged on loans, and the average annual effective yield for prompt payers was 32 percent.

The performance of the Central Java BKK system has been less impressive as reported in Table XI.3. The system reached about 500,000 loans outstanding by 1987, then growth tapered off. The total loan portfolio was almost Rp50 billion at the end of 1992 (roughly \$23 million) with an average loan size of about \$47. The number of savers also leveled off at just over 500,000 but voluntary savings grew substantially, representing half of the total 1992 savings of some Rp12 billion (\$6 million) with the average account equivalent to \$12. Cumulative delinquencies fell steadily from 1972 and the system was becoming profitable.

Table XI.2: Growth of BRI Unit Desa Operations, 1984-1989

Date	Total KUPEDES lending during semester		Total KUPEDES outstanding at end of semester		Cumulative KUPEDES lending		Total savings at end of semester (Rp billion)						Ratio of total savings to KUPEDES loans outstanding (%)
	Rp billion	Thousands of loans	Rp billion	Thousands of loans	Rp billion	Thousands of loans	TABANAS	SIM-PEDES	Giro	Deposito berjangka	Rp billion	Thousands of savers	
June 1984	81.1	302	71.6	360	81.1	302	26.9	0.0	2.6	0.0	29.5		41.2
Dec. 1984	90.2	337	111.1	641	171.3	639	39.1	0.3	2.0	0.8	42.2		38.0
June 1985	156.1	474	180.1	854	327.4	1,114	39.5	0.5	1.9	1.1	43.0		23.9
Dec. 1985	182.7	518	229.0	1,035	510.1	1,631	63.8	5.1	13.8	2.2	84.9		37.1
June 1986	225.7	572	284.9	1,164	735.8	2,203	66.5	15.5	11.8	3.0	96.8		34.0
Dec. 1986	256.3	578	334.4	1,232	992.1	2,782	78.4	82.6	10.9	3.9	175.8	3,544	52.6
June 1987	299.1	599	403.2	1,301	1,291.2	3,381	66.7	121.8	16.6	5.3	210.4	3,854	52.2
Dec. 1987	298.7	538	429.2	1,315	1,589.9	3,918	79.5	182.6	12.5	12.7	287.3	4,184	66.9
June 1988	348.1	568	492.6	1,379	1,938.0	4,486	70.3	214.7	9.8	21.8	316.6	4,251	64.3
Dec. 1988	359.6	546	538.7	1,386	2,297.6	5,033	89.5	342.0	16.6	44.4	492.5	4,998	91.4
June 1989	483.0	658	690.6	1,490	2,780.6	5,690	86.4	454.9	8.4	71.6	621.3	5,365	90.0
Dec. 1989	589.7	722	845.6	1,644	3,370.3	6,412	113.6	699.8	26.3	117.3	957.0	6,262	113.2

Source: Reproduced from Patten and Rosengard (1991, p. 77).

Table XI.3: Expansion and Portfolio Quality of the BKK Program

Year	Loans outstanding		Cumulative delinquencies (% of cumulative loans)		Savers (number)	Savings (Rp'000)
	Number	Amount (Rp'000)	Number	Amount		
1972		213,429	16.03	7.11	73,456	38,389
1977	260,253	1,400,382	7.03	3.15	244,469	356,273
1982	310,167	4,817,823	4.36	1.92	283,841	1,002,394
1987	516,065	18,223,750	3.26	1.98	415,842 ^a	2,865,724 ^a
					3,339 ^b	29,550 ^b
1992 ^c	498,591	48,946,000			414,797 ^a	6,268,000 ^a
					91,461 ^b	6,193,000 ^b

^a Mandatory savings

^b Voluntary savings (*TAMADES*)

^c Data for loans outstanding and savings for 1990–1992 available only rounded to millions and thousands of rupiah, respectively.

Source: Riedinger (1994).

A 1989 survey of over 600 clients in 20 BKKs revealed that petty trading was the primary activity for more than half of the respondents and farming was a secondary activity for about half of them (Patten and Rosengard, 1991). Sixty percent of the borrowers were women, half the borrowers owned land, and most lived in the village where the loan transaction took place. More than a third had received credit from other sources and more than 40 percent had savings accounts outside the BKK. Average borrowers quadrupled their loan size within four years and received a total of more than 13 loans.

Analysis of the South Kalimantan BKK system for 1995 revealed 34,518 loans outstanding for the 110 units for a total Rp7.8 billion (\$3.4 million) or about \$100 per loan (Ravicz, 1998). The growth between 1993 and 1995 was due almost entirely to increased average loan size rather than to a larger number of loans. Most of the borrowers were petty traders and approximately 40 percent were women. Loans were not written off such that, after adjustments were made for old loans, the arrears rate in 1995 for loans more than 90 days overdue was 6 percent. Return on equity was estimated to be -29.7, 7.5, and

12.0 percent for 1993, 1994, and 1995, respectively. All BKKs needed additional liquidity. For those units that mobilize savings, voluntary savings were equal to only 31 percent of outstanding loans in 1995. The fact that the new units do not accept savings will retard their growth, deny an important service to clients, and deprive loan officers of an important gauge of client creditworthiness. These units may be especially vulnerable to competition from BRI and other banks in the region.

An evaluation of the PHBK project was conducted in 1997–1998 (Steinwand, 1998). It included interviews with 23 rural credit banks (BPR), approximately 10 KPM (financial intermediaries) per bank for a total of 200, and two members from each KPM for a total of 400 members. Most of the BPR were newly created with 10 years or less of experience. The PHBK project is oriented toward sound banks, but seven sampled banks had serious problems due to high arrears or internal problems such as misuse of funds.

The banks tend to be small and chose to participate in the program to lend to small entrepreneurs and microentrepreneurs because they cannot compete with commercial banks for larger clients. Nearly a third made loans as small as Rp50,000 (\$10) and the median minimum loan size was Rp100,000. The median minimum requirement to open a savings account was only Rp2,500 (\$0.50). The banks provide door-to-door service in collecting savings and loan installments at their client's homes. Productivity per staff member varied considerably from 26 to 119 credit accounts per staff member and 80 to 318 savings and time-deposit accounts. Margins varied from 20 to 43 percent but, because of high costs, profits were either negative or reached a maximum of 3 percent of average productive assets. Future profits will depend heavily on the disposition of classified loans, which varied from 6 to 30 percent of productive assets.

The banks are vulnerable to losing deposits because only a few people hold most of the time deposits in a bank. There was no clear evidence that group lending reduced the costs and risks of lending compared to individual loans, but it may

have assisted the banks to reach a poorer clientele. Group lending seemed to perform better in Central Java than in the other provinces and staff productivity was higher.

Analysis of the PHBK borrowing groups (KPM) revealed an average of 11 members. The overall membership was 56 percent men with 26 percent of the groups being men-only, 21 percent women-only, and the remainder mixed gender. Only 26 percent of the groups met regularly, and nearly half were new and had only received one loan. Most groups divided the total loan among the members according to an estimate of need. With the exception of Central Java, about three quarters of the groups restricted loans to productive purposes. Even though most groups employed joint liability, most banks required collateral, frequently in the form of blocked savings accounts. About half of the groups had no arrears. The better paying groups were formed at their own initiative, were smaller in number of members, kept total group size unchanged over time, selected their own managers, and met more regularly. Surprisingly, loan collateralization made little difference in repayment. The best repayment rate was observed when the group managers collected from members and delivered the funds to the bank rather than when the bank staff picked up payments from the group.

Analysis of the member interviews revealed that about half reported trade as their primary business with agriculture being second most important. Most members reported using the loan for expanding a current business rather than starting a new one. Nearly half had never visited their lending BPR because the services were received at their homes. The median distance from the BPR to the member's home was eight kilometers. Surprisingly, their closest bank was only three kilometers away on average, and it was often a BRI unit desa. This result reflects a possible segmentation in the clientele. Clients able to borrow somewhat larger loans on an individual basis may choose BRI, while clients who enjoy the greater level of service provided or who cannot or choose not to provide as much loan collateral, select the BPR.

Access to formal loans appears to be widespread in rural Indonesia. Borrowers without sufficient loan collateral face problems in getting loans from BRI and the other lenders that require physical collateral. Seeking loans from joint liability group lenders is one way for rationed borrowers to solve this problem. However, Indonesia represents an especially interesting case because several organizations successfully provide individual loans without requiring collateral. Instead, they employ local authorities such as village leaders to screen clients. This experience is in sharp contrast to organizations in other parts of rural Asia that conclude that group lending is the only way to improve access by the poor to formal finance.

Sustainability

The sustainability of Indonesian rural financial institutions is quite varied. The BRI unit *desas* represent one extreme. The gross financial spread for the unit *desas* in 1996 was reported to be 18 percent and the adjusted return on equity was an extremely large 134 percent. The unit *desas* were financially self-reliant and subsidy independent. In effect, they were subsidizing the rest of BRI, such that rural borrowers were subsidizing the more affluent urban clientele. It was estimated that in 1995, the unit *desas* could have reduced the yield on their loan portfolios from 31.6 to 16.3 percent and still remained subsidy independent (Charitoneko, Patten, and Yaron, 1998).

Several weaknesses have been identified in the Central Java BKKs, especially when compared to the BRI unit *desas*, and they raise questions about BKK sustainability (Riedinger, 1994). First, the low-interest-rate experience with the *klusus* loans revealed the importance of correct pricing to cover lending costs and risks. Second, many of the BKK failures in the early 1980s were in urban areas where corruption may more easily occur. Third, total outreach is limited because of an incomplete network of village posts. Fourth, the trend towards larger loan sizes may reduce female participation. A study of BRI and other BKK-like financial institutions found a negative relationship

between increasing loan size and the share of female borrowers (Holt, 1991). Fifth, savings mobilization lags behind BRI and other BKK-like institutions. One reason is that poorer customers seem to prefer passbook savings rather than the certificates of deposit of the TAMADES program operated by the BKKs. The proximity of the BKK units to their clients offers an advantage relative to competitors, but it may not be sufficient to retain their savings as interest rates rise elsewhere.

No definitive judgement can be made about the lasting impact and sustainability of the PHBK. Since the participating banks are small, they may choose to continue serving this clientele after the project subsidy ends. No clear evidence exists on whether or not group lending reduces lending costs or risks, but groups may help somewhat poorer clients gain access to financial services. The regional differences in the results imply that Central Java is a more favorable area for group lending than the other less densely populated provinces.

A major conclusion is that there is a considerable range in the sustainability of the rural financial organizations. On the top of the list are the unit *desas* that could substantially reduce their interest rates and still be subsidy independent. This is due to their high interest rate policy and level of efficiency. BRI also has attractive savings products even though very small deposits earn no interest. Many of the other financial organizations, however, rely on subsidies. They do not price their loans high enough to cover costs and have not developed attractive saving products to mobilize savings. Rather than compete with BRI on interest rates for savings, some institutions emphasize the service of door-to-door savings collection. The special poverty-oriented programs funded by the Government and donors tend to be highly subsidized, represent a departure from the Government's drive to create sustainable finance, and run the risk of collapsing if the flow of subsidies is discontinued. Any success they achieve in furnishing financial services to the poor, therefore, would only be transitory. Their loan recovery rates are also inferior to the BRI unit *desas* and this saps their viability.

The relative success of BRI and some other rural financial institutions is due in part to Indonesia's dynamic economy and comparatively stable macroeconomic and political environment until mid-1997. This contributed to a strong demand for credit and savings services. This demand and the generally good repayment performance of borrowers stimulated the emergence of rural financial institutions.

Several key features of institutional design also explain the successful performance of many of the important financial intermediaries (Chaves and Gonzalez-Vega, 1996). First, important information problems in lending have been resolved by establishing a network of semi-independent, locally operated financial institutions with a comparative advantage in gathering information about clients, monitoring loans, and enforcing loan contracts. Loans, therefore, are often based more on character than collateral. Second, to resolve the agency problem, incentives in the form of performance-based remuneration and efficiency wages⁴ have induced financial managers to behave in ways consistent with the financial health of the institutions. Third, managers of the financial institutions have been given considerable autonomy over interest rates and other key performance variables. Fourth, one-time subsidies in the form of start-up loans and grants nurtured the organizations without creating a dependency for continuous subsidies. The modest levels of this support prevented the development of expensive fixed-cost structures. Fifth, clients value their banking relationship due to rapid loan disbursement, low transaction costs, and the possibility of pledging nontraditional forms of collateral such as character references. Loan recovery is high because borrowers want to protect their reputations and their access to future loans.

⁴ Efficiency wages refer to wages paid above employee opportunity costs. This increases the cost of job loss and encourages workers to put forth adequate effort.

DEPOSIT MOBILIZATION

Indonesia has explicitly included savings mobilization in its policies to expand financial services. As noted above, the number of savers in the BRI unit *desas* far exceeds the number of borrowers. This experience reveals the importance of designing financial instruments desired by customers. TABANAS (national savings program) and TASKA (insurance savings scheme) were introduced in 1971. Various financial institutions were authorized to accept deposits. Interest income was tax exempt, BI guaranteed the deposits, depositors received special incentives through lotteries, and the deposits could be used as loan collateral. The banking reforms, which reduced reserve requirements, removed easy access to refinance funds and permitted banks to develop their own financial products, thereby unleashing a scramble for savings and deposits. Interest rates have often been negative in real terms but, rather than raise rates, some banks have attempted to attract funds through reducing transaction costs to savers by offering door-to-door savings services. The banking law of 1992, however, limited deposit taking to those banks defined as commercial banks and rural credit banks.

The most well-analyzed rural savings experience is that of BRI and the introduction of SIMPEDES. The reforms of BRI were based on the idea that there was an unmet rural demand for savings that could be effectively mobilized for lending. BRI participated in the national TABANAS program beginning in 1976 and offered other savings instruments but only in its branch offices. TABANAS was found to have limitations for rural people because it permitted only two withdrawals per month so SIMPEDES was designed to permit unlimited withdrawals. It also provided savings opportunities for the previously untapped market of formal and informal rural organizations such as village treasuries, schools, development programs, sports associations, and informal savings and loan associations. The SIMPEDES design was first tested in 1984 with a 12 percent nominal annual interest, but with the added labor costs it proved to be too

expensive. It was redesigned such that no interest was paid on small accounts of Rp25,000 or less, and 12 percent on accounts above Rp200,000. Over time, the interest rates were raised on the larger accounts, but generally not as high as the TABANAS rates (Robinson, 1992). The features of unlimited withdrawals, BRI guarantees of safety, and participation in savings lotteries proved to be the attractive features of SIMPEDES in rural areas. This stimulated its rapid growth as noted in Table XI.2.

The cost of mobilizing savings in the BRI unit desa system was recently estimated at about 15 percent (Maurer, 1997). This high cost has been balanced by a funds transfer price within BRI of about 15.5 percent. Therefore, besides providing a valuable service to savers, units can make profits by channeling excess funds to branches. Some 95 percent of the units are net fund providers to branches. More than a third of interest income in 1996 came from branch interest, and two thirds came from KUPEDDES loans. The transaction costs to savers have been kept low through the customers' physical proximity to the BRI units. Units or village service posts, however, do not cover many remote areas; thus, opportunities still exist to tap savings by expanding the BRI network or by more aggressive savings mobilization by competing financial institutions.

MICROFINANCE

Microfinance does not play as visible a role in Indonesia as in some other Asian countries. Seibel and Parhusip (1998) prepared a summary of the loans and deposits reported for the BRI unit desas and the major categories of microfinance organizations as of December 1995 (Table XI.4). These data give a partial picture of access by the poor to financial services. Some 12,000 total rural banking outlets were reported with 4.7 million outstanding loans. BRI had about a quarter of the outlets and reported almost half the total loans with over 60 percent of the total volume. The Rp5 billion in total loans, however,

Table XI.4: Number and Market Share of Major Rural Financial Organizations, December 1995

Type of financial institution	Outstanding Loans				Funds Mobilized			
	Number	Accounts ('000)	Percent of total	Amount (Rp billion)	Accounts ('000)	Percent of total	Amount (Rp billion)	Percent of total
1. BRI - unit desa	3,482	2,264	48	3,194	14,483	76	6,016	81
<i>Major microfinance organizations:</i>								
2. BPR (Rural Credit Bank) and Secondary Banks	1,948	1,232	26	1,566	2,969	16	1,226	17
3. LKPDs (Small Financial Institutions)	1,978	261	6	224	456	2	118	2
4. BKDs (Village Credit Body; include BPR)	5,435	955	20	93	1,176	6	63	<1
Total rural	12,843	4,712	100	5,077	19,084	100	7,423	100
5. Commercial Banks	240	91,168		234,611	49,904		214,764	

Source: Adapted from Seibel and Parhusip (1998).

represented less than 2.2 percent of the total loans reported by commercial banks.

The remarkable feature of Indonesian microfinance is the 19 million saving and deposit accounts that represent 38 percent of the total number of accounts reported by the commercial banks. The unit *desas* were responsible for three quarters of these accounts, with over 80 percent of the total value. The other three categories of rural microfinance organizations perform less well in mobilizing savings. Their savings-to-loan ratio is less than one, indicating that they obtain resources from other sources to finance their loan portfolios. Considering that the commercial banks have rural operations and assuming that most rural households have only one account, it can be concluded that in 1995 some 20 million rural households had formal savings accounts and some 5 million had loans. Many clients would be defined as poor so this represents significant outreach.

As noted above, the geographic distribution of financial outlets appears to be most heavily concentrated in Central Java and other regions with high population densities. Some villages are served by competing banks, while more remote areas are likely to be underbanked.

The depth of outreach also seems substantial. The country's per capita GDP was reported to be just over \$1,000 in 1995. The unit *desas* in 1996 reported average loan size roughly equal to that amount, but make loans as small as \$11. The average loan size of the Central Java BKK was \$47 in 1992. It is often thought that joint liability group lending is capable of reaching poorer clients than is individual lending, but the South Kalimantan BKK, which makes some group loans, reported an average of \$100 per loan in 1995. The 1997–1998 evaluation of the PHBK project, however, reported that nearly a third of the small banks made loans as small as \$10. Although BRI can make loans as small as the other banks, on average its loans are somewhat larger. Therefore, the poor may find it easier to get smaller loans to meet their demands in regions and villages where the other microfinance organizations are located. However, on the savings side, the unit *desas* do a

much better job than other organizations in attracting small savings. The government guarantee of BRI deposits helps explain why savers moved their funds into BRI during the financial crisis as discussed further below.

INFORMAL FINANCE

In his comprehensive study of informal finance, Ghate (1992) noted there are fewer studies on informal finance in Indonesia than in many other Asian countries. There is little information on which to evaluate the types and total volume of informal finance, who uses it, and the terms and conditions. The following types of informal finance mentioned in the literature are presumably still common.

An ancient and widespread form of rotating savings and credit associations (RoSCAs) called *arisans* is found in both rural and urban areas. Membership tends to be small and contributions in the form of rice often substitute for money. Hospes (1992) discussed the important role of RoSCAs in a study of the coastal town of Tulehu in the Moluccan province. He noted ways in which formal and informal finance are linked, such as a local cooperative (KUD) opening interest-free deposit accounts for daily savings and depositing the funds in an interest-bearing account in the local BRI unit *desa*. Loans from itinerant traders, professional moneylenders, and *arisans*, in addition to friends and relatives, are most frequent in both Central and Eastern Java. Moneylenders appear to be prevalent in urban areas; the profession is associated with the ethnic minorities of the Chinese and the Batak tribe.

Informal finance is frequently found in trading. Bouman and Moll (1992) cite a case study of vegetable farmers in West Java in which most of the farmers obtain rice and production inputs from shopkeepers and traders. These loans are interest free, usually without collateral, but inputs bought on credit are priced higher than cash purchases. Loans are also obtained from traders against standing crops. In the *tebasan* system, the

crop is purchased only 3 to 10 days before harvest. The *ijon* system involves the sale of the crop long before harvest and is frequently done for rice farming in Central Java, and for tree crops in East Java and other islands. The borrowers shift much of the price and marketing risk to the lender who assumes responsibility for harvesting and selling the crop. Suppliers' credits are used by the manufacturers and retail dealers of hand tractors and powered threshers. Land pawning through usufructuary mortgages also exists through *sewa*, in which land is leased by large landowners from small landowners for a fixed number of crop seasons. The net proceeds of cultivation repay both principal and interest. There is another form called *gadai*, in which the earnings constitute interest only and no fixed maturity is established.

IMPLICATIONS OF THE FINANCIAL CRISIS

The financial and economic crisis in Asia hit Indonesia particularly hard because it occurred when it was experiencing its worst drought in 50 years and international oil prices were in sharp decline. In the space of a year, the currency fell in value by 70 percent, inflation soared to over 50 percent, the economy rapidly contracted, unemployment soared, and the stock market lost much of its value (McGuire and Conroy, 1998). The central bank sharply increased interest rates, which raised the costs of production for borrowing firms. At the same time, the Government tried to preserve a social safety net for the poor by subsidizing food, fuel, electricity, medicine, and other essential items. The political clashes and eventual change of Government contributed to a climate of political and economic uncertainty.

Some fragmentary evidence exists about the impact of the crisis. The primary concern here is to understand how it affected the rural economy and rural financial institutions. At the aggregate level, there was little evidence of a credit crunch for firms up to early 1998, but strong sectoral shifts in funds

may have contributed to localized credit problems (Ding, Domac, and Ferri, 1998). First, real deposit growth declined while funds denominated in foreign currency rose, indicating a reluctance to hold rupiah. Second, the market shares of State and foreign bank deposits rose while those of private national banks fell, indicating a flight to safety by depositors. This shift probably implied that borrowers from small private banks faced greater credit constraints than those of State banks. They would probably be small and medium-sized enterprises generally perceived to be risky. Third, the decrease in spreads between lending and deposit rates contributed to bank fragility. Several banks were closed and others were taken over by the Indonesia Bank Restructuring Agency (IBRA).

In January 1998, the Government declared a guarantee on all bank deposits to stem the outflow of deposits from private commercial banks. In mid-March 1999, the country announced the closure of an additional 38 banks, and the nationalization of seven others. A plan was approved by the Government to recapitalize seven State banks, 14 regional banks and 11 nationalized banks (Anon., 1999b). The total stock of bonds to be issued in 1998–1999 to finance the operations of IBRA was estimated to be Rp235 billion (25 percent of GDP). The annual budgetary costs of servicing the bonds and the operational costs of IBRA were estimated to be about 2 percent of GDP (Lane et al., 1999).

The experience of BRI varied depending on the economic sector served. The Strategic Business Unit that deals with corporate finance was hit particularly hard because its clients are large corporate units, many of which borrowed abroad and were seriously affected by the fall in the exchange rate. Most of these loans were nonperforming in August 1998 (Patten, 1998). In the Micro Unit, which includes the unit *desas* with the KUPEDDES borrowers, these borrowers continued to pay back more than 97 percent of their loan amounts falling due. A nominal decline occurred in KUPEDDES loans outstanding, but this was attributed more to weak demand than to supply constraints or rising interest rates. Nominal interest rates were raised from 1.5 to 2.2 percent per month flat only in September

1998. Borrowers reportedly feared taking on new debt because of a weakening in demand for their products due to the drought, stagnant incomes, layoffs, and inflation. This seems to imply that loans did not play an important role in consumption smoothing. BRI experienced a rapid increase in savings in both the branches and unit desas. This was explained by the perception of security in State-owned banks as well as an increase in the interest rates paid on savings.

The situation may be less favorable for small banks and special programs serving poorer clients. A survey of selected rural banks (BPRs) suggested that they were exercising caution in extending loans to new clients, were making fewer loans, and were increasing average loan sizes to cope with inflation. Some rural banks reported a rise in arrears, and were providing loans only to established customers and tightening collateral requirements. Some depositors were reported to be withdrawing their funds from BPRs and depositing them in BRI due to the perception of greater security (McGuire and Conroy, 1998). A case study of three BPRs revealed the wide variation that exists among local economies, the circumstances of different financial institutions, and the different management strategies employed to deal with the crisis. While one bank managed to adjust its lending and pricing policies to the changing circumstances, another had more difficulty and may fail (Reille and Gallman, 1998).

In response to the problems faced by rural banks, the central bank announced in June 1998 that working capital credits would be available to rural banks for expanding their financial resources for small enterprises and employment creation. These credits were to be made available at 15 percent per annum and could be relented at a maximum of 30 percent. This rate is below current market rates so there is a concern about sustainability.

There is evidence that NGOs and specialized projects were also experiencing a decline in loan recovery rates. The organizations associated with Catholic Relief Services face the common dilemma of rising operating costs and falling revenues. They have slowed disbursements and permitted selective loan rescheduling. They face the dilemma of focusing on either the

sustainability of the financial institution by raising interest rates or on the welfare of the borrowers who may be in a precarious situation (McGuire and Conroy, 1998).

It appears that State banks have fared better than private banks, and rural financial institutions have been much less affected than their urban counterparts. BRI unit desas have been relatively unaffected. The smaller rural banks and specialized programs face the greatest challenges. If, because of financial stress, the lenders cannot make new loans, they will break the financial relationships built up with borrowers. Borrowers may hesitate to repay if they believe that the lenders lack liquidity to make new loans. But the lenders may become illiquid precisely because of low recovery rates. Furthermore, the group-lending technology may be severely tested. Peer pressure to repay may give way to collective default if group members perceive that another member may not be able to repay. The lack of collateral may make the group lenders more vulnerable in this crisis than the individual lenders who have the ability to threaten to seize mortgaged property in the event of nonpayment. Another threat to the small banks is the recent flood of subsidized credit projects implemented to ease the economic problems created by the crisis. These programs represent threats to institutions trying to become independent of subsidies.

CURRENT POTENTIAL AND CONSTRAINTS FOR RURAL FINANCE

The Indonesian experience provides important lessons for rural Asia about what to do and what not to do in developing a sound and efficient rural financial system. Four lessons stand out. First, the important role played by technocrats, supported by foreign technical assistance, was obvious in effectively redesigning the BRI unit desa system, developing and pricing new loan and savings products, decentralizing responsibility and providing personnel incentive systems, and creating an image

of a stable, long-term institution. Second, resources spent on institutional development may have little impact if the policy environment is unfavorable. The huge volume of resources that historically had been invested in BRI and its predecessors made little impact when the institution was saddled with the ill-conceived Bimas program, but contributed to a large payoff when policies and the institutional mission were changed. In fact, the most important contribution of the relatively small amount of donor support that went into the system in recent years may have been political support for technocrats facing pressure to undertake unhealthy practices and policies. Third, the massive amount of rural savings mobilized by the unit *desas* provides ample proof of the demand for attractive savings products and the capacity of rural people to save. Even within Indonesia this lesson does not seem to have been fully learned by financial institutions that are slow in designing products demanded by a rural clientele. Fourth, policies and institutions can be designed to achieve high levels of outreach, serve the very poor, and attain financial and institutional sustainability using an individual lending technology. The unit *desas* reach poor clients by using an individual loan technology requiring collateral, but group loans may be useful for reaching even poorer clients.

Although much has been written about rural financial institutions in Indonesia, there are uncertainties about several key questions, such as:

- How far have the formal financial institutions penetrated into rural areas, especially the more isolated regions of the country? What types of households and rural enterprises have and do not have access to formal loans and savings services? Are there specific regions in which the lack of access to formal financial services is a serious constraint for firms and households? How unique is the Central Java economy and culture relative to the rest of the country, and what are the limits to the transferability of lessons learned in that region?
- What financial institutions serve large farms and agribusinesses? How dynamic are they in meeting

evolving demands? How were these financial institutions and firms affected by the financial crisis?

- How well do rural cooperatives and special credit programs and projects perform? Whom do they serve with what products, and what is their potential for sustainability?
- How many formal financial services are provided to farmers largely engaged in seasonal crop production, compared with those to rural entrepreneurs with nonfarm enterprises? What types of financial services are provided to the very poor? Are there limitations in the BRI or other institutional models that affect how well they can be applied to typical farming situations or to very poor clients?
- How important is informal finance either as the sole or complementary source to formal finance? Whom does it serve at what terms and conditions? What lessons can be learned from informal finance to improve formal finance?
- How many subsidized lines of credit exist in rural areas today? How many have been implemented since the crisis, and what are the implications for financial institutions striving to achieve self-sufficiency? How fragmented have the rural financial markets become because of government and donor programs?
- What type of information is collected about clients of formal financial institutions, and how is it processed, analyzed, and shared among financial institutions?

These uncertainties need to be resolved before clear recommendations can be made about the priority needs of the rural financial system at this time. However, a number of issues identified in the literature require attention.

Creating the Policy Environment

The major short-term problem in Indonesia is how to manage the negative effects of the financial crisis, and restore the health of the financial system. The longer-term policy issues concern what needs to be done to prevent a repetition of the financial crisis. The crisis exposed the inherent weaknesses of the entire financial system, and especially the lack of transparency in financial operations. It is commonly known that political considerations distorted decisions about which projects to fund, and at what terms and conditions. The unnoticed "contagion" effect may be the greater acceptance of corruption in small financial transactions because of the corruption observed in large ones. The corrupting influences of family and political connections must be minimized at all levels of the financial system. This requires the creation and effective enforcement of rules about insider transactions and portfolio concentration. Implementing these changes requires strong support from the Government, but that may be difficult to obtain at this time of political uncertainty. Donors also need to insist on these changes.

The costs of restructuring the financial system are projected to be large; perhaps the annual costs will amount to 2 percent of GDP. Financing these costs will crowd out other demands for resources. The question of who will bear these costs may be an important factor influencing the country's future political stability. This experience demonstrates the extreme costs that a country may bear when bad financial and macroeconomic policies are implemented.

The desire to ease the social costs of the crisis is understandable. But the policy of creating unsustainable financial projects cannot be rationalized, given the country's negative experience with directed and subsidized programs. Although the intent may be laudable, these projects create several problems. First, unsubsidized organizations cannot compete by offering market-based products. Second, the lucky beneficiaries may come to expect subsidies and never graduate to become clients of market-based institutions. Third, resources

for subsidies will always be limited, especially so in this crisis situation, so the few who get the subsidies gain at the expense of the many who do not. Fourth, weak enforcement procedures may undermine the repayment culture.

Creating and Strengthening the Financial Infrastructure

The major infrastructure challenge is to create an appropriate regulatory and supervisory framework for the financial system. The most prominent banking failures in the early 1990s were caused more by a lack of enforcement than by a lack of regulation (McLeod, 1999). Presumably that problem also contributed to the current crisis. The highly decentralized nature of the rural financial system, with thousands of independent banking units, complicates monitoring the health of the system and performing essential regulatory and supervisory functions. Therefore, the challenge for the lower end of the market is the difficulty of regulating and supervising the thousands of small financial institutions scattered in rural areas. They represent strength in the sense of extending the financial frontier outside the large cities and beyond the reach of BRI, but they pose a problem for effective regulation and supervision. On the one hand, their flexibility in serving local clients with market-determined financial products needs to be preserved while, on the other hand, they need to become more professional in their operations with appropriate safeguards for depositors and owners.

BI may not have the capacity to undertake this vast regulatory task, and it may have compromised its traditional regulatory role by managing donor and government projects designed to channel loans to targeted clients. The same problem exists for BRI because it must ensure the viability of the unit *desas* at the same time as it channels subsidized funds through its branches. A firewall needs to be built between these two sets of activities such that the problems caused by subsidized funds do not contaminate nonsubsidized operations.

The current patchwork arrangement is insufficient to deal with the regulatory complexities of the rural financial system. The danger, however, is that a heavy-handed regulatory framework will be applied to small institutions, which will raise costs, damage innovation, and strangle the system when the risks and costs to society are fairly small, even if a few small units collapse due to poor management or fraud. Alternative methods of regulation and supervision need to be explored. For example, the rural banks are eligible to join *Perbarindo*, the Association of Indonesian Rural Banks, which might evolve into a method of self-regulation. Likewise, the NGOs have discussed forming an association, but so far this has not occurred (McGuire, Conroy, and Thapa, 1998).

Little information was found in the Indonesian literature about the collection of information and its availability to financial institutions. Information about credit histories is necessary to permit lenders to screen possible clients and to determine the terms and conditions of loans made. It is unclear if there is any type of credit reporting system and who has access to it. If none exists, then consideration should be given to creating one.

Institutional Development

The immediate problems of the financial system imply that some rural financial institutions may require a government bailout to avoid collapse. This is a delicate problem because, on the one hand, the Government has to evaluate the social losses if they are permitted to fail. On the other hand, there is the problem of precedence and the moral hazard problem in that financial institutions in the future may undertake risky behavior if they believe they will also be bailed out if they fail. For the long term, lender-of-last-resort arrangements need to be worked out for rural lenders that face the systemic agricultural risks of droughts, floods, and other natural disasters.

There are several puzzles about the uneven pattern of development of Indonesian rural financial institutions. With the success of the BRI unit *desas*, it is puzzling why other

institutions fail to adopt similar methods of management, and design and pricing of products. It is even more puzzling why donors support subsidized projects. If a dynamic organization such as BRI fails to serve a particular class of customers, such as the very poor, the question should first be asked why this is so. Perhaps there are good reasons to support competing institutions and to provide temporary subsidies to cover the cost of serving particular classes of clients. Unfortunately, the rationale for many institutional strengthening projects does not appear to be based on a good analysis of the underlying problems, and there is little explanation of how a particular project will provide anything more than a temporary respite from the problems.

Since there are many small and weak institutions, an obvious question is how to strengthen them. Consideration might be given to establishing an apex or second-tier institution. Experience has revealed several weaknesses in this approach, however, that have to be evaluated before assessing if this is a good recommendation for Indonesia. Apex organizations work better if there is a willingness by the participating institutions to adopt fundamental changes and a clear understanding of the nature of the improvements required. Apex organizations may also assume a regulatory role, but their promotional role may complicate their effectiveness as impartial agents for regulation and supervision (Gonzalez-Vega, 1998). The same problem may exist for the newly created DABANAS Foundation.

Many projects and programs funded by the national and provincial governments and donors with heavy subsidy elements have emerged in recent years. They focus mainly on loans in spite of the huge demand for rural savings services. These initiatives unfairly compete with nonsubsidized financial institutions and create expectations about entitlements for future subsidized loans. The subsidized pricing of financial services needs to be avoided. If subsidies are justified for nonfinancial services, they should be provided by institutions other than banks. The rationale for creating new rural programs and institutions is unclear in the face of the widespread network of unit desas, the BPRs, and the millions of clients served.

The pricing policy of BRI should be revised. No rationale can be found to justify why the unit desas should tax rural borrowers through excessively high lending rates, and generate huge profits that subsidize the rest of BRI operations, including large loans to richer clients. Unit desa lending rates should be set to cover the cost of funds, operating costs, losses, and costs of new product development, plus building prudent reserves. If any cross-subsidization is desired, it should be to tax the current rural borrowers to allow the unit desas to expand into more distant rural areas and to compensate them for making smaller loans to poorer clients. The unit desas might be given the freedom to lend to other banks and earn an interbank rate rather than be limited to BRI. This would improve resource allocation and expose the implicit subsidy now going to BRI. Alternatively, the rural units might be spun off as a separate institution such that the surpluses generated could be used to lower interest rates, expand the network, serve more clients, and create new products.⁵

⁵ Apparently consideration was being given to various alternatives in 1998, including creating a separate bank to take over the corporate unit of BRI with its large portfolio of nonperforming loans.