The microfinance Revolution

Volume 2: Lessons from Indonesia

Marguerite S. Robinson

THE WORLD BANK

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The Microfinance Revolution

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The Microfinance Revolution

Volume 1: Sustainable Finance for the Poor

Volume 2: Lessons from Indonesia

Volume 3: The Emerging Industry

Marguerite S. Robinson

The World Bank, Washington, D.C.

Open Society Institute, New York

Praise for *The Microfinance Revolution*

"This is volume one of three that Dr. Robinson is preparing for World Bank publication. I especially liked three aspects of this tome: it makes a strong case for emphasizing deposit mobilization in microfinance efforts; it does a thorough job of covering recent literature on this topic; and the discussion is enriched with anthropological perspectives that remind us that microfinance clients are complex people. Proponents of the new paradigm of development finance will warm to Robinson's treatment of interest rate policies, deposit mobilization, stress on sustainability, emphasis on quality of services, and the profitability of providing microfinance—if done correctly...I enjoyed reading volume 1 and look forward to chewing on volumes 2 and 3."

—Dale W Adams, Professor of Agricultural Economics, Emeritus, The Ohio State University; consultant in rural finance. From a review of volume 1 posted on Ohio State's online Development Finance Network, 9 September 2001

"If you are looking for a book that can provide a global overview of the current microfinance sector with a historic flavor from both a theoretical and practical perspective, you have one place to go: Marguerite S. Robinson's new book, *The Microfinance Revolution*. Robinson's vast experiences in Asia and skills as a financial anthropologist are well combined to provide a gourmet treat to a wide variety of readers including academics, microfinance practitioners, consultants, policy makers, and researchers. In short, it is a must read for all stakeholders in microfinance."

—Geetha Nagarajan, Associate Editor, The MicroBanking Bulletin. From a review of volume 1 in the Asian Development Bank's quarterly newsletter, Focal Point for Microfinance, *September 2001, p. 8*

"The book examines how the diverse demand for financial services...for the poor and low-income households and their enterprises...can be met on a large scale and on a sustainable basis. [The author] does this in a stimulating manner by drawing from the basics of commercial microfinance. She combines the basics with her insights gained from years of field experience in microfinance and policy advice to policymakers in a number of developing countries. The result is a unique study...The book is a must for those who need to keep abreast of the changing landscape of microfinance. The readers of this book will, in my view, gain both insight and foresight."

—Nimal A. Fernando, Lead Rural Finance Specialist, Asian Development Bank

"*The Microfinance Revolution* is a magnificent contribution to the theory and practice of international development. It is a much-needed wake-up call for economists who have long pooh-poohed the potential of microfinance institutions for promoting savings and investment and alleviating poverty. Likewise, it will alert advocates of subsidized microfinance that the financial needs of the vast majority of the poor can be met by commercially based microlending."

—David E. Bloom, Clarence James Gamble Professor of Economics and Demography, Harvard University

"Dr. Robinson has written a magnificent work that provides a jolt of energy as well as wise guidance to the fledgling microfinance industry. This book will quickly become required reading for students and professionals in and around the microfinance industry, for donors and government agencies, and for investors. This is also the first book that, through thoughtful analysis, vivid images, and extensive research, will beckon commercial bankers and the rest of the 'real world' to sit up and take interest in microfinance. It will thus be a potent force in fusing the small scale, donor-driven microfinance of today with the formal financial systems of tomorrow—systems that will provide high-quality financial services on a permanent and ever increasing scale to millions of poor households around the world."
—Elizabeth Littlefield, Chief Executive Officer, Consultative Group to Assist the Poorest; Director, World Bank; and former Managing Director, JP Morgan

"Marguerite Robinson has produced a major work that will unquestionably lie at the very center of microfinance literature for many years to come. Dr. Robinson is uniquely qualified, having spent many years living in tiny villages as an anthropologist, seeing informal finance as it happens, and having spent many years advising top policymakers on how to design effective financial services for the poor, most notably in Indonesia with Bank Rakyat Indonesia projects. Her account of the paradigm shift in microfinance is both exhaustively researched and provocative. She has a wonderful ear for stories; her book is full of marvelous phrases, excerpts, and anecdotes from the world of poor people's finance, in addition to being a wellspring of quantitative documentation for the trends about which she writes. Highly recommended!"
—Robert Peck Christen, Senior Adviser, Consultative Group to Assist the Poorest; Academic Director, Microfinance Training Program, Naropa University, Boulder, Colorado

"*The Microfinance Revolution* is an ambitious achievement that will be the definitive work on microfinance now and for some time to come. In clear, convincing, and often elegant language, Marguerite Robinson gives us the fruits of her deep experience and painstaking research. This book provides the most complete statement existing on how microfinance arose, how it works, and why it matters. *The Microfinance Revolution* views microfinance from the commercial or financial systems perspective. Robinson sets microfinance in its correct place as one important tool in the 'poverty alleviation toolbox.' In so doing she dispels the fuzzy myths surrounding the image of microfinance as a panacea for poverty. Every microfinance professional will want a copy of this work as a comprehensive reference for the field. Every policymaker or donor will be remiss if he or she makes decisions about microfinance without first internalizing Dr. Robinson's messages."
—Elisabeth Rhyne, Senior Vice President, ACCIÓN International; former Director, Office of Microenterprise Development, U.S. Agency for International Development; author, Mainstreaming Microfinance: How Lending to the Poor Began, Grew and Came of Age in Bolivia

Praise for *The Microfinance Revolution* (continued)

"*The Microfinance Revolution* is a tour de force remarkable both for the breadth of its vision and for the wealth of experience it captures. Dr. Robinson folds page after page of telling information about real people and their financial behavior, and about real institutions and their achievements, into a vigorously argued—and sometimes controversial—synthesis. Anyone interested in financial services for poor people should read it."
—*Richard Rosenberg, Senior Adviser, Consultative Group to Assist the Poorest*

"Marguerite Robinson's book succeeds admirably in presenting and analyzing the fundamentals of microlending and mobilizing savings among the poor. In distilling the essence of microfinance, Dr. Robinson demonstrates with extraordinary clarity that the application of commercial principles to microfinance ensures the long-lasting capacity of institutions to reach those previously excluded from financial services. This book combines the detailed, painstaking research of a noted scholar with the experiences of successful microfinance institutions around the globe, and provides a view of remarkable scope and exceptional weight. Dr. Robinson's work is not only an essential contribution to our current understanding of microfinance, but also a key resource for laying out the future of this field."
—*María Otero, President and Chief Executive Officer, ACCIÓN International*

"If you read *Finance at the Frontier,* published in 1991, you should read *The Microfinance Revolution,* published in 2001. If you did not read *Finance at the Frontier* and you seek an authoritative source about microfinance, you should still read *The Microfinance Revolution.*"
—*J.D. Von Pischke, President, Frontier Finance International; author,* Finance at the Frontier

"For more than 20 years Marguerite Robinson has been at the forefront of the 'microfinance revolution' she documents so lucidly and persuasively in this book. She was deeply involved in the transformation and development of Bank Rakyat Indonesia's microbanking (unit *desa*) system, now the largest microfinance institution in the world with more than 20 million clients. This book brings together the author's wealth of practice-based wisdom and draws on her experience of working with institutions all over the world. It is a valuable, important, and necessary addition to the library of anyone seriously interested in microfinance."
—*Graham A. N. Wright, Programme Director, MicroSave-Africa; author,* Microfinance Systems

"Marguerite Robinson has written a wonderful book. Its declared aim is to make the case for large-scale commercial microfinance, a cause that Dr. Robinson champions with passion, logic, and plentiful examples from her years of experience. But in the process she sheds light on a host of important and contentious issues in microfinance, and the outcome is a work that will enormously enrich the debates it is bound to engender."
—*Stuart Rutherford, Chairman, SafeSave; author,* The Poor and Their Money

"Hardheaded yet warmhearted, Marguerite Robinson's compendium points a way toward including greater numbers in the world's wealth. Based on her sound and wide-ranging field experience, her investigations up and down official ladders, and her wide knowledge of theory in several disciplines, her work is provocative yet immensely practical. Robinson's contribution shows how incentives and efficiency might finally take account of local power structures, human dignity, and reciprocity. The result is just the sort of guide that could help people who deal financially across continents, and across classes, to avoid the ideological excesses of the 20th century in the 21st. It is a remarkable bridging act."
—*Parker Shipton, Associate Professor of Anthropology, Boston University; author,* Bitter Money

"Marguerite Robinson has spent 20 years at the cutting edge of microfinance. In this book Marguerite gives us a history lesson and a guide on how to build commercial finance that fits the needs of the world's poor majority. Policymakers, finance leaders, and anyone who wants to join this revolution in banking must read this book."
—*Nancy M. Barry, President, Women's World Banking*

"This book tells a long overdue story—that of commercial microfinance institutions. It highlights the world's most efficient rural microfinance institution, Bank Rakyat Indonesia's microbanking system. Marguerite Robinson provides extensive analysis of the remarkable traits that have made microbanking at BRI an unprecedented success. This program has achieved massive outreach to millions of low-income savers and borrowers. All this has been accomplished in the past decade without subsidies; in fact, it is a highly profitable operation. BRI's path-breaking achievements have often been overshadowed by other, overpublicized programs. *The Microfinance Revolution* is a timely publication that clearly demonstrates the tremendous potential embedded in well-designed microfinance programs."
—*Jacob Yaron, Senior Rural Finance Adviser, World Bank; author,* Successful Rural Financial Institutions

"In the past five years the enormous promise of access to capital as an effective tool for the world's poor has erupted into the world's consciousness. But the facts have often come intertwined with myth and legend, until oft-repeated misinformation threatens today to debase the accomplishments of truth. In this fog Marguerite Robinson's book, *The Microfinance Revolution,* arrives as a beacon. In it she combines her extensive first-hand experience, gained initially in Asia and then around the world, with the intellectual rigor of the first-rate scholar she also is. The result is a rare, comprehensive look at microfinance that is long on analysis and short on sound bites. By asking the right questions and seeking the tough answers around the globe, she expands our understanding even though we in the field might from time to time squirm in our seats. In the process she has presented all of us who are seriously committed to the field—practitioners, policymakers, academics, public servants, and most of all, the poor of the world—a wonderful gift of intellect and expertise."
—*Michael Chu, Chair, Capital Markets; former President and Chief Executive Officer, ACCIÓN International; former Chairman of the Board, BancoSol*


IBRD 31766
INDONESIA
SELECTED CITIES AND TOWNS
PROVINCE HEADQUARTERS
NATIONAL CAPITAL
PROVINCE BOUNDARIES
INTERNATIONAL BOUNDARIES
PROVINCES
1 D I ACEH
2 SUMATERA UTARA
3 RIAU
RIAU ARCHIPELAGO*
4 SUMATERA BARAT
5 JAMBI
6 BENGKULU
7 SUMATERA SELATAN
8 LAMPUNG
9 BANGKA BELITUNG
10 BANTEN
11 JAWA BARAT
12 JAWA TENGAH
13 D I YOGYAKARTA
14 JAWA TIMUR
15 BALI
16 NUSA TENGGARA BARAT
17 NUSA TENGGARA TIMUR
18 TIMOR
19 KALIMANTAN BARAT
20 KALIMANTAN TENGAH
21 KALIMANTAN SELATAN
22 KALIMANTAN TIMUR
23 SULAWESI UTARA
24 GORONTALO
25 SULAWESI TENGAH
26 SULAWESI SELATAN
27 SULAWESI TENGGARA
28 MALUKU UTARA
29 MALUKU
30 PAPUA (IRIAN JAYA)
*Proposed province
MYANMAR
THAILAND
LAO P.D.R.
VIETNAM
CAMBODIA
PHILIPPINES
Andaman Sea
Gulf of Thailand
Sulu Sea
Celebes Sea
PACIFIC OCEAN
MALAYSIA
BRUNEI
SINGAPORE
Riau Islands (Proposed)
Proposed Province Capital
KALIMANTAN
SUMATERA
SULAWESI
Java Sea
Banda Sea
INDONESIA
JAKARTA
JAWA
PAPUA (IRIAN JAYA)
PAPUA NEW GUINEA
EAST TIMOR
Arafura Sea
Gulf of Carpentaria
INDIAN OCEAN
AUSTRALIA
Banda Aceh
Medan
Pematangsiantar
Simeulue
Nias
Pekanbaru
Tanjungpinang
Natuna Besar
Anambas
Tarakan
Talaud Is.
Manado
Morotai
Ternate
Halmahera
Gorontalo
Waigeo
Manokwari
Biak
Sorong
Yapen
Jayapura
Misool
Obi
Pelang
Palu
Samarinda
Pontianak
Lingga
Padang
Siberut
Jambi
Bangka
Pangkalpinang
Belitung
Palembang
Bengkulu
Enggano
Bandar Lampung
Serang
Bogor
Cirebon
Semarang
Madura
Bandung
Cilacap
Surakarta
Surabaya
Yogyakarta
Malang
Bali
Lombok
Sumbawa
Denpasar
Mataram
Flores
Ende
Alor
Wetar
Moa
Babar
Tanimbar Is
Timika
Merauke
Kai Is
Aru Is
Banjarmasin
Balikpapan
Parepare
Ujung Pandang
Kendari
Buton
Muna
Buru
Ceram
Amahai
Ambon
Sula Is
Rentawai Is
Waingapu
Sumba
Timor
Kupanga
0 200 400 600 Kilometers
0 100 200 300 400 Miles
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FEBRUARY 2002

This book is dedicated to all those who have led the microfinance revolution around the world.

I add a special, personal dedication to those in Indonesia who developed large, financially self-sufficient microfinance institutions. For the first time in history, they made commercial microbanking available on a large scale to low-income people.

Ali Wardhana
Sugianto, in memoriam
Kamardy Arief
I Gusti Made Oka
Sri Adnyani Oka

About the author

Marguerite S. Robinson is a social anthropologist and internationally recognized expert on microfinance. She received her B.A. and Ph.D. from Harvard University and served as professor of anthropology and dean of the College of Arts and Sciences at Brandeis University before joining the Harvard Institute for International Development, where she worked from 1978–2000. She has worked extensively in rural areas and among the urban poor in India, Sri Lanka, and Indonesia—where she served for many years as an adviser to the Ministry of Finance and to Bank Rakyat Indonesia. She has also worked in other Asian countries and in Latin America and Africa, advising governments, banks, and donors, and is the author of many papers and books on development and microfinance.

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Foreword

Occasionally one meets someone with deep expertise in her chosen field. But rarely does one meet such a person who can also explain her views with equal ease to both other experts in the field and to other interested parties without prior knowledge of the field, such as government policymakers, central bank governors, or even members of the general public. Marguerite Robinson is such a person, having acquired deep knowledge of microfinance over some 20 years. She has worked primarily in Indonesia, advising the government and helping to create Bank Rakyat Indonesia's unit *desa* system, one of the world's most successful microfinance programs. But Dr. Robinson has also provided her expertise to policymakers and directors of microfinance institutions in many other countries, including Bolivia, China, India, Kenya, Tanzania, and Vietnam—to name just a few.

This seminal work offers readers a richness and depth on microfinance that have long been needed

Dr. Robinson came to microfinance with a rich academic and professional background as an anthropologist, having spent many years in villages in India, Indonesia, and Sri Lanka. She describes herself as a financial anthropologist, given her unique credentials to understand both people—particularly poor people in remote villages or urban slums not normally served by financial institutions—and financial markets, and how the two interact. Few people have come to microfinance with such tools of the trade, and Dr. Robinson has honed those tools with long stints in Indonesia and other countries studying, observing, researching, teaching, writing, and practicing microfinance.

Now Dr. Robinson has bundled all that knowledge, and the result is a seminal work on microfinance that offers readers a richness and depth about the field that have long been needed. This long overdue book, *The Microfinance Revolution,* consists of three volumes. The first focuses on the paradigm shift in mi-

crofinance, the second concentrates on microfinance in Indonesia, and the third (written with Peter J. Fidler) looks at the global experience with microfinance and documents the move to commercially viable microfinance.

The microfinance field is not short on information. There are scores of case studies on microfinance institutions; technical, financial, and practical guides to the field; and wonderful reports on savings, interest rates, client desertion and delinquency, supervision, audit, appraisal, planning, and management information systems for microfinance institutions. There are also works on the impact of microfinance on poverty and some selective works on theory. We have all the bits and pieces, but no one has really seamed it all together. No one has provided an overview of how the industry has developed and where it is headed. And no one has provided an overarching theory that supports these views—until now. Marguerite Robinson does all that and more. The third volume, *The Emerging Industry,* provides a global view on microfinance in developing countries (excluding the transition economies of Central and Eastern Europe and the former Soviet Union, which Dr. Robinson decided not to cover due to her lack of experience in the region). That volume also explores theory and the evolution of thinking on this subject.

This book contains wonderful anecdotal richness supported by a wealth of facts, figures, tables, notes, and citations

This book also contains wonderful anecdotal richness on a variety of microfinance themes: on microfinance institutions, on the voices of microfinance clients, on savings, and on moneylenders, as well as a unique assessment of Indonesia that makes up the second volume, *Lessons from Indonesia.* This rich anecdotal material is supported by a wealth of facts, figures, tables, notes, and citations reflecting Dr. Robinson's academic rigor, a rigor that has rarely been brought to this field.

The book's detail and richness are spun into a fine web supporting the author's basic thesis—that a fundamental shift is occurring in microfinance, inexorably pushing the industry to focus on commercially viable microfinance. This thesis and a detailed explanation supporting it are the main subject of the first volume, *Sustainable Finance for the Poor.* Only by making this shift, says Dr. Robinson, can microfinance fill the "absurd gap" between the demand for and supply of microfinance services. That gap is huge: at least 80 percent of the 900 million households in low- and lower-middle-income countries do not have access to formal financial services.

Most microfinance institutions are nongovernmental organizations (NGOs), often providing an array of social services. They focus on microfinance as a social intervention or a poverty alleviation tool. They see a dilemma between achieving commercial viability and serving the poor. For the most part they are not viable financial institutions and do not mobilize domestic savings or raise commercial funds. And they are largely dependent on donors to subsidize their operations. Yet the microfinance industry barely scratches the surface of its market potential, and the industry as currently structured cannot meet this need.

But increasingly, as spelled out in this book, commercially viable microfinance institutions are being established as banks or nonbank financial institutions. They operate from a financial systems perspective, and they see microfinance as filling an important niche in the financial system by providing financial

services—for profit—to the working poor. The only way to close the absurd gap between demand and supply in microfinance is for microfinance institutions to mobilize savings, to raise capital commercially, and to service clients through extensive branch networks. This is increasingly the case in Latin America, as illustrated by the book's analysis of Bolivia's BancoSol. It is also true for a few large microfinance institutions in Asia, such as Bangladesh's Association for Social Advancement. Bank Rakyat Indonesia's unit desa system best illustrates the benefits of long-term adherence to commercial principles of microfinance, which is why this case is an important contribution of this book.

Let me try to sum up what this work offers to readers:

- A detailed overview of the development of microfinance over the past 20 years.
- A global view of microfinance in the developing world.
- A thesis on the future path of microfinance.
- A coherent theory about microfinance—why it works when so many other development interventions fail.
- Exquisite detail on a number of important microfinance topics—such as informal moneylending and savings.
- An important study of Indonesia, with detailed analysis of Bank Rakyat Indonesia.
- Brief studies of many other microfinance institutions in Africa, Asia, and Latin America.

The author's basic thesis is that a fundamental shift is occurring in microfinance, inexorably pushing the industry to focus on commercially viable microfinance

This book reflects Marguerite Robinson's longstanding experience in microfinance. Readers will quickly understand that Dr. Robinson is one of the few people with deep knowledge in her chosen field—as well as the ability to convey that knowledge simply and clearly to a broad range of interested readers.

Ira W. Lieberman
Former Chief Executive Officer,
Consultative Group to Assist the Poorest, 1995–99
Senior Manager, World Bank

Introduction

We in Indonesia have a special, longstanding interest in the emerging microfinance revolution, which has made it possible for large numbers of low-income people to access institutional financial services—often for the first time. Financial services that are widely available in rural areas and in low-income urban neighborhoods help the poor improve their financial security, allow them to take advantage of business opportunities, and facilitate the growth of their enterprises. In Indonesia sustainable microfinance in the formal sector began in 1970 with the opening of Bank Dagang Bali (BDB), a private bank in Bali, and attained nationwide coverage with the 1984 restructuring of the unit *desa,* or local banking, system of the state-owned Bank Rakyat Indonesia (BRI).

We in Indonesia have a special, longstanding interest in the emerging microfinance revolution

BRI's unit desa system is now the largest financially self-sufficient provider of sustainable microfinance in the developing world. Indonesia's approach to microfinance—making it profitable, and so widely available—helped the country reduce the incidence of poverty from about 40 percent of the population in the mid-1970s to about 11 percent in 1996. In 1997, when the East Asian economic crisis began and poverty in Indonesia started to rise, BRI's microfinance system helped poor people who had lost their jobs finance informal sector enterprises. It also gave them secure and convenient deposit facilities—especially important to poor people in times of crisis.

Hindsight is, as we all know, a powerful analytical tool. In reviewing the restructuring of BRI's microbanking system, one can identify a number of components that might better have been done differently. In the 1970s, for example, BRI opened more than 3,500 village units to channel subsidized government credit to rice farmers through BIMAS, the credit component of Indonesia's massive

rice intensification program. As it turned out, the rice intensification program was highly successful, but its credit component was not. The long-term results of BIMAS were similar to those found in many developing countries. The subsidized loans, being at below-market interest rates and so in demand by wealthier farmers, often did not reach poor farmers. Moreover, arrears and losses were high. The program was phased out in 1985. Meanwhile, BRI's unit desa system also tried to mobilize savings. However, since the government required that banks lend at 12 percent and pay 15 percent on most deposits, there was a negative incentive for the banks to mobilize savings—and the incentive structure worked well!

During the 1970s and 1980s rural borrowers who qualified for loans larger than those available at the unit desas also had the option of obtaining subsidized government credit through bank branches in district capitals. The Small Investment Loan Program, known as KIK, and the Small Permanent Working Capital Loan Program, known as KMKP, provided loans of up to 15 million rupiah ($36,145 in 1975 and $13,333 in 1985). But these programs also resulted in high arrears and large losses to both the banks and the government, and were eventually phased out.

By the early 1980s we began to realize that not only were our subsidized credit programs not driving rural development, they were actually slowing it down!

By the early 1980s we began to realize that year after year, the subsidies and arrears of BIMAS, KIK, and KMKP were large, the programs were inefficient, and the loans generally did not reach the intended borrowers. In brief, our approach to local finance was ineffective and unsustainable. Not only were our subsidized credit programs not driving rural development, they were actually slowing it down! Having recognized the severe deficiencies of these programs, we decided in 1983 to begin a new program for rural finance based on principles of commercial finance.

But in 1983, when the Indonesian government began to implement a variety of financial reforms, we did not have good models or examples—or even approximate ones—from other, similarly positioned countries. In many ways Indonesia was a pioneer in implementing financial reforms, and the reform of the unit desa system is a prime example. When we decided to transform it into a commercial microbanking system, we could find no example of a financial institution in any developing country that provided microfinance profitably on a large scale.

The development of commercial microbanking in BRI's unit desas can best be understood in the context of the broad set of economic reforms implemented by the Indonesian government. On the whole these reforms reflected a consistent intent to achieve three basic objectives:

- To move toward a predominantly market-based financial system.
- To provide effective protection, as needed, so that the general public could benefit from the services offered by the financial system.
- To build a financial system that would support the stable, healthy growth of the national economy.

To move effectively toward achieving these aims, in 1983 we began to introduce a series of far-reaching finance, tax, trade, and investment reforms.

The oil boom of the mid-1970s through the mid-1980s had been a mixed blessing for Indonesia. One economist, writing about oil-exporting countries, concluded that the boom left most economies no better off than they would have been if oil prices had stayed at 1972 levels in real terms. But unlike most oil exporters, Indonesia capitalized on its windfall oil revenues. Even when we had ample oil revenues, we looked ahead to days when we might not be so fortunate.

A critical element of Indonesia's development strategy has been to stimulate rural development, rural incomes, and rural employment. Thus in the 1970s a large share of our oil wealth was invested in agriculture—especially irrigation and new rice technologies—and in infrastructure, education, and health. Much of this investment was in rural areas, where about 80 percent of the population lived in the mid-1970s. This investment helped ensure that agriculture and other rural industries would continue to support rural income growth and create employment—an essential part of the foundation for our economic growth since the mid-1980s.

A 1983 deregulation made possible the transformation of BRI's unit desa system from a channeling agent for targeted, subsidized government loans to a profitable financial intermediary

It is important to understand that this was not "trickle down" growth. Our approach to economic growth incorporates some of the poorest groups in the economy. Our food supply, especially rice, depends on the increasing productivity of small farmers—supported by the government's massive rural investment. Our export drive is based on the growth of firms that create jobs for low-skilled workers. Some of the country's largest industries—including construction, transportation, retail trade, and other services—employ large numbers of unskilled workers, especially in the informal sector. These service sectors are quick to respond to rapid growth in other sectors of the economy.

As the incomes of poor people rose, their demand for banking services increased. The reform of BRI's microbanking system was undertaken in order to bring about a major increase in the availability of financial services—initially for the rural population and later for low-income urban residents as well. Decisions to provide microbanking services delivered at the subdistrict level throughout the country, to pay positive real interest rates for savings, and to charge loan rates sufficient to cover all costs and to earn a reasonable profit for the bank were consistent with our overall reform agenda.

Financial reforms were extended to rural areas with the government's first major financial deregulation package, issued in 1983. That deregulation abolished credit ceilings and permitted banks to set their own interest rates on most loans and deposits. This made possible the transformation of BRI's unit desa system from a channeling agent for targeted, subsidized government loans to a profitable financial intermediary providing small loans and deposit services to clients in rural areas throughout Indonesia. In 1989 BRI extended its microbanking services to urban areas as well.

When making the decision to reform the unit desas, we asked ourselves three questions. First, would there be local demand for credit at the interest rates needed for BRI to cover all its costs and earn a profit? We studied the demand for small loans in different areas and found it to be very large. Poor borrowers were

paying much higher interest rates to local moneylenders, and it seemed that they would generally welcome the rates that BRI would charge.

Second, would people place their savings in BRI's village units? We conducted studies in many parts of the country and found huge demand for savings services if the deposit instruments and services were designed to meet the needs of poor savers.

Third, with an eye on the government budget, we asked how long it would take for the restructured microbanking system to break even and begin to make a profit. Under the assumptions we used, we predicted that the system, which began in 1984, would break even in two years—which it did in just under two years. And it has been profitable every year since.

The BRI reforms have enjoyed remarkable success. The system has been profitable since 1986 and without subsidy since 1987

Our approach to reforming BRI was market-based: in BRI's thousands of local microbanking units, performance-based cash awards and other incentives motivate staff to act as bankers. Unit personnel also required training to change their behavior. Most important, unit staff had to learn about the markets they served. Responsibility for loan decisions had to be delegated from branch offices to village units, while regional offices had to de-emphasize their control-minded approach and become more oriented toward promotion. In a large, complex institution like BRI, these changes took careful planning and implementation. The restructuring of BRI's unit desa system was a major institutional reform—and it succeeded. As a result savers have a secure outlet for their funds, on which they generally earn positive real returns, while borrowers with productive uses for small loans have access to credit on commercial terms.

The BRI reforms have enjoyed remarkable success. The unit desa system has a single loan product, KUPEDES, that offers loans of 25,000–25,000,000 rupiah ($3–$3,406 in 1999) for any productive purpose. Most KUPEDES loans carry an effective annual interest rate of about 32 percent if payments are made on time. Savings instruments offer a choice between different combinations of liquidity and returns—enabling depositors to combine the products in ways that best meet their needs.

Unit desa deposits, a highly stable source of funds, finance all KUPEDES loans. The system has been profitable since 1986 and without subsidy since 1987. Contrary to much international experience with rural finance, KUPEDES has had very high repayment rates. In Indonesia we have found that a less regulated economy, with widespread access to institutional finance at the local level, can open new opportunities to people previously excluded from full participation in the country's economic growth.

But in 1997 a severe financial and economic crisis developed that affected all East Asian economies, from Thailand to Japan and the Republic of Korea. Indonesia's currency fell from 2,450 rupiah per U.S. dollar in June 1997, just before the crisis began, to about 17,000 at its weakest point in 1998. The rupiah then recovered to levels of 7,000–8,000 in the fourth quarter of 1998. At the end of 1999 there were 7,430 rupiah to the U.S. dollar. Indonesia's average annual inflation for 1998 was 57.6 percent—a sharp contrast to the 1980s, when annual inflation had stayed below 10 percent. GDP, which had grown by more than 7 percent a year

for over a decade, grew just 4.9 percent in 1997 and fell 13.7 percent in 1998. But in 1999 inflation dropped to 20.5 percent, while GDP rose to 0.2 percent.

The economic meltdown that hit Indonesia—and one can hardly describe it differently—had multiple causes. Some were self-inflicted; others were external. Among the external events I would list the sharp decline in the world oil price, a decline in prices for other primary product exports, and a serious drought in 1997. But to explain the severity of Indonesia's economic crisis relative to that of our neighbors, we have to look at internal weaknesses. Let me highlight two.

First, our financial institutions were encouraged to fund risky, unprofitable ventures. Government officials could and did direct loans to favored firms and activities. Loans were rarely subjected to even the most rudimentary economic and financial analysis. Second, the involvement of well-connected parties in many economic activities led to a problem of moral hazard: in the presence of a perceived guarantee, implicit or explicit, there is little incentive to avoid risky behavior. In addition, actions by the government and the central bank suggested that Indonesian banks would be protected from failure. Our foreign exchange regime also encouraged risky behavior that, after the depreciation of the rupiah, resulted in unmanageable debt that effectively bankrupted a substantial portion of our corporations.

The economic meltdown that hit Indonesia in 1997—and one can hardly describe it differently—had multiple causes. Some were self-inflicted; others were external

At this writing more than two years have passed since Indonesia's crisis began. While it may be too optimistic to say that the crisis has passed, much has been accomplished, and there is general consensus on what needs to be done to get our economy back on track. With assistance from the International Monetary Fund, World Bank, Asian Development Bank, and others, an economic reform program was introduced in 1998. Structural reforms are under way. Safety net policies to protect the poor have been given high priority. The weaknesses in the financial system have been clearly identified, a bank restructuring program is in process, and the legal and supervisory framework for the banking sector is being strengthened. Emphasis is being placed on making our capital markets more transparent and better regulated. Many other reforms are also in process.

Numerous policy measures must still be implemented, but my prediction is that the crisis will pass and growth will resume. In the 1980s and 1990s the rapidly growing Asian economies created a base of human and physical infrastructure, and that base remains intact. It is on this base that we will eventually be able to resume rapid growth.

While it has been important to identify our weaknesses in order to rebuild the Indonesian economy, it is also important to identify the institutions that remained strong throughout the crisis and to understand the reasons for their strength and stability. One of those institutions is related to the subject of this book: commercial, sustainable microfinance.

In sharp contrast to the Indonesian banking sector generally, commercial microbanking at BRI's unit desa system continued its wide outreach, high repayment rate, and profitability throughout 1997–99. The system remained stable and profitable throughout the crisis. Deposits in the unit desas more than

doubled in rupiah terms, from 7.7 trillion rupiah ($3.2 billion) in June 1997 (the month before the crisis began) to 17.1 trillion rupiah ($2.3 billion) at the end of 1999. The number of savings accounts increased from 17.0 million in June 1997 to 24.2 million at the end of 1999.

KUPEDES lending has remained stable. In June 1997 there was 4.3 trillion rupiah outstanding ($1.75 billion) in 2.5 million KUPEDES loans. By the end of 1999 the outstanding loan balance was 6.0 trillion rupiah ($802 million) in 2.5 million loans. The repayment rate, 98 percent in June 1997, was also 98 percent in December 1999. In 1998, the worst year for the Indonesian economy in the past three decades, pretax unit desa profits were 714 billion rupiah ($89 million), while the pretax return on assets for the unit desa system was 4.9 percent. In 1999 pretax profits were 1.2 trillion rupiah ($160 million) and the pretax return on assets was 6.1 percent.

In sharp contrast to the Indonesian banking sector generally, commercial microbanking at BRI continued its wide outreach, high repayment rate, and profitability throughout the crisis

BRI's microbanking system emphasizes understanding local markets and meeting the demand for financial services from low-income households and enterprises. It provides products and services designed to be appropriate for this market segment. We now know that the unit desas are so robust that they have withstood an extraordinary national economic and financial crisis. This strength in microbanking has helped to mitigate the effects of the crisis on the poor and to improve the foundations for future economic development.

The creation of BRI's unit desa system cannot be separated from Dr. Marguerite S. Robinson. She actively participated in developing the unit desas into what is now a strong, viable microbanking system that provides financial services to low-income people in rural and urban areas throughout Indonesia. To ensure that the system would function effectively for local communities—consisting largely of small farmers and microentrepreneurs—Dr. Robinson visited many unit desas and the villages they served. She coordinated research teams that surveyed the income flows and savings habits of local people, studied their need for capital and their demand for financial services, and assessed opportunities for investment in the community. The studies covered villages in Java, Sumatra, Kalimantan, Sulawesi, and other Indonesian islands, and resulted in ongoing recommendations to the Ministry of Finance and the BRI about unit desa instruments and services that would be appropriate for local demand.

When decisions were made to add new savings and loan products and services in the unit desa system, to open new units, or to expand unit desa operations to urban neighborhoods, Dr. Robinson advised BRI, assisting with staff training and advising on the management and supervision of unit operations. She has often returned to the units to learn whether they function properly and to advise BRI on the development of its microbanking system.

BRI's unit desa system has made great progress since 1984, rapidly becoming a financial institution capable of contributing to rural development and rural employment. It has also expanded to serve low-income urban areas. At the same time, the unit desas have a considerable way to go—and like many newly developed financial institutions, they face problems of institutional development.

Dr. Robinson deserves credit for her active role in creating the unit desas, not only at the initial stages of their restructuring but also during the entire period of their subsequent development. This book reflects her deep insight and thorough knowledge of BRI's unit desas.

During the 1990s BRI's unit desa system received nearly 1,000 international visitors from more than 30 countries. The bank has had to create a separate office to serve the many international visitors to the unit desas. A number of the visitors have also visited Bank Dagang Bali, well-known as the earliest bank to institute commercial microfinance, as well as some of Indonesia's other financial institutions that provide services at the village level on a commercial basis, such as the Badan Kredit Desas (Village Credit Organizations) of Java and Madura.

Many developing countries in Asia, Africa, and Latin America are at different stages of learning about and implementing institutional commercial microfinance. This book documents Indonesia's experience with sustainable microfinance, explores the spread of commercial financial services to low-income people in other countries, and analyzes the ideas that underlie both.

Indonesia, which has played a leading role in the Non-Aligned Movement, is active in transferring technology and sharing experiences that lead to economic growth, equity, and stability in the developing world. We are especially pleased that our approach to sustainable microbanking—which has provided poor people in Indonesia with new opportunities for economic growth and financial security—is useful for the development of microfinance in other developing countries.

We are especially pleased that our approach to sustainable microbanking is useful for other developing countries

Ali Wardhana
Minister of Finance, Government of Indonesia, 1968–83
Coordinating Minister for Economics, Finance, and Industry, Government of Indonesia, 1983–88
Economic Adviser, Government of Indonesia, 1988–

Preface

When I began life as a social anthropologist in the 1960s, carrying out field work in remote areas of developing countries in Asia, outsiders rarely visited the villages where I lived. Those who did come, other than the occasional scientist, were missionaries of various religions. Over the years I noticed that the few outsiders I encountered in the field were increasingly less likely to be missionaries—and more likely to be bankers. This gradual change was my first introduction to the then-embryonic microfinance revolution.

Over the years I noticed that the few outsiders I encountered in villages were less likely to be missionaries—and more likely to be bankers

The bankers who began showing up in small villages on their bicycles, motorcycles, or jeeps in the 1960s and 1970s were usually employees of local branches of state-owned banks. They came along with the green revolution. Their mission, as assigned by their governments and assorted international donors, was to find trustworthy villagers to whom they could provide credit. This, it was thought, would both help feed the population and increase rural economic growth.

The bankers and the missionaries, who shared much of the same client pool, were curiously alike in some ways. Usually outsiders to the local community, both tended to discover in the villages their own preconceptions, rather than the local realities and dynamics (a problem to which, of course, anthropologists are not immune!). But many cared about helping poor people increase their incomes and improve their lives, and some were quite successful. They came with powerful ideas, found others already present, and often became catalysts for the cross-fertilization of thought and sometimes for the introduction of social and economic reforms.

I watched from villages in different countries and continents as, over the decades, the balance switched from outsiders bringing religion to outsiders bringing finance. Of course, those who lived in the villages already had both. As an

world began to develop commercial microfinance programs. Though the programs differed, the underlying principles were similar. Gradually, a paradigm shift took place—from the delivery of government- or donor-subsidized credit to the development of sustainable financial intermediaries that capture local savings, access commercial finance, and lend these funds to low-income borrowers at interest rates that enable full cost recovery and institutional self-sufficiency.

The microfinance revolution developed in the 1980s (before it had a name) and came of age in the 1990s. It occurred when the many advances of previous decades in market knowledge, lending methods, and savings mobilization were combined with a commercial approach to financial intermediation for low-income people, making financially sustainable formal sector microfinance possible. This breakthrough—which also required the development of organizational structures and management resources capable of delivering microfinance services profitably throughout an entire country—first occurred in Indonesia in the 1980s and then in Bolivia in the mid-1990s.

Gradually, a paradigm shift took place—from the delivery of government- or donor-subsidized credit to the development of sustainable financial intermediaries

Commercial microfinance is now found in many countries, where it is at different stages of development. In its most advanced form, in banks and other formal financial institutions, all microloans are fully financed by savings, commercial debt, for-profit investment, and retained earnings (in a variety of forms and combinations). As a result all savers and all creditworthy borrowers can be served, repeat borrowers can be accommodated as they expand their enterprises and qualify for larger loans, and many economically active poor people can be helped out of poverty. Industry standards for commercial microfinance began to develop in the 1990s. And in some countries intense competition has erupted among commercial financial institutions aiming to attract the business of poor clients.

Nevertheless, in most developing countries the formal financial sector still does not serve microfinance clients. The traditional view—that it is neither important nor profitable for institutions to provide commercial financial services to low-income people—is still widely held. The microfinance revolution is still emerging. But it is probably irreversible: because there is massive unmet demand for microfinance, because it has been proven that this demand can be met profitably on a large scale, and because information about the profitability of financing the economically active poor has begun to be widely disseminated.

Microfinance in the developed world is beyond the scope of this book. But many low-income people in industrial countries lack access to financial services, also with pervasive negative effects on society and the economy. Rich countries could learn many lessons on sustainable microfinance from developing countries.

A number of people have asked whether, because this book is in three volumes, it is intended to be a reference book. While to some extent it can be used for reference, the book was not written primarily for that purpose. Rather, it is an analytical narrative on why and how capital is becoming democratized on a global scale for the first time in history. The reason the book is in three volumes is that it concerns a major revolution of our times.

A reader who wants to learn about a particular microfinance institution—such as Bangladesh's Association for Social Advancement, Bolivia's BancoSol, or Mexico's Compartamos—can find these institutions in the indexes of these volumes and read about them. But the approach is not encyclopedic. The aim is not a comprehensive summary of the institution, but an emphasis on its contributions (and in some cases lack thereof) to the microfinance revolution.

Finance for the poor is a topic on which many opinions are held, usually passionately. This book will undoubtedly be controversial, as is intended. But microfinance is unusual. As in any emerging industry, debates are endemic. But in microfinance these debates are among people who work every day to increase the employment opportunities, incomes, and self-confidence of the poor. These are debates among good people. In presenting new data and analyses and in reexamining long-held assumptions and conclusions, this book aims at stimulating constructive dialogue—in ways that will help financial institutions meet the demand for microfinance sustainably and soon.

Finance for the poor is a topic on which many opinions are held, usually passionately. This book will undoubtedly be controversial, as is intended

What Is an Anthropologist Doing in Banking?

During my first decade as an anthropologist, I conducted the kinds of research I was taught at Harvard and Cambridge universities: studying the people of different societies and recording, comparing, analyzing, writing, and teaching about their cultures and social structures. While the education I received was well suited for its multiple purposes, there was little in it to prepare me for the fact that most of the people I would study would be poor—and in some cases starving, abused, and in bonded servitude.

As part of extended field work in a very underdeveloped rural area in India, I had long conversations with many bonded laborers, members of "untouchable" castes, and others among the desperately poor and disenfranchised. Once after a long discussion, I rose to leave a small group from whom I had been learning about their social and economic activities and their political environment. We had been sitting on the mud floor of a small, crowded, windowless house that provided only minimal protection from the driving rain of the monsoon.

One of the men with whom I had been talking said to me, "We are pleased that you are interested in us, that you visit our houses, and that you sit and talk with us. We try to tell you whatever you want to know. But we would like to ask you a question. There is something that we cannot understand. We are sitting here in the mud because this is all that we have. Can you not see that we are cold and wet, and that we are poor and have nothing? But you are educated and wealthy. Why do you want only to sit here and learn about our customs? Why do you not also use your knowledge and resources to help us to have better lives and to improve our customs?"

He was right. Since then, while continuing my anthropological research, I have worked on the social and economic development of the poor people in

the societies I try to understand. Since 1979 I have worked simultaneously as an anthropologist and as a policy adviser to governments and financial institutions.

As an anthropologist working on microfinance, I analyze local markets and their wider networks, the economic activities of their participants, and the nature and extent of the demand for financial services. My knowledge of local financial markets comes largely from those who participate in them: people of varying ages and both genders employed in a variety of occupations, from different social, economic, religious, and political backgrounds. My anthropological training stands me in good stead here. I try to learn from whom, and at what cost, they obtain credit; how their credit options are linked with transactions in other markets; in what forms and for what purposes they save; and what they like and dislike about their current methods of borrowing and saving.

This book focuses on how the demand for microfinance can be met on a global scale

In the process it becomes possible to learn how informal credit markets, government interventions, and bank programs work at the local level. The vested interests that might oppose the development of institutional commercial microfinance in particular regions can be identified, and attention can be given to how such interests can be challenged, circumvented, or co-opted. It then becomes feasible to design financial instruments and services appropriate for the social, political, and economic environment in general, and for the varied types of local demand in particular. As a policy adviser on microfinance, my role has been to learn the country's policy goals and its constraints, to provide information to decisionmakers about their country's microfinance demand and its relevance to development more broadly, and to suggest strategies to achieve policy objectives, drawing on lessons from the country's financial markets and from international best practices in commercial microfinance.

Plan of the Book

This book focuses on how the demand for microfinance can be met on a global scale. It documents the contributions of institutions and of people who have led the development of commercial finance for the poor, and it analyzes the principles on which the microfinance revolution is based. The book's intended audience is diverse, including those with interests directly related to microfinance, such as policymakers and other government officials, microfinance practitioners, social scientists, economists, bankers, and donors; those with more general interests in social and economic development and in the fundamentals of poverty reduction; and those drawn to difficult problems that can be solved only through an interdisciplinary approach.

But this book is limited in a number of ways. Among these, no attempt is made to cover all the many types of financial institutions that provide some form of finance to the poor; emphasis is placed instead on the lessons from leading commercial microfinance providers. Second, it was not possible to cover all regions. For example, Eastern Europe, which has seen important growth in microfinance since the breakup of the Soviet Union, is largely omitted from the

discussion here. My impression is that microfinance in former centrally planned economies is somewhat different from microfinance in most developing countries, but I am not knowledgeable enough about transition economies to include them in the discussion. Third, this is not a "how to" book for microfinance institutions on specifics such as operations, business planning, or financial analysis—though aspects of these topics are discussed, and references are provided to excellent sources on these subjects.

Fourth, important as the topic is for poverty reduction and human rights, this book does not focus on gender issues. Many microcredit institutions have targeted poor women as clients and, as demonstrated in chapter 3 and elsewhere in the book, there is little doubt that this approach has helped women and their families increase their incomes and self-confidence. But this book is about large-scale sustainable microfinance for all economically active poor people, women and men.

Fifth, except for what clients of microfinance institutions tell us in their own words, this book does not focus on the impact of microfinance on clients' households or enterprises. Money is fungible, and the use of small loans and savings is difficult to track accurately. Most impact studies on microfinance have deep methodological flaws, although breakthroughs are beginning and better knowledge of the impact of financial services on the lives of the poor can be expected in coming decades.

Finally, except in the second volume—which provides extensive discussion on the development of microbanking in Indonesia—it has not been possible to provide the historical, macroeconomic, political, legal, and regulatory backgrounds for the development of microfinance institutions in the many countries discussed.

Because of these and other areas not discussed or covered in only a limited way, I have called attention throughout the book to relevant works by microfinance practitioners, bankers, financial analysts, economists, and others that will be helpful to readers pursuing in more depth specific components and analyses of the growing microfinance industry. Despite the book's omissions, I believe it tells a critical story—one that is little known outside the microfinance industry. Writing this book brought to mind Charles Kindleberger's statement, "My thesis does not rest on small differences in quantities—or so I believe" (Kindleberger 1996 [1978], p. 5).

There are difficulties in writing about a revolution in process. New ideas and practices spawn others. Realities change. Thus the emphasis here is on the principles and processes of the microfinance revolution. This book will soon be outdated as a current description of the state of microfinance—but not, it is hoped, as an analysis of the development and meaning of the microfinance revolution.

The first volume considers the shift from subsidized microcredit to commercial microfinance

The first volume: sustainable finance for the poor

The book's first volume, which considers the shift from subsidized microcredit to commercial microfinance, has two parts. Part 1 (chapters 1–3), "The Paradigm Shift in Microfinance," explores the reasons for the massive gap between

the low level of commercial microfinance generally available from financial institutions and the extensive worldwide demand for such services among the poor.

Chapter 1 explores the differences between the poverty lending approach to finance for the poor and the financial systems approach. The poverty lending approach emphasizes lending to the poorest of the poor, while the financial systems approach focuses on lending to the creditworthy among the economically active poor—people with the ability to use small loans and the willingness to repay them—and on voluntary savings mobilization.

In this context a poverty alleviation toolbox is introduced. The tools include food, employment, financial services, education, health care, infrastructure, and the like. Credit is a powerful tool that is used effectively when it is made available to the creditworthy among the economically active poor. But other tools are required for the extremely poor, who have prior needs such as food, shelter, medicine, training, and employment.

Large-scale outreach is shown to depend on institutional self-sufficiency for long-term viability

The focus then turns to the recent shift in microfinance from government- and donor-subsidized credit delivery programs to financially self-sufficient institutions providing commercial microfinance. The link between institutional self-sufficiency and large-scale outreach to low-income clients is examined; large-scale outreach is shown to depend on institutional self-sufficiency for long-term viability.

Chapter 2 introduces the emerging paradigm shift, considers how and why it is occurring, and discusses the implications of sustainable microfinance for social and economic development. In chapter 3 the focus shifts from institutions to clients. Clients of microfinance programs in different countries provide their views on the role that financial services have played in their economic activities, income growth, and household development. The voices of these clients show that microfinance helps them expand and diversify their enterprises, increase their incomes, raise their living standards and those of their families, and gain self-confidence. Their statements indicate strong underlying commonalities in microfinance demand across countries, economies, and institutions.

Part 2 (chapters 4–7), "Theories of Local Finance: A Critique," reviews the theoretical background of microfinance. Four main streams of literature are analyzed. Chapter 4 considers supply-leading finance theory, its resulting subsidized credit programs, and the criticisms of this approach that have filled the literature for more than 20 years. Chapter 5 examines the imperfect information paradigm and considers asymmetric information and moral hazard as these concepts have been applied to rural credit markets. The literature on informal commercial credit markets and market interlinkages is reviewed in chapter 6, while that on the role of savings in microfinance is explored in chapter 7.

These chapters share a common thread. They examine a variety of theories and models that, when applied to microfinance markets, have impeded the development of formal sector commercial microfinance. The theorists' intentions were not to create obstacles to financing the poor, but that was often the

result. The theories are contrasted with the ways real microfinance markets work, and suggestions are offered for improving the theoretical framework for microfinance.

The second volume: lessons from Indonesia

Indonesia's exceptional accomplishments in microfinance are documented and analyzed in volume 2, which forms part 3 of the book ("The Indonesian Experience," chapters 8–15). In one sense the Indonesian experience takes up a disproportionate amount of space in this book, partly because it is the example that I know best. But the choice of Indonesia for detailed examination, and particularly the long case study of Bank Rakyat Indonesia's (BRI's) microbanking system, can be justified on other grounds.

The second volume documents and analyzes Indonesia's exceptional accomplishments in microfinance

Indonesia is home to what is, to the best of my knowledge, the world's oldest commercial microfinance institution—the Badan Kredit Desas (BKDs), which began in 1896. It is also home to Bank Dagang Bali (BDB), a private bank that opened in 1970 and is thought to be the world's oldest licensed, full-service commercial bank providing continuous, profitable microfinance services on a substantial scale. And it is home to the world's largest fully self-sufficient microfinance system: the microbanking division of BRI, which has operated profitably on a nationwide scale, without subsidy, since 1987.

In addition, it was possible to discuss here only one institution at considerable length and detail, and BRI's microbanking system is much less well known internationally than some microfinance institutions in other countries that have been written about extensively.

Emphasis is placed on the reasons the microfinance revolution emerged on a large scale in Indonesia, on the ways this occurred, and on the lessons for other countries. Chapters 8 and 9 present material on Indonesia's history, economy, and society (chapter 8) and on its rural development and rural financial markets (chapter 9). These chapters provide the background for understanding why commercial microfinance developed in Indonesia nationwide, turning on its head the conventional wisdom of the time.

Chapter 10 examines the history and performance of BDB. Chapters 11–15 document and analyze the remarkable restructuring of BRI's nationwide local banking system from a government-subsidized credit program with high arrears and substantial losses during 1970–83 to a profitable, unsubsidized microbanking system beginning in 1984.

The Indonesian section of the book, which was first written in early 1997, provides detailed material through 1996. It documents and analyzes the history of Indonesia's commercial microbanking over more than 25 years, a period when the country achieved unprecedented economic growth and massive social and economic development. But in mid-1997 Indonesia was hit by its biggest economic, financial, and political crisis in three decades. The crisis that began in mid-1997 affected Southeast Asia and some East Asian countries, causing steep currency devaluations, plunging stocks, widespread bank failures and corporate bankruptcies, loss of foreign investment, rising inflation, growing unem-

ployment, and increasing poverty throughout much of the region. For reasons discussed in chapter 8, Indonesia was hit hardest by the crisis.

Given both the deadlines for this book and the importance of the post-1996 Indonesian material, certain compromises were adopted in writing part 3. Chapter 8 was revised to provide an introduction to Indonesia through 2000, and chapter 9 was updated with post-1996 material on rural finance. Chapters 10–14 analyze microbanking in Indonesia through 1996. But chapter 15, which concludes part 3, updates the microbanking material through 2000 and compares the 2000 results with those of 1996.

Nearly everyone in Indonesia was affected by the crisis. Despite massive efforts by the government—aided by international agencies—to provide food, employment, and social safety nets, many low-income households faced very difficult times. Their purchasing power shrank substantially, many workers were laid off as businesses closed or were retrenched, bank savings declined sharply in value, and some who had emerged from poverty slipped back under the poverty line.

The Indonesian crisis offers some basic lessons about the extraordinary stability that sustainable microfinance institutions can maintain in a highly unstable environment

Of crucial importance for this book is that as all this occurred and while the country's financial system collapsed, Indonesia's commercial microbanks remained stable. They continued to serve millions of low-income households without any major interruption. In general these institutions saw the amount of rupiah savings and the number of savings accounts increase considerably, loans held steady, repayments continued to be high, and the microbanks remained profitable.

Thus the Indonesian crisis offers some basic lessons about the importance of microfinance to low-income households, and about the extraordinary stability that sustainable microfinance institutions can maintain in a highly unstable environment. Thus part 3 demonstrates how BRI's microbanking system was transformed from a loss-making rural credit program to the world's largest sustainable microfinance system—and how it has continued to attain profitability and wide outreach through good times and bad.

The third volume: the emerging industry

The book's third volume, in two parts, analyzes the emerging microfinance industry, suggests a microfinance model for 2025, and discusses policy issues likely to be important for the microfinance industry over the next 25 years.

Part 4, "Microfinance in Developing Countries: A Global View" (chapters 16–20), written with Peter J. Fidler, analyzes the history and performance of selected institutions that have played key roles in the microfinance revolution—village banks, credit unions and cooperatives, NGOs, banks created by NGOs, commercial banks, central banks and bank superintendencies, microfinance networks, international organizations and donors, and others. Its focus is on the creation and rapid spread of underlying principles and best practices of the new paradigm in varied institutional and country contexts in Asia, Latin America, and Africa, and on the further dissemination of these principles and practices.

The microfinance revolution can be said to have reached a region when competitive institutions in the formal financial sector provide appropriately designed small loans and savings services (and in some cases other products as well),

serve low-income clients efficiently, and price their products to cover all costs and risks—and when together these institutions provide financial services to a large share of the country's low-income households and enterprises.

Chapter 16 offers a brief introduction to the history of microfinance as it developed in multiple regions. The contributions to microfinance made by non-bank financial institutions such as village banks, credit unions, and cooperatives—as well as the limitations of most of these institutions—are the focus of chapter 17. NGOs, along with regulated financial funds and companies (some of which are recent creations of NGOs that decided to expand microfinance outreach), are considered in chapter 18. The role of banks in microfinance is discussed in chapter 19, which highlights both the historical reluctance of most banks to enter microfinance and their growing interest in the market today. A few banks are selected for detailed discussion because of their special relevance for the development of the microfinance industry.

The third volume analyzes the emerging microfinance industry and suggests a microfinance model for 2025

Chapter 20 explores the roles played in the development of commercial microfinance by governments and international organizations, including international NGOs, foundations, networks, and donors. Emphasis is placed on three kinds of microfinance activities: information dissemination, banking laws and regulation and supervision of institutions providing microfinance, and capacity-building initiatives that concentrate on tools, training of managers and staff, and institutional development. This chapter also focuses on the crucial partnerships being forged between governments and many kinds of organizations. Thus the discussion concerns the roles played in microfinance by central banks, a donor consortium, multilateral and bilateral donors, an equity fund, an NGO, a nonprofit charitable organization, a private microfinance rating company, a practitioner network, a training program, and an Internet list.

Part 5, "The Twenty-first Century: Democratizing Capital" (chapters 21–22), analyzes the status of the microfinance revolution at the turn of the century and projects advances in the democratization of capital by 2025.

A new model of institutional commercial microfinance is developed in chapter 21. Unlike earlier models also analyzed there, the commercial microfinance model assumes an arena in which competing formal sector institutions act as intermediaries, providing commercial loans and savings services to the economically active poor. In this model profitable microfinance institutions that are publicly regulated and supervised hold a sizable share of the microcredit market and a large share of the microsavings market. Organizational structures are streamlined for efficiency. Loan sizes are limited but savings, in any amount over a tiny minimum, are collected from the public—providing ample funding for loans and making savings mobilization cost-effective. Depending on the institution, loan portfolios are also financed by commercial debt and investment. The model emphasizes horizontal links between formal and informal sectors in the same locality, as well as vertical links between local financial markets and actors in regional, national, and international arenas.

The chapter ends with some thoughts on the microfinance industry in 2025. It projects a rapid advance in the market share of microcredit provided by reg-

ulated formal institutions, along with a substantial decline in the market share of informal moneylenders. This shift implies a much larger number of formal sector borrowers in 2025 relative to 2001, but not necessarily a major decrease in the number of moneylenders or their clients. As commercial microfinance develops into a competitive industry with funds to finance loans coming from capital markets, investments, and savings, the formal sector will lend more funds to far more microfinance clients. A substantial increase in the market share of microsavings is also envisaged for formal sector microfinance institutions.

The book concludes, in chapter 22, with a discussion of policy issues that are likely to be crucial for microfinance over the next 25 years. The focus is on the kinds of policy decisions that will probably engage governments, banks, nonbank financial institutions, donors, and others. The policy choices for the various players are explored.

"The bank is not a king, the bank is a servant."
—A customer of Indonesia's Bank Dagang Bali

There are many routes to large-scale, sustainable microfinance. Banks may enter the market. NGOs may become regulated, for-profit institutions. Village banks may become linked with formal sector financial institutions. And some credit unions and cooperatives may decide to focus on microfinance. But the focus here is on the basics that underlie the microfinance revolution and are common to all large-scale, profitable microfinance institutions. A macroeconomic and policy environment that permits commercial financing and pricing enables institutional profitability and self-sufficiency. Institutional sustainability allows financial services to be made widely available to the economically active poor over the long term. Profitability engenders competition, which increases efficiency—improving the services available to low-income clients and lowering the costs they pay for them.

What does all this mean for the poor people who become clients of these institutions? This is best explained by the clients themselves. A customer of Indonesia's Bank Dagang Bali for more than 20 years put it this way:

> I grew up poor and without education. I learned, though, that I could improve myself, and that the bank would help me. The president of Bank Dagang Bali is a great man. Why do I say that? Not because he is a bank president; there are many bank presidents. Because he knew that poor people fear banks, and he taught us not to be afraid. BDB taught us something important that we never knew before. BDB taught us that the bank is not a king, the bank is a servant.

Acknowledgments

During the years that I have been learning about microfinance, I have become greatly indebted to many people. This book draws on the help, insights, and guidance of many people in many parts of the world. It is not possible to mention all of them here, but I want to thank those who have helped in especially important ways.

First, I must record my debt to the thousands of men and women in villages and low-income urban neighborhoods of developing countries who have answered my questions and taught me about their enterprises, their finances, and their lives. Most were poor in economic terms but rich in terms of wisdom and social responsibility. My knowledge of microfinance is largely derived from them.

Microfinance made an impression on me at an early age. My late father, Philip Van Doren Stern, wrote a story called *The Greatest Gift* that was made into a movie titled *It's a Wonderful Life.* The film, which I saw many times while growing up, is about the owner (played by Jimmy Stewart) of a small-town building and loan institution who fights the local establishment to provide financial services to the town's working poor. The movie's message seems to have sunk deep into my subconscious to emerge many years later.

I first learned directly about the power of formal sector finance for the social and economic development of low-income people from the late Burra Venkatappiah, who served at different times as deputy governor of the Reserve Bank of India (India's central bank) and chairman of the State Bank of India. As the driving force behind the famous 1954 All India Rural Credit Survey, he played a major role in the first nationwide study of rural credit and its relation

to economic and social development. The study found that government and cooperative credit together reached only about 6 percent of rural borrowers—mostly large farmers. As a result major changes were recommended in rural credit policy, laying the foundations for the country's long-term interest in providing finance to low-income borrowers. Much later the novelist Aubrey Menon, while being interviewed by the press, was asked what he considered the most important book written in India since independence. He replied: "The 1954 All India Rural Credit Survey." I am much indebted to Burra Venkatappiah and his family for sharing with me their wisdom and their hospitality for a very long time.

Among his many far-reaching contributions to the Indonesian economy, Professor Ali Wardhana—minister of finance from 1968–83, coordinating minister for economics, finance, and industry from 1983–88, and economic adviser to the government since 1988—was primarily responsible for creating Indonesia's commercial microbanking system, the world's first large-scale system of sustainable microfinance. Ali Wardhana first played a crucial role in the economic reforms that resulted in extensive rural development in the 1970s and 1980s—and in the consequent emergence of millions of potential bank clients. He led the country's widespread financial reforms that began in 1983; among their results was a policy and regulatory environment in which commercial microbanking could be born and sustained. He then arranged the establishment of Bank Rakyat Indonesia's (BRI's) nationwide commercial microbanking system, and he has watched over and guided its development ever since. Thus his introduction to this book is especially relevant. As Stephen Grenville, now deputy director of the Reserve Bank of Australia, said in 1994: "Not only was Pak Ali present at the creation of the Indonesian financial sector as we know it, but he was midwife at its birth and its guardian as it grew up." I am deeply indebted to Pak Ali both for the privilege of having worked for him for so many years and for all that I have learned from him. I am also much indebted to Ibu Nani Gandabrata for her many years of assistance and kindness; through her example she has taught me much.

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For many years I have been fortunate to have served as an adviser to BRI and to have had the opportunity to observe closely the development of its microbanking system. To the thousands of BRI managers and staff—from the board of commissioners, president-director, and board of directors to the staff of the local bank units with whom I have interacted since 1979—I am indebted in a special way. They set the example for the development of sustainable microfinance on a nationwide scale. I have learned much from their achievements, as well as from the goals, strategies, tactics, and methods that lie behind BRI's success in microfinance. Kamardy Arief, former president-director of BRI (1983–92), provided long-term, active, committed leadership for the transformation of BRI's approach to banking for the poor. Djokosantoso Moeljono has been president-

director since 1994, and it was during his term that BRI's microbanking system emerged as a model of technology transfer among developing countries.

A special acknowledgment must be made to the late Sugianto, BRI's managing director who was responsible for its unit *desa* (microbanking) system from the inception of its commercial approach to microfinance in 1984 until his sudden death in 1998. After the financial deregulation of 1983 made it possible, Sugianto (who like many Indonesians used only one name) managed the transition of the unit desa system from a network of banking units with high arrears, high losses, low savings, and low staff morale to the world's largest self-sufficient microbanking system. Sugianto once said to me, "You can succeed in microfinance only if you love it." He did both. The unit desas now provide financial services profitably to millions of poor people throughout the country, continuing even throughout the financial and economic crisis that began in 1997. I am much indebted to Sugianto for all that I learned from him for nearly two decades, and for his careful reading and helpful comments on chapters 1–14 of this book. His successor, Rustam Dachlan, who has managed the unit desas successfully at a time of great difficulty in Indonesia, has continued BRI's interest in the effort made in this book to document the development of BRI's microbanking system.

From 1979–83 I coordinated with Donald R. Snodgrass the Development Program Implementation Studies (DPIS), an interdisciplinary study of Indonesian development programs conducted by the Harvard Institute for International Development (HIID) for the Indonesian Ministry of Finance. I had the privilege of coordinating the four-year DPIS study on Indonesia's rice intensification program, which resulted in recommendations to change the network of rural banks created to channel subsidized credit to rice farmers into a system of commercial financial intermediation. Many of the DPIS recommendations were accepted by the government and implemented by BRI. I am much indebted to the many people with whom I worked on that study.

I am also grateful to the Center for Policy and Implementation Studies (CPIS) in Jakarta, the Indonesian foundation that grew out of the DPIS project, and to the many people with whom I worked there. As coordinator of the CPIS local banking group, which provided assistance to BRI from 1983–90, I learned much from Ismah Afwan, Hilman Akil, Kwan Hwie Liong, R. J. Moermanto, Ilyas Saad, L. Hudi Sartono, Bambang Soelaksono, Sudarno Sumarto, and others.

The CPIS also studied urban informal sector labor in Indonesia, and those studies helped me understand the demand for microfinance among the urban poor. From 1986–92 I served as coordinator of the CPIS informal sector group and worked closely with a number of CPIS research staff. Those whose work has been especially relevant to the issues considered here are Akhmadi, Sri Budiyati, Reno Dewina, Leni Dharmawan, Inca Juanita, the late Iman Juwono, Dewi Meiyani, Isono Sadoko, Kamala Chandrakirana (Nana) Soedjatmoko, and Darwina Wismoyo, in addition to others from the CPIS mentioned above. I would also like to express my appreciation to Reitje Koentjoro for her long, continuing, kind assistance.

The research on which the Indonesian sections of the book are based was supported primarily by Indonesia's Ministry of Finance. The Ministry of Finance and the coordinating minister for economy, finance, and industry provided long-term support and provided me with extensive information on rural development, banking, and government policy. My work with BRI was also supported by BRI, the U.S. Agency for International Development (USAID), and the World Bank. All this generous support is acknowledged with gratitude.

Much of what I have learned about successful microfinance has been garnered from years of discussions with I Gusti Made Oka, president-director of Bank Dagang Bali (BDB), and his wife Sri Adnyani Oka, and through observation of their bank's operations. Putu Indra Suryatmaja provided extensive help explaining and helping me to document BDB's activities and performance. Kadek Edy Setiawan provided help with BDB's financial data. Chapter 10, on BDB's development, is based primarily on research that I carried out in 1994, supported by USAID through its GEMINI Project (administered by Development Alternatives Inc. of Bethesda, Maryland) and by Calmeadow of Toronto. I am much indebted to all who helped me understand BDB's remarkable and pioneering role in microfinance.

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Work with the Bank for the Poor in Vietnam, sponsored by the Consultative Group to Assist the Poorest, World Bank, and United Nations Development Programme; with the Bangladesh Ministry of Finance and Bangladesh Bank, supported by the United Nations Educational, Scientific, and Cultural Organization; and with the Bank of Tanzania, supported by the bank and the World Bank, has provided important insights on how governments view the introduction of commercial microfinance. Work with financial institutions and government bodies in the Philippines and South Africa, funded by USAID; in East Africa, funded by the U.K. Department for International Development; and in China, funded by the Consultative Group to Assist the Poorest and the United Nations Development Programme, have broadened my perspective in this area. The support of these organizations is gratefully acknowledged.

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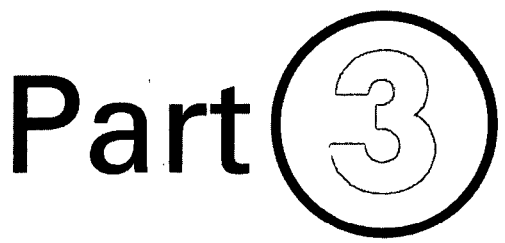
Once when I was at the Jakarta airport, about to leave for Boston, the immigration officer challenged my embarkation card. "It says here you are an anthropologist," he said. "It also says you work for the Ministry of Finance. Which is it? It cannot be both!" It took some time to explain that both were correct. As an anthropologist who has been given the opportunity to serve as a policy adviser to finance ministries, central banks, and a variety of banks and other financial institutions in many parts of the world, I have been especially fortunate, and am most grateful.



Commercial Microfinance in Indonesia

Indonesia was the first developing country to establish large-scale commercial microfinance systems. More than a hundred years ago the Badan Kredit Desa—village-owned banks now supervised by Bank Rakyat Indonesia (BRI)—began offering microloans commercially, and they continue to do so today. Bank Dagang Bali, which opened in 1970, is a private bank believed to be the oldest licensed bank in a developing country specializing in commercial microfinance. Founded by a couple who had long experience in the informal sector and in informal moneylending, the bank provides savings and credit services and has been profitable since the first year it opened.

Indonesia was the first developing country to establish large-scale commercial microfinance systems. These began in the late 19th century

In 1983 the Indonesian government issued a major financial reform deregulating interest rates on most bank loans and savings accounts. At that time the Ministry of Finance decided that BRI, a state-owned commercial bank with a mandate to provide financial services in rural areas, would transform its 3,600 unit *desas*—bank outlets at the subdistrict level that served as channeling agents for the government's subsidized rural credit programs—into commercial microfinance intermediaries. And in 1984 BRI began transforming its loss-making unit desa system into what quickly became a profitable nationwide commercial microbanking system—now the largest in the world.

These and other commercial microfinance institutions continue to operate profitably in Indonesia, reaching millions of clients with small loans and savings services. And with decades of experience, such institutions offer many lessons that can be adapted by microfinance organizations in other parts of the world. The Indonesian institutions discussed here are important contributors to the microfinance revolution for another reason as well: in recent years they have demonstrated unmistakably that commercial microfinance institutions can be remarkably stable even in times of extreme national crisis.

In Indonesia it has been demonstrated unmistakably that commercial microfinance institutions can be remarkably stable in times of extreme national crisis

The East Asian crisis hit Indonesia in 1997. The value of the rupiah plummeted, inflation mounted, and unemployment, food shortages, and high prices led to social unrest and violent outbreaks. By 1998 the foreign debt of commercial banks reached about three times their equity, and loan losses increased dramatically because borrowers were unable (or in some cases unwilling) to make payments. Domestic loan losses increased as well, as corporations went bankrupt and the banking system melted down. President Soeharto was forced to resign after 32 years in office, and the country began a long and difficult effort to restore the economy, build a viable, transparent financial system, and undertake major political reforms. The process continues today—with mixed results and many obstacles remaining.

Yet an outsider with no knowledge of Indonesia who examined the performance of BRI's unit desas during 1984–2001 would have no way of knowing that, beginning in 1997, the country had suddenly faced severe political instability, extensive economic hardship, and financial chaos. With giant banks and corporations collapsing all around them, the unit desas continued to increase their outreach, collect loans, mobilize savings, and remain profitable. Other commercial microbanking institutions withstood the crisis as well.

A century-old tension—between rural credit subsidies and commercial microfinance—is explored from its 19th century roots to its 21st century issues

Part 3 (which contains all the chapters of volume 2) focuses on how and why Indonesia developed large-scale sustainable banking systems, and is organized as follows. Chapter 8 provides an introduction to Indonesia's history, economy, government, and politics. It then analyzes the reasons for Indonesia's recent crisis, the crisis itself, and the attempts (through mid-2001) to restore broadly based economic growth and build a functioning democracy.

Chapter 9 reviews the history of rural finance in Indonesia (and its antecedents in Europe) and examines the country's rural development and rural financial institutions. A century-old tension in Indonesian microfinance—between those who promote rural credit subsidies and those who foster independent commercial financial institutions providing voluntary savings and credit—is explored from its 19th century roots to its 21st century issues. In Indonesia large outreach

and institutional profitability have been associated throughout only with a commercial approach to financial intermediation. Chapters 8 and 9 provide the background needed to understand the reasons that large-scale commercial microfinance developed in Indonesia. The rest of volume 2 considers how and why this happened.

Bank Dagang Bali, a private bank, is the oldest licensed full-service bank specializing in commercial microfinance in a developing country

Bank Dagang Bali (BDB), discussed in chapter 10, is the oldest licensed general bank specializing in commercial microfinance that currently operates in a developing country—and without ever having received a subsidy. Chapter 10 explores the history of BDB and its performance from 1970–96 (its 1997–2000 performance is discussed in chapter 15). The bank is best known for its knowledge of microfinance clients and for its savings services, which are state of the art in microfinance. BDB is now a full-service bank providing finance to large customers and corporate clients (many of whom were once the bank's poor clients) in addition to its microfinance customers.

The development and growth of BRI's microbanking (unit desa) system are explored in chapters 11–15. The unit desa system was selected for detailed analysis here for three reasons. It is the world's largest financially self-sufficient microbanking system. It is the Indonesian microfinance institution I know best, having advised on its development for more than 15 years starting in 1979. And it is much less well-

known internationally than some microfinance institutions in other countries that promote the poverty lending approach to microfinance. The BRI story should be understood by every government, donor, and financial institution making decisions about microfinance. The unit desas cannot—and should not—be cloned, but they offer many important lessons for the microfinance industry.

Bank Rakyat Indonesia's unit desa system is the world's largest financially self-sufficient microbanking system. This volume shows how it got there

Chapter 11 examines the unit desa system from its creation in 1970 to 1983, when the government decided to transform the units from channeling agents for subsidized rural credit programs to commercial financial intermediaries. The 1970–83 period was characterized by what BRI's President-Director Kamardy Arief (1983–92) called the unit desas' "old culture"—in sharp contrast to the "new culture" that resulted from the fundamental institutional transformation initiated in 1984 (see box 1 at the end of this section). This "new culture" is depicted in chapters 12–15. Today's unit desas can be fully understood only in the context of this transformation.

The unit desa system was originally created to administer the government's subsidized BIMAS credit program for rice cultivation; later many other smaller subsidized credit programs were added. BIMAS generally resulted in negative outcomes for rice farmers, BRI, and the government. Chapter 11 analyzes the many reasons this program did not—and could not—work as planned. The lessons of this era are

important because the transformation of the unit desa system occurred only after basic lessons about agricultural finance had been learned the hard way. The reasons for Indonesia's failure with BIMAS may help other countries and financial institutions currently implementing similar programs to understand why subsidized agricultural programs aimed at increasing production and raising the incomes of poor farmers cannot achieve those goals. The failures of such programs are caused by intrinsic structural defects. Microfinance outreach efforts must be based on fundamentally different assumptions. Using the Indonesian example, this chapter shows why.

With giant banks and corporations collapsing all around them, BRI's unit desas increased outreach, collected loans, mobilized savings, and remained profitable

Chapters 12–14 discuss, respectively, lending, savings, and organizational reforms in the unit desas from 1984–96. Chapter 15 documents and analyzes the remarkable stability of the unit desas and other commercial microfinance organizations between 1997 and mid-2001, during the Indonesian crisis.

Chapter 12 focuses on the financial sector reforms, policy decisions, and other enabling conditions that made possible the 1984 shift of BRI's unit desa system to a commercial microbanking intermediary. It analyzes BRI's achievements (and mistakes) in developing and implementing the unit desa credit program. And it examines the unit desas' credit performance and profitability from 1984–96.

Kredit Umum Pedesaan (KUPEDES), the unit desas' general purpose credit program introduced in 1984, provides loans to economically active poor and lower-middle-income individuals throughout Indonesia. The program is guided by the principle that institutional sustainability is required for large-scale outreach to low-income borrowers. KUPEDES provides loans to all creditworthy applicants for all productive purposes. Its interest rate is set to cover all unit desa costs and risks, and to return a profit to the system.

The failures of subsidized rural credit programs are caused by intrinsic structural defects. Using the Indonesian example (1970–83), chapter 11 shows why

Loan decisions are based on evaluations by well-trained, experienced unit desa staff of borrowers' character (willingness to repay) and of the viability and cash flows of their enterprises (ability to repay). KUPEDES was designed specifically to meet the needs of low-income borrowers for convenient bank locations, simple loan procedures, and flexible terms. Thus within the overall KUPEDES regulations, the loan purposes, maturities, and payment plans are customized for each borrower's needs.

Repayment rates have been high for a number of reasons. Borrowers are selected based on their ability to use loans productively and on their ability and willingness to repay them. Loans are provided in gradually increasing amounts, based on the borrower's repayment record and the creditworthiness of the enterprise for which the loan was taken. Borrowers are motivated to repay in order to retain their option to rebor-

row on what are considered attractive terms at reasonable cost. And unit staff treat clients with respect and courtesy.

The unit desa system made a profit in 1986 and has been independent of subsidy since 1987. In 1996 the KUPEDES credit program had $1.7 billion in outstanding loans to 2.5 million borrowers and a long-term loss ratio of 2.2 percent. Ninety-five percent of the units were profitable, and the pre-tax return on assets was 5.7 percent—substantially higher than typical banking industry averages in Indonesia and elsewhere. The crucial issue about profitability, however, has been BRI's use of unit desa profits to cover losses in the bank's less successful divisions that serve wealthier borrowers with generally low repayment rates—a decision outside the control of the unit desa system.

Chapter 13 documents the dramatic rise in savings mobilization in BRI's unit desas from 1984–96. The units had only $18 million in savings at the time of the 1983 bank deregulation. Low deposits were widely but wrongly attributed to an assumed lack of demand for financial savings instruments: it was believed that rural people were unable to save, unwilling to save in financial form, and did not trust banks. In fact, the problem was with the banks—which did not understand the nature or the extent of the demand for rural savings services—and with the government, whose regulations made it impossible for banks to meet this demand profitably.

Chapter 12 focuses on the financial reforms and policies that made possible the 1984 transformation of the unit desas to a commercial microbanking intermediary

The unit desas' new savings program was developed in three phases. In 1984–85 extensive research was conducted on the potential demand for unit desa savings and on products and services that would meet this demand; during this phase the new savings program was designed and tested in a two-stage pilot project. Then in 1986 the program was expanded to all unit desas throughout Indonesia. Finally, in 1987–89 methods were developed for market penetration. By 1989 all KUPEDES loans were funded by unit savings, as they have been ever since. The units subsequently achieved increasing penetration of the Indonesian market for rural savings and, with the opening of urban units in 1989, urban savings in low-income neighborhoods.

The KUPEDES loan product was designed to meet the needs of low-income borrowers for convenient bank locations, simple procedures, and flexible terms

Three main savings products offering different ratios of liquidity and returns are available at all units, with some differences between rural and urban units. Savers are permitted to have as many accounts as they want, enabling them to customize their use of the accounts to meet specific needs. In 1996 the unit desa system held locally mobilized savings of $3 billion in 16.1 million savings accounts.

The principles of sustainable institutional microfinance carry with them a set of basic operational requirements. Chapter 14 shows that effective operations depend on an efficient organization and a microfinance-specific management structure. Such an organization does not arise in the

absence of the underpinning principles. Yet the principles can be put into operation on a large-scale, long-term basis only through appropriate institutional organization. How can the sequencing work in such a situation?

This is a critical problem in microfinance, and one that is little understood. When BRI's unit desa system changed in 1984 from a loss-making channeling agent for government credit subsidies into a commercial financial intermediary, it did not have an organizational structure that could provide the prerequisites for institutional sustainability.

Although microfinance can operate viably under a number of organizational structures, certain features of operations and management must be incorporated into the design of any financially self-sufficient microfinance intermediary. For example, multiple components must be in place to achieve the repayment rates of more than 95 percent needed for institutional sustainability. Among these components are effective, committed management; an efficient, accountable, labor-intensive organization; simple, transparent accounting and reporting systems; appropriate staff training and performance-based incentives; decentralized authority for loan decisions; regular, meticulous internal supervision; simple, suitable management information systems; and user-friendly products and services priced for institutional viability. Whatever its organizational struc-

Chapter 13 documents the rise in unit desa savings mobilization—from $18 million in 1983 (after more than 10 years of collecting savings) to $3 billion in 1996

ture, a sustainable microfinance institution must provide these elements.

The ways in which new savings and credit products drove major changes in unit desa organization and management are explored in chapter 14

Chapter 14 focuses on the dynamics of organizational development at BRI, specifically on the ways that the basic products of commercial microfinance—savings and credit—and their operating requirements drove the changes in unit desa organization and management. The chapter also explores the organizational difficulties faced by the unit desas in their role as the microbanking division of a full-service commercial bank. In addition, the chapter analyzes the performance of two large microfinance organizations administered (in different ways) by BRI: the commercial Badan Kredit Desas (BKDs) and a heavily subsidized microcredit program known as P4K. As would be expected, the two organizations have striking differences in performance.

Chapter 15 first examines the financial aspects of Indonesia's crisis, the collapse of the banking sector, and the government's subsequent bank restructuring efforts. It then turns to the stunning contrast that emerged during 1997–2001 between the banking sector generally and commercial microfinance, represented here by the BKDs, BDB, and the unit desas. During the crisis all three of these institutions continued their wide outreach and profitability. The chapter also provides a more extensive analysis of unit

desa performance from 1997–2000, followed by a mid-2001 snapshot of their strengths and challenges.

This final chapter of volume 2 addresses the reasons that commercial microbanking has remained stable during a financial crisis so severe that, as *The Economist* (18 July 1998) commented, Indonesia "would probably walk away with the prize for Asia's most desperate banking system." While there are differences among the three microfinance institutions discussed, the main reasons for their stability under crisis are the same. These include:

- Macroeconomic stabilization measures undertaken by the government with the support of the International Monetary Fund and other donors.
- The fact that most microbanking clients operate in the domestic economy and were not directly affected by the currency crisis.
- The experienced management, strong performance, and high liquidity of these institutions before the crisis.
- Their well trained, motivated, and friendly staff.
- The high value placed by borrowers on the option to reborrow during the crisis.
- The impetus for clients to save more and consume less in times of rising inflation and growing unemployment.
- Savings moved from failing banks to trusted microfinance institutions.

The stunning contrast that emerged during the crisis—between the banking sector generally and commercial microfinance—is the focus of chapter 15

- The decisions of these institutions to continue to make financial services available throughout the crisis.

Indonesia offers four important lessons. Microfinance institutions can be fully sustainable with large, nationwide outreach over long periods. Commercial microfinance, following basic principles (see chapters 12–14), can be carried out by different types of financially self-sufficient institutions. Microfinance can be profitable and stable even during severe crisis. And as a result, millions of low- and lower-middle-income savers and borrowers can improve their enterprises, increase their incomes, and gain self-confidence. Some of these lessons (and others) are of course available from other countries. But these four are probably found in combination only in Indonesia.

There are differences among commercial microfinance institutions. But the main reasons for their stability during crisis are the same

Box 1 **Old and new cultures at Bank Rakyat Indonesia's unit desas**

Old culture, 1970–83	*New culture, 1984–present*
Overview	
Unit desas acted as channeling agents for the government's rural subsidized credit programs. The government set terms and ceilings for loans and interest rates for savings and loans	In June 1983 the government deregulated interest rates on most loans and savings and encouraged restructuring of the unit desa system. The government provided initial funding for the KUPEDES loan program All decisions about unit desa products, services, pricing, and the like are made by BRI without government interference But the government has remained a strong supporter of the unit desa system and, when formulating financial policy, has consistently kept in mind the units' special contributions and requirements
BRI managers and staff had little understanding of local markets or of the potential for microfinance. BRI saw the units as a loss-making activity that impedes "our real banking	Since 1984 the units have provided commercial financial services for the economically active poor, the units' profitability makes the system viable for the long term. Hallmarks of the new culture include simplicity, transparency, professionalism, accountability, service, and knowledge of local markets
Human resources	
Salaries of unit staff were much lower than those of BRI branch staff.	Unit staff are on the same salary scale as the rest of the bank
Unit staff were considered outside the BRI "family," were not treated as part of the corporate culture, and were not viewed as bankers	Unit staff are part of the BRI organization, included in corporate events, and encouraged to act as, and regard themselves as, bankers
There was no career track at BRI for unit staff	Unit staff are on a BRI career track, based on performance, they can be promoted to BRI branches In addition, low-level branch staff can be promoted to serve at the units
There was no specialized microfinance training for unit staff and their branch-level supervisors	Extensive microfinance training is provided for unit staff and their supervisors, who are based at the bank's branches
There were no performance-based incentives	Unit staff receive significant cash incentives and formal recognition for good unit performance
Unit managers had very limited authority	Unit managers have considerable authority in loan approval and unit management
Unit managers and staff had limited accountability	There is strict accountability; unit managers and staff are held responsible for their financial decisions and for their unit's performance

Box 1 **(continued)**

Organization and management	
Units were branch windows, and their transactions were posted as branch transactions.	Units are treated as individual profit centers, with each unit's performance recorded and reported separately
Unit performance reports were aggregated and incorporated into the balance sheet and profit and loss statement of the supervising branch	A balance sheet and profit and loss statement are required of each unit every month The unit desa system has its own reporting system at the unit, branch, regional, and head office levels
There was no unit desa division at the head office and no unit desa section at regional offices	The unit desa division at the head office reports to a BRI managing director; regional offices have unit desa sections
Supervision of the units was poor and irregular.	Regular, intensive supervision of the units is conducted by supervisors from the branch and regional levels
Thirty-two monthly reports were required from each unit, consuming a large amount of staff time but resulting in little useful information	Five monthly reports are required from each unit, providing more relevant information than was contained in the 32 reports under the old system
Products and pricing	
About 350 subsidized loan products were offered at below-market interest rates One savings product was provided, with an interest rate that was set below inflation and below the lending interest rate	One loan product and three basic savings/deposit products with generally positive rates of return are offered, with an interest rate spread that enables unit profitability
Interest payments on loans were transferred to the supervisory branch Unit savings were also transferred to the branch, but interest to depositors was paid by the unit	KUPEDES interest is posted under unit assets and unit savings are posted under unit liabilities Units can save at or borrow from their supervising branch at the transfer price set by the head office
Borrowers were selected primarily by government officials and committees.	Borrowers are selected by well-trained unit staff, unit managers have the authority to approve most loans
Profitability and outreach	
Arrears and defaults were high, as were government subsidies and unit desa losses. In 1983 there were fewer than 500,000 outstanding loans, including many in default from previous years The number of savings accounts is not available, but at the time of the June 1983 financial deregulation the amount of unit savings was $18 million	The units have been profitable every year since 1986 and free of subsidy (except for technical assistance) since 1987. In 2000 the units had 2.7 million outstanding loans in a portfolio of $816 million and $2 billion in savings in 26 million savings accounts

8 An Introduction to Indonesia

The development of large-scale sustainable microfinance in Indonesia did not occur gradually, accidentally, or as a grassroots initiative; it was planned and implemented as an integral part of the country's economic development. Because Indonesia's achievements in microfinance can be understood only in a wider context, this chapter summarizes its history and economic development as background to the rest of volume 2. Only a brief account of Indonesia's rich and complex history can be given here, but references are provided throughout the chapter for readers who want to learn more about the country's history, economy, politics, and culture. In preparation for the discussion of microbanking, the chapter that follows completes the general background summary by

reviewing the history of Indonesia's rural development and rural financial institutions.

This chapter begins with a discussion of early Indonesian history, the struggle for independence, and the post-independence era under Sukarno, who served as Indonesia's first president from 1949–67. By the mid-1960s, however, the Indonesian economy was in severe decline and Sukarno's political base had eroded. An attempted coup occurred on 30 September 1965; within hours Major-General Soeharto, head of the army's Strategic Reserve Command, took control of the army. The attempted coup—for which responsibility is still in dispute—was followed by an army massacre of hundreds of thousands of communists and others whom the army blamed for the coup attempt. Soeharto emerged as the new national leader: executive power was transferred to him in March 1966, and he was appointed acting president in 1967 and president in 1968.

From 1970–96 Indonesia's economic growth averaged 7 percent a year, and Soeharto's government made extraordinary achievements in poverty reduction

The primary achievement of Soeharto's 32-year presidency was Indonesia's social and economic development under what was known as the New Order government. An extraordinary team of technocrats restored the economy and, as economics ministers, led it through three decades of remarkable growth with a strong emphasis on equity. From 1970 to 1996 Indonesia's economic growth averaged 7 percent a year. During 1986–96 the country saw average annual growth of nearly 8 percent, while average annual inflation stayed below 10 percent.

Soeharto is widely credited with placing a high priority on poverty reduction, and his technocrats were able to help the poor increase their incomes and improve the quality of their lives. As a result Soeharto won prestigious international prizes for Indonesia's achievements in food and agriculture, in family planning, and in poverty alleviation. But under the authoritarian New Order government the country remained politically underdeveloped, with Soeharto personally dominating all branches of the government, controlling the political opposition and the media, and ensuring that no healthy opposition—and no potentially powerful leaders—could emerge.

By the 1990s the Soeharto family and a small group of their friends had become corrupt on a massive—and escalating—scale. In the process Soeharto had virtually stopped listening to his team of economics ministers. Many Indonesians became increasingly outspo-

ken against Soeharto's authoritarian rule and the family's corruption. Then in July 1997 a financial crisis erupted in Southeast Asia. In Indonesia the value of the rupiah plummeted, inflation mounted, corporations went bankrupt, banks closed, the financial system collapsed, and unemployment, food shortages, and high prices led to social unrest and violent outbreaks. The primary cause of the crisis was not the underlying economy, however, but the deep and growing weaknesses in governance and in the financial system. Soeharto was forced to resign in May 1998; he was succeeded by Vice President B. J. Habibie, his lifelong protégé.

Because of Soeharto's authoritarian rule, the country remained politically underdeveloped, with corruption flourishing at the highest levels

In 1998 the International Monetary Fund (IMF) and other international donors provided an emergency $42.3 billion soft loan financial aid package for Indonesia. The economy, which was at its lowest point of the crisis in 1998, improved gradually. Stabilization measures brought down inflation from 53.4 percent in 1998 to 20.5 percent in 1999 and 3.7 percent in 2000.

Responding to mass demand after Soeharto's resignation, President Habibie initiated a number of political reforms, including the abolition of restrictions on forming political parties and the referendum that allowed the province of East Timor to vote overwhelmingly for independence from Indonesia. (After the vote, however, massive burning, looting, and killing of East Timorese were carried out by Indonesian militias with support from some of the military.)

Immediate challenges were to improve governance, implement political reforms, strengthen the economy, rebuild the financial system, and maintain a safety net for the poor, whose numbers had increased during the crisis. But results were mixed. Inflation decreased substantially and economic growth improved. Some basic reforms were accomplished (such as freeing the media, a process begun by Habibie and completed by his successor, President Abdurrahman Wahid). But many of the country's old problems did not disappear, and new ones emerged.

Indonesian general elections were held in June 1999—the first time in more than 40 years that the results of an election were not known beforehand. No party obtained a majority. The presidential election was held in October 1999, with Habibie and Megawati Soekarnoputri (Sukarno's daughter) as the front runners. However, the newly reformed People's Consultative Assembly elected Ab-

durrahman Wahid as president and Megawati Soekarnoputri as vice president. Wahid was selected largely because he was a widely respected Muslim religious leader, known for his honesty, tolerance, and support for human rights. But Wahid is blind and had been weakened by strokes, and there was concern about whether he would be able to run the government.

The challenges were formidable. Could Wahid build a coalition government from multiple newly formed parties with different views and priorities? Could the president control the army? Could the government resolve secessionist movements, restore the economy and rebuild the financial system, and build the institutions needed for a viable democracy?

The Soeharto family and cronies and their conglomerates, though weakened, remain wealthy and powerful. And many Soeharto supporters throughout the country remain active, in some cases working to create and maintain political instabilities. President Wahid failed in his effort to bring Soeharto to trial for corruption (the court dismissed the case, finding Soeharto too ill to stand trial).

Wahid made some crucial reforms early in his administration: making the media fully independent, placing the military under civilian control, and holding some military officers accountable for human rights abuses. And the economy showed improvement. Inflation remained single digit and GDP growth, which was –13.0 percent in 1998 and 0.3 percent in 1999, reached 5.2 percent in 2000.[1]

But Wahid was unable to consolidate power. He had neither the political backing nor the administrative skills needed to achieve sustained reforms. Political infighting, violence, bombings, secessionist movements, ethnic and religious conflicts, and instabilities promoted by Soeharto supporters, Muslim fundamentalists, and others escalated. By early 2001 the rupiah was falling, the country's slow economic growth was faltering, and inflation was rising. Still constraining the economy were difficulties with the restructuring of massive corporate foreign and domestic debt, the crippled banking system, and continuing large-scale corruption. Efforts to restructure the corporate debt and to build an effective and accountable banking system, both needed for any significant growth in private investment, remained mired in political problems. Many of these problems involve the Soeharto family and their friends.

Since independence Indonesia has had a strong leader and a weak state. When Soeharto resigned, the strong leader was gone but the weak state remained

Meanwhile, the IMF and Indonesia's other donors had become dissatisfied with the glacial pace of agreed reforms and with growing political instabilities. In December 2000 the IMF suspended disbursement of a $400 million tranche of its aid program, which remained suspended throughout the rest of Wahid's presidency.

By April 2001, 18 months after his election, Wahid had twice been censured by parliament. He was criticized for his government's lack of focus, coordination, and implementation; for the deterioration of the economy; for insufficient progress in legal, judicial, legislative, banking, and other reforms; and for failing to curb corruption, resolve secession issues, and bring former president Soeharto to justice. Three months later, on 23 July 2001, President Wahid was impeached by the unanimous vote of the 591 members of the 700-member People's Consultative Assembly who attended the session. He was replaced for the remainder of his five-year presidential term by Vice President Megawati Soekarnoputri.

Indonesia is now attempting to recover from a major economic, financial, and political crisis and to build a modern political state

The transition from the Soeharto era could not have been easy under any circumstances, but the economic, financial, and political crisis that began in 1997 made it especially difficult. And there will undoubtedly be difficult times ahead. But Indonesia has many strengths. It has abundant resources: a large and educated labor force, ample natural resources, a strategic location, an extensive infrastructure, a large domestic market, and long experience with sustained economic growth and equity. As Ali Wardhana (1998b, p. 5) put it, "No one should doubt the severity of the current economic crisis. Yet neither should anyone underestimate our capacity to set our institutions right."

Indonesia is perhaps the least understood of the world's major nations. Only an overview of selected aspects of this large, complex, and multiethnic country is provided here. But even for a summary of Indonesia's social, economic, and political history, three underlying concepts are crucial: the role of the Javanese *wayang* puppet theater and its teachings, the Javanese concept of power, and Pancasila—the five guiding principles of the Indonesian government. These concepts are considered here in the contexts where they are most directly relevant to the discussion. In different ways, all are fundamental for an understanding of the events and processes explored here: the freedom struggle that culminated in a declaration of independence in 1945 and the formation of an independent nation in 1949, the country's economic development over the next half-century, its political dynamics, the economic and political crisis of the late 1990s, and Indonesia's current attempts to recover from that crisis and to build a modern political state.

The Javanese wayang shadow theater teaches central lessons about conducting life and making choices. Current events are often interpreted based on wayang teachings

Wayang, or Javanese shadow theater, teaches central lessons about the conduct of life and about making choices—messages embodied in stories that people learn from early childhood. Much of Javanese philosophy is based in Hindu thought—not necessarily compatible with Western ideas—in which the creative and the destructive are the same principle, goodness cannot exist without evil, and opposition and complementarity are aspects of the same whole. While most Javanese are Muslim,[2] a strong underlay of earlier Hindu culture remains on Java, where most of Indonesia's population lives (and on Bali, where most of the population is Hindu).

Three of the many lessons from the wayang are discussed below. One is that life is complex, duties conflict, and even ethical, honorable choices may lead to undesirable outcomes. Another is that while humans may accumulate material goods, greed—especially among rulers—is unacceptable to the gods. The third is that a sovereign is legitimate only so long as he maintains the enlightened characteristics required of a ruler and so long as he governs in the interest of his people.

Closely related is the Javanese concept of power—which is seen as an independent, fixed entity that exists apart from its users and passes from one holder to another (Anderson 1990 [1972]). Thus the only way to gain power is to take it from someone else. Commoners can become kings if they acquire power. But to keep power, a ruler must demonstrate continuously that he still holds it. "The ruler must behave properly or his Power will ebb and vanish, and with it the good ordering and smoothness of the social system" (Anderson 1990 [1972], p. 63).

Pancasila, or the five guiding principles of the government—belief in one supreme being, Indonesian unity, humanitarianism, democracy by representative consensus, and social justice—was first proclaimed by Sukarno in a speech on 1 June 1945, two months before Indonesia declared its independence. As a national ideology, Pancasila is so all-encompassing that it provides an inclusiveness that can bind together many highly diverse groups. It also enables a powerful president to justify virtually any decision, and it can serve as an instrument of repression.

Readers should keep these views in mind as the discussion below describes the rise and fall of both Sukarno and Soeharto, who between them ruled Indonesia for 50 years, as well as events of the post-Soeharto era and the rise of Sukarno's daughter, Megawati Soekarnoputri, who became Indonesia's president in 2001.[3]

The Javanese Wayang Shadow Theater

"The ruler must light the minds and souls of his subjects...and provide direction, responsibility, example, and impartiality"

Wayang, a traditional Indonesian puppet theater of multiple dimensions, incorporates entertainment, art, spiritual teaching, and information and commentary on current events—all intricately interwoven.[4] Extremely popular, especially on Java and Bali, the wayang both reflects and provides inputs into the wider society.

> The trunks of banana trees that
> the puppets are inserted in
> are symbols of the world of man
> Man's spirit is the puppeteer,
> symbol of truth and meaning.
> The screen's the unseen world above,
> man's characters the wayangs,
> and the lamp's rays the Almighty
> The audience is the all-perceiving wise man.
>
> —Pak Jaya, cited in Mulyono 1981, pp. 18–19

Many wayang performances depict episodes from the Ramayana and the Mahabharata, ancient epics that came to Indonesia from India and were gradually adapted to local culture and society. The Ramayana, composed originally by Valmiki in Sanskrit, tells the story of Rama, the prince of Ayodhya. One famous episode concerns the kidnapping of Sita, the wife of Rama—who is an *avatar* (incarnation) of Vishnu, part of the Hindu holy trinity of Brahma the Creator, Vishnu the Sustainer, and Siva the Destroyer. Sita is kidnapped by Ravana, the King of Alengka (Sri Lanka), and after many episodes is rescued by Rama's forces.

One Javanese wayang performance[5] highlights the role of Wibisana,[6] the younger brother of King Rahwana.[7] Wibisana entreats Rahwana not to hold Sinta[8] captive and not to make war on Rama, "who is a powerful, honest, noble-minded man of supernatural virtue" (Mulyono 1981, p. 72). Rahwana refuses to listen and banishes his younger brother. Wibisana then joins Rama's followers. The wayang performance centers on Wibisana's choice.

Serving one's country may mean betraying the truth, while serving the truth may mean betraying one's country. In the wayang the puppetmaster recites the following as Wibisana's left foot touches the soil of Mangliawan, Rama's kingdom, while his right foot is still in contact with the soil of his native land:

> Stopping, he stands erect like a statue dressed with clothing. His heart is filled with confusion. The world grows dark in an instant. The flying birds fall to the ground, their feathers ruffled, their wings thrashing helplessly. The fish in the water float to the top and beat helplessly against the shore. In the words of the saying, not a leaf is stirring, for the wind itself is standing still.

Wibisana is caught on the horns of a dilemma. "Eat the fruit of the *simalakama* and your mother dies. Don't eat it, and your father dies. Walk forward and be wounded. Retreat and be torn to pieces... This is life." (Mulyono 1981, p. 74)

Another episode from the Ramayana shown in wayang performances focuses on the balance between the material and the spiritual, and on the proper way for a ruler to live. After many years as ruler, Rama set his life and kingdom in order.

> Sri Rama did not leave worldly things behind until his children had replaced him on the throne. In the philosophy of the wayang, man is advised to deal fully with the material side of life—only he is cautioned not to be greedy, and not to worship possessions and rank, for worship belongs only to God.
>
> —Mulyono 1981, p. 149

In a third episode depicted in wayang performances, Rama teaches the principles of rule to Wibisana, who is eventually crowned King of Alengka (Sri Lanka). The principles emphasize the duty of the king to give his subjects spirit, inspiration, and the means of earning their livelihood, to light their minds and souls, and to provide direction, responsibility, example, and impartiality. The ruler must be free of hatred and pettiness and must be solid, honest, and willing to reward those who serve the land and its people. "Every ruler who does not possess these characteristics is a king without a crown, while every commoner who does is a crowned head in reality" (Mulyono 1981, pp. 136–37).

Most Indonesians, including many non-Javanese, are familiar from childhood with the teachings of the wayang shadow plays. This fact should be remembered when considering Indonesian history (and current events)—because in Indonesia events are often interpreted and choices made in light of wayang teachings.

Indonesia, with its strategic location astride major sealanes, has a rich resource base including oil, natural gas, minerals, timber, and primary energy resources

Indonesia's Environment, Demographics, Early History, and Struggle for Independence

The world's fourth most populous country, Indonesia lies between Asia and Australia on the world's largest archipelago, a strategic location on, and alongside, major sealanes from the Indian Ocean to the Pacific Ocean (see map of In-

donesia). Divided into 23 provinces, 2 special regions, and 1 special capital city district, and covering 1.8 million square kilometers, the country comprises some 13,700 islands spread over a variety of ecological zones. A pluralistic country, in 2000 Indonesia had a population of 210 million people from many cultural, linguistic, and ethnic backgrounds (World Bank 2002, *World Development Report 2002*). In 1999 about 60 percent of the population was rural, down from 78 percent in 1980 (World Bank 2001, *World Development Report 2000/2001*). But in densely populated Java and Bali, where most of the population lives, the distinction between rural and urban is not always clear. Indonesia is nearly 90 percent Muslim but is also home to Protestants, Roman Catholics, Hindus, Buddhists, and other religious minorities.

Educating Indonesians was not a Dutch colonial priority. At independence there were only 337 higher education graduates in a population of 70 million

Although hundreds of languages are spoken, the nation's official language is Bahasa Indonesia (commonly called Indonesian in English), which is known by nearly all Indonesians. The Malayan language has served as a lingua franca throughout the Indonesian-Malayan archipelago since the 15th century. Both present-day Bahasa Malaysia and Bahasa Indonesia, which are mutually intelligible, are modernized versions of the older Bahasa Melayu. Bahasa Indonesia was proclaimed the official language of Indonesia in 1928, as part of the early independence struggle. The widespread acceptance of a national language in this large, multilingual country was undoubtedly helped by the fact that the official language chosen was not the Javanese language of the dominant majority—a lesson not learned in some other countries (India, for example). Among people 15 and older in 1998, 91 percent of men and 80 percent of women were reported to be literate (World Bank 2001, *World Development Report 2000/2001*).[9]

The country's rich and diversified resource base includes oil, natural gas, minerals, timber, and substantial primary energy resources. Indonesia is the world's largest exporter of liquefied natural gas. In addition to exploitation of natural resources, the economy is based on manufacturing of consumer goods (textiles, processed foods, garments, shoes, furniture) and intermediate goods (plywood, cement, fertilizer), on agriculture and fishing (rice, cassava, maize, fish, and poultry and other animals for domestic consumption, and rubber, coffee, palm oil, spices, tea, cocoa, food, live animals, and fish for export), on trade, and on hotel and restaurant services.[10]

Early Indonesian history and culture (see Koentjaraningrat 1975b, 1985, and Fox 1980) were formed from a complex mix of influences from China, India, Southeast Asia, and the Arabian peninsula. During the 15th century the Portuguese, Spanish, British, and Dutch fought for control of the Indonesian spice trade. By the 17th century the Dutch dominated the trade routes, and in the 18th and 19th centuries they occupied most of what is now Indonesia.

Indonesia became administratively unified under Dutch colonial rule, which lasted until the Japanese occupation during World War II.

> The Dutch saw no need to bring significant numbers of Indonesians into government or to start preparing them to manage their own affairs. The 1930 census, the last before

> Indonesia's independence, showed there were 208,269 Dutch living in Indonesia. They ran virtually everything...M.S. Ricklefs in his study *A History of Modern Indonesia* quotes Dutch governor-general B.C. de Jonge (1931–36) as saying, "We have ruled here for 300 years with the whip and the club, and we shall still be doing it for another 300 years." Education for the local people was also not high on the Dutch agenda, with the result that there were only a few hundred Indonesian college graduates out of a total population estimated at 70 million at the time of independence.[11]
>
> —Masters 1999, p. 2

Independence was declared in 1945, but the struggle to gain it continued. In 1949 Indonesia finally became a unified republic with Sukarno as president

During the 1920s the Indonesian National Party (Partai Nationalis Indonesia, or PNI) was organized by Sukarno—popularly known as Bung (brother) Karno, later the country's first president—and six other founders. The PNI urged immediate independence. But the Netherlands strongly resisted the idea of Indonesian independence, and in 1929 Sukarno and many of his associates were imprisoned. Released in late 1931, in part because of protests by humanitarians in the Netherlands, Sukarno joined Mohammad Hatta and Soetan Sjahrir in forming a new party, the Indonesian National Education Party (Pendidikan Nasional Indonesia); the party's initials were intentionally kept the same as the previous independence party. Sukarno was imprisoned again in 1932 and then exiled to a remote fishing village in eastern Indonesia, where he remained until 1942.

In 1940 Germany invaded Holland, and in 1942 Japan invaded Sumatra and then Java. Sukarno became the nominal head of the Indonesian government under Japanese rule. He helped Indonesians when and as he could, but little could be done to mitigate the terrible hardship and suffering that the Japanese occupation brought to Indonesia.

In August 1945 Japan surrendered to the Allies. Japan had promised to grant independence to Indonesia, but the promise was not kept and Japan handed Indonesia over to the Allies.

However, during the short period between the Japanese surrender and the arrival of the Allied forces, Indonesia declared independence. A short proclamation, written by Sukarno in Indonesian, stated: "We the people of Indonesia hereby declare Indonesia's independence. Matters concerning the transfer of powers and other matters will be executed in an orderly manner and in the shortest time possible." Sukarno and Hatta signed the proclamation on behalf of the Indonesian people on 17 August 1945.

But independence was not yet won. The Dutch returned almost immediately, killing some 8,000 civilians in Jakarta by December 1945 (Neill 1973, p. 325). The Dutch tried several times to assassinate Sukarno, while the British (in Indonesia in the aftermath of the Japanese surrender) tried to arrest him. Over the next four years guerrilla warfare ensued in many parts of Java as well as in Sumatra and Bali. Finally, on 27 December 1949 Indonesia became a fully independent state with Sukarno as its president and Hatta as its vice president.

The Sukarno Era, 1949–67

Under President Sukarno Indonesia became a unified republic.[12] A constitution was written and announced on 18 August 1945, the day after Sukarno and Hatta had proclaimed Indonesia's independence. Meant as a provisional constitution, it was short and general, but provided for a powerful presidency.

Although the large majority of Indonesians are Muslim, the country was not established as an Islamic state. Sukarno's Pancasila was offered as a compromise among groups with strongly different views on this and other issues. "The primary objective of this fuzzy doctrine is rooted in its first principle [belief in one supreme being] which aimed to undercut demands from the Muslim community for an Islamic state" (Schwarz 1994, p. 10).

Sukarno's presidency began with a period of parliamentary democracy. In 1959 he switched to "guided democracy"—in practice personal rule "reminiscent of Javanese feudalism"

Sukarno's presidency (1949–67) began with a period of parliamentary democracy. In 1950, when Indonesia became a fully independent state, a new constitution was adopted that mandated a parliamentary government, provided detailed guarantees for human rights, instituted a system of checks and balances for political institutions, and subordinated the military to civilian leadership.[13] In 1953 the government announced plans for general elections, which were held in 1955. More than 90 percent of the registered voters cast ballots—in what turned out to be Indonesia's last democratic election until 1999. No party contesting the 1955 elections won a majority of the votes, and Sukarno continued as president with a coalition government.

An election was also held in 1955 to elect delegates to the Constitutional Assembly (Konstituante), which was to draw up a permanent constitution. Despite its diverse membership, the Constitutional Assembly was able to reach broad consensus on issues concerning human rights and safeguards against arbitrary use of power. But the delegates were polarized on some issues, most notably the debate over whether Indonesia should become an Islamic state.

By then the economy had begun a sharp decline, a rebellion had occurred in West Sumatra,[14] regional discontent with Jakarta's leadership had grown, the military had become increasingly unhappy with parliamentary democracy, and a sense of crisis was forming.

On 5 July 1959 Sukarno dissolved the Constitutional Assembly, abrogated the 1950 constitution with its division of powers and human rights protections, and decreed a return to the 1945 constitution (which remains in effect today). This ended the experiment in parliamentary democracy. What followed next was Sukarno's "Guided Democracy."

> Guided democracy, its title notwithstanding, meant in practice a return to a system of personal rule more reminiscent of Javanese feudalism than the chaotic democratic experiment of the 1950s. 'In Guided Democracy,' Sukarno once said, with typical flair, 'the key ingredient is leadership. The Guider... incorporates a spoonful of so-and so's opinions with a dash of such-and such, always taking care to incorporate a *soupçon* of the opposition.

> Then he cooks it and serves his final summation with "OK, now my dear brothers, it is like this and I hope you agree..." It's still democratic because everybody has given his comment.'
>
> —Schwarz 1994, pp. 16–17

Under Guided Democracy the influence of the Indonesian Communist Party (Partai Komunis Indonesia, or PKI) rose—and became a source of serious concern to Islamic parties and to the military. Meanwhile, the military also became increasingly alarmed about political Islamic groups and their goal of Indonesia as an Islamic state. The military expanded its operations under what had become known as the "the middle way," a doctrine formulated by Major General Abdul Haris Nasution in 1958.[15] According to the middle way the armed forces were not only a military force, but also a socio-political force with a role in preventing national instability. Under Guided Democracy the military received representation in the cabinet, civil service, and parliament. Later, under the middle way, the military greatly expanded its role throughout the country.

By the early 1960s the economy was in steep decline. And Sukarno—listening only to what he wanted to hear—lost touch with the Indonesian people

The Sukarno administration was based on an uneasy coalition of nationalists, religious groups, and communists known as NASAKOM (Nasionalisme [nationalism], Agama [religion], Komunisme [communism]). An inherently unstable grouping, it began to rupture in the late 1950s and early 1960s.

Sukarno, a political revolutionary, was little interested in economics. By the early 1960s the economy was in steep decline. Production and investment had fallen sharply. Debt soared, real per capita income declined, the country was wracked by hyperinflation, and the agricultural sector could not produce enough food to feed the population. Export earnings declined sharply, the country's net foreign exchange reserves were negative, and the budget deficit reached about half of government spending. Banks, choked with regulations and unable to attract funds because of inflation that reached more than 600 percent, ceased most commercial lending. Most of the population was poor and getting poorer.[16]

Meanwhile, Sukarno had lost touch with the Indonesian people, listening only to those who said what he wanted to hear. "Dialogue died. The flow of opinion was now only from the top down. The sounding board for public opinion became an echo of the leader" (Jones 1971, p. 248).

Increasing antagonism between the PKI and the army, along with the growing economic problems and a narrowing of Sukarno's political base, led to a violent coup attempt in late 1965. Responsibility for the attempted coup is still in some dispute. Among the possible candidates are the PKI, some army officers, the U.S. Central Intelligence Agency, President Sukarno, then–Major General (later President) Soeharto, and others.[17]

The coup attempt occurred the night of 30 September 1965, when leftist army troops murdered six army generals—members of the army's General Staff—as well as an aide, then buried them in an unused well in Jakarta. Soeharto, who led the army's Strategic Reserve Command (Kommando Strategis Angkatan Darat, or KOSTRAD), assumed control of the army by early morning 1 Oc-

tober. The army blamed the PKI for the attempted coup. Along with youth, nationalist, and religious organizations that were encouraged to take part, the army massacred PKI members, followers, suspects, and others who were disliked by the attacking mobs. The victims included many ethnic Chinese, who were widely resented by indigenous Indonesians (*pribumi*) because of their prominence in economic activities (box 8.1).

The bloodbath that erupted on Java and Bali in October 1965 continued into 1966; an estimated 300,000–400,000 people were killed.[18] The complexities of the attempted coup, and of the massacres that followed, have yet to be fully unraveled.

A violent coup attempt occurred in 1965, followed by a massacre that continued into 1966. Soeharto emerged as the new leader and soon became president

Soeharto emerged from the havoc as the new national leader. Sukarno was permitted to retain the title of president, but he was relieved of his powers and prohibited from engaging in political activity until after the next election. Executive power was transferred to Soeharto in March 1966; he was appointed acting president by the Provisional People's Consultative Assembly (Majelis Permusyawaratan Rakyat Sementara, or MPRS)[19] in 1967, and president in 1968. Sukarno, who never regained power, died in 1970. At the time of his death, about 60 percent of Indonesians lived below the poverty line.

The rest of this chapter considers Indonesian history since Soeharto assumed the presidency in 1967. It focuses first on the reasons for the country's impressive and sustained economic development over three decades, then considers the reasons for the devastating economic, financial, and political crisis that began in1997; progress toward recovery; and early steps toward a workable political democracy.

The Soeharto Era, 1967–98

When Soeharto's New Order government took de facto control in March 1966, it inherited a fractured society and an economy in chaos. Thirty years later, in 1996, the IMF ranked Indonesia seventh in its list of emerging economies. Similarly, a 1997 World Bank report on Indonesia was titled "Indonesia: Sustaining High Growth and Equity." According to estimates for Indonesia made by the Bank in 1996:

> Economic growth is expected to remain at about 7.5 percent over the next few years, despite a declining contribution from the oil sector. Ongoing trade and industrial sector reforms should continue to open profitable areas for relatively labor-intensive export industries.
>
> —*World Bank News,* 4 April 1996, p. 6

In stark contrast, a July 1998 World Bank report on Indonesia, called "Indonesia in Crisis: A Macroeconomic Update," stated:

Box **8.1** **Excerpts from David C. Cole and Betty F. Slade's *Building a Modern Financial System: The Indonesian Experience***

A brief description of the evolution of the economic role of the ethnic Chinese businessmen in Indonesia [is provided]. because many financial policies resulted from the overwhelming and very obvious economic success of many ethnic Chinese in Indonesia and their seeming domination of many aspects of economic activity

In the early years of the New Order, Bruce Glassburner wrote

> It is the Chinese who pose the most difficult problem because of their vastly disproportionate share of economic power. .The indigenous majority regard the power of the Chinese with suspicion, fear and hostility The indigenous peoples typically regard the Chinese with derision for their devotion to trade, moneylending, banking, and manufacturing, while both resenting and envying the wealth and power which they enjoy Unfortunately, for the economic policymakers in the government, this dominance of Chinese entrepreneurship presents a major complication Policies which attempt to revitalize the private sector benefit the Chinese ethnic group relatively more than the indigenous majority, so far as direct effects are concerned Attempts to build an indigenous entrepreneur group through subsidy and protection have not been notably successful (Glassburner, 1971, pp 181–82)

In 1994 Schwarz...could affirm that the problem was influencing policymaking

> Indonesia's small, ethnic-Chinese business community dominates the private sector Many leading *pribumi* [indigenous Indonesian] businessmen concluded that the technocrats' deregulation measures [of the 1980s and early 1990s] were specifically aimed at helping the ethnic-Chinese increase their dominance of the business world The fact that many of these same *pribumi* businessmen also benefited from the deregulations didn't blunt their resentment [pp 80-81]

How did this important economic role of the Chinese come about? Glassburner (1971, p 9) attributes it to the legacy of the Dutch colonial regime which seems to have encouraged a "special economic and social position of the Chinese" [In addition,] the extensive system of Chinese schools was much more developed than those for Indonesian *pribumi* children

When the Dutch left Indonesia, the Chinese were the strongest economic force left However, they did not have political or military power in the new independent Indonesian state and were faced with building up new relationships. The Chinese have been successful since that time in joining with *pribumi* businessmen in economic activities, including links with politicians, bureaucrats, and the military In the last two decades, a number of Chinese businessmen have joined forces with President Soeharto's emerging family interests This collaboration allowed the Chinese to get around the discriminatory practices against them but, on the other hand, also provided the business skills and experience of the ethnic Chinese to a venture Foreign investors often preferred working with Chinese businessmen in Indonesia "because they were better equipped in terms of business experience, capital and technical know-how." Chinese firms have maintained close connections with Singapore and Hong Kong which have opened up opportunities for credit and trade and given them a distinct comparative advantage

The ethnic Chinese, originally mainly in commercial, service, financial, and small industrial sectors began to become more involved in larger manufacturing and industrial

The World Bank observed in 1998 during the Indonesian crisis, "No country in recent history has ever suffered such a dramatic reversal of fortune"

Box **8.1** **(continued)**

activities However, many Chinese have remained in small-scale operations Soeharto remained close to powerful ethnic Chinese businessmen and involved them in most major investments with his family, friends and close colleagues

Note Cole and Slade's account was published in 1996 During 1997 and 1998 many of the protests and riots that led to Soeharto's downfall targeted ethnic Chinese, who were widely seen as controlling the nation's economy under Soeharto's protection and at the expense of indigenous Indonesians (pribumi)
Source Cole and Slade 1996, pp 322–27

In Javanese culture, power is believed to exist as an entity independent of its users. The ruler has all the power—but it can move to another holder

> Indonesia is in deep crisis. A country that achieved decades of rapid growth, stability, and poverty reduction, is now near economic collapse. Within the space of one year Indonesia has seen its currency fall in value by 80 percent, inflation soar to over 50 percent, the economy swing from rapid growth to even more rapid contraction, unemployment climb rapidly, and the stock exchange lose much of its value. Foreign creditors have withdrawn, investors have retreated. Capital and entrepreneurs have fled. Long standing defects in governance, earlier camouflaged by rapid growth, have now been unmasked as fatal flaws...No country in recent history, let alone one the size of Indonesia, has ever suffered such a dramatic reversal of fortune.
>
> —World Bank 1998b, p.1

The World Bank was not alone in not anticipating the crisis.

> [A] study by Kaufmann, Mehrez, and Schmukler (1998) looked at various indicators of market expectations based on the Global Competitiveness Survey (GCS), McGraw-Hill Global Risk Service, and Moody's and Standard and Poor's (S&P) ratings. Only businessmen and local investors seem to have foreseen the crisis in Thailand and Korea, and to a lesser degree in Malaysia. No one predicted the crisis in Indonesia.
>
> —World Bank 1998a, p. 43

The reasons that the crisis was not anticipated, and the multiple warning signals that were not sufficiently heeded, are discussed later in the chapter.

The exceptional achievements—and extraordinary regressions—that occurred during Soeharto's 32-year presidency are best viewed in the complex context in which they developed. Along with lessons from the wayang, two concepts

are important for understanding Indonesia generally and the Soeharto era in particular: the Javanese concept of power, and Pancasila, the guiding principles of the Indonesian government.

The Javanese concept of power

Soeharto is Javanese, as was Sukarno and as are about 45 percent of Indonesians. The Javanese concept of power is central to understanding Soeharto's presidency. Benedict Anderson's 1990 [1972] seminal work, "The Idea of Power in Javanese Culture," analyzes the differences between Western and Javanese concepts of power. In Javanese culture power is seen as a concrete entity that exists independent of its users. The total amount of power remains fixed, though its distribution may vary. "Power simply exists, and is not the product of organization, wealth, weapons or anything else—indeed [it] precedes all of these and makes them what they are...Since all power derives from a single homogeneous source, power itself antecedes questions of good and evil...Power is neither legitimate or illegitimate. Power is" (Anderson 1990 [1972], pp. 22–23).

As Schwarz (1994, p. 45) says, "The Javanese ruler does not have some of the power, he has all of it. Power is a zero-sum game: to get it, you have to take it from someone else. There is no sense of broadening your scope of power by seeking a mandate from your subjects."

Soeharto saw the power he took from Sukarno as emanating from God, not from the Indonesian people.[20] In this concept of power there is no scope for power sharing or for independence in the judiciary, legislature, political parties, or media. Yet the traditional Javanese concept of power is not necessarily believed in by the many Indonesians outside Java or, in the modern era, by many Javanese.

Pancasila, the state ideology, is so broad that it can appeal to highly diverse groups. It also enables a powerful president to justify virtually any decision

Pancasila, the guiding principles of Indonesian government

Pancasila—belief in one supreme being, Indonesian unity, humanitarianism, democracy by representative consensus, and social justice—is a state ideology of great flexibility that can be (and has been) pulled, pushed, and stretched to cover just about any situation. Accordingly, and in contrast to the Javanese concept of power, there has been a wide gap between form and practice in Pancasila.

> In reality Indonesia is far from the ideal of Pancasila democracy. Not only is it not democratic in the Western liberal sense, it is not democratic in the Pancasila democracy sense either. The imperative of "consensus at all costs" leaves Indonesians with little scope to disagree with official policy...The interesting thing about Indonesia's Pancasila democracy is that it includes many of the features of democratisation—secret balloting, universal adult suffrage, regular elections—but relatively few of the individual and group freedoms on the liberalisation agenda. It has, in other words, the form of (Western) democracy but not the content.
>
> —Schwarz 1994, pp. 292, 294

However, Soeharto strongly promoted acceptance of Pancasila principles, although not necessarily their implementation. The general principles of Pancasila incorporate three important characteristics. They are so universal that they are widely agreed on and cannot easily be openly opposed. As the national ideology, they provide protection against specific ideologies or religious values that various groups advocate for adoption by the state. And their existence has allowed the government to control those it declared to be following anti-Pancasila practices.

An example of the second characteristic is that Soeharto, invoking the Pancasila state ideology, was able to hold off militant Muslim minorities advocating that Indonesia become an Islamic state, as well as those who argued for exceptions for Muslims under Pancasila ideology. An example of the third is that under Soeharto's rule and the Pancasila doctrine of tolerance, ethnic and religious conflicts were prevented where possible and controlled when they occurred. Negative examples of the third characteristic were common. Interference with political parties, "mysterious killings" of alleged criminals without trial,[21] control of the press, banning of books and plays, and the like were typically justified as protecting the society from anti-Pancasila elements.

Real annual income for the average Indonesian was nearly four times higher in 1996 than it was in 1970

The economy, 1966–96

The New Order government is known for its rapid economic growth and development. During three decades of high growth the economy became diversified, as the country moved away from dependency on oil and developed an export-oriented manufacturing base. Major achievements in poverty reduction, agriculture, population control, and education brought international recognition. Indonesia's population grew from 118 million in 1970 to 197 million in 1996. However, "real annual income for the average Indonesian was nearly *four times* higher in 1996 than it was in 1970" (Radelet 1999, p. 1). Between 1986 and 1996 real GDP grew by an average of 7.9 percent a year, increasing per capita incomes by nearly 80 percent. In 1996 per capita income reached $1,073 (in constant 1995 U.S. dollars; table 8.1). The focus here is on the growth of the economy from 1966–96; the crisis that began in 1997 and current rehabilitation efforts are discussed later in the chapter and in chapter 15.

Macroeconomic management and the technocrats. In 1966, as Soeharto's New Order government took power, the economy was paralyzed. The first priorities were to form a team of economic managers and to begin a process of economic restructuring. The new government introduced stabilization and rehabilitation policies, paying immediate attention to reducing inflation. Emphasis on development was next: increasing food production (especially rice), developing infrastructure, strengthening the mining and manufacturing sectors, and encouraging foreign investment and export expansion (see Booth and McCawley 1981b).

These policies were the work of a team of economics ministers that initially had five members, though it later expanded.[22] The team is known informally as the "Berkeley mafia" (because many of its members were educated at

Table **8.1** **Economic indicators for Indonesia, 1996–2000**

Indicator	1996	1997	1998	1999	2000
Exchange rate					
(rupiah/U.S. dollar, end of period)[a]	2,383	4,650	8,025	7,085[b]	9,595
GDP growth					
(percent, at constant 1993 growth rates)	7 8	4 7	−13 0	0 3[c]	5 2[c]
Annual inflation					
(percent, measured using consumer prices)[a]	8 0	6.2	53 4	20 5	3 7
GNP per capita					
(constant 1995 U S dollars)	1,073	1,099	903	906	n a

n a Not available
a See appendix 1 for more details
b The small discrepancy with tables 2 1 and 2 3 in volume 1 for the 1999 exchange rate occurs because more recent IMF data were used in this volume
c Preliminary data from Biro Pusat Statistik (Indonesian Bureau of Statistics)
Source IMF, *International Financial Statistics,* March 2001, World Bank data, Biro Pusat Statistik data

Macroeconomic policy in the 1980s emphasized nonoil exports. Manufactured goods rose from 2 percent of export value in 1980 to 53 percent in 1993

the University of California at Berkeley). Throughout, Professor Widjojo Nitisastro has been the leader of the technocrats. Professor Ali Wardhana, Indonesia's longest-serving minister of finance, has served (among many other roles) as the leader in the development of Indonesia's financial system. This group of technocrats has guided Indonesia's economy for more than 30 years. But as discussed later in this chapter, their influence had waned by the mid-1990s, when President Soeharto had virtually stopped listening to them. In the post-Soeharto era the senior technocrats have played important, though generally less public, roles. But despite their efforts, recent governments have allowed political pressures to interfere with badly needed economic and financial reforms.

The economic team first won the confidence of the country with its stabilization of the economy after the havoc of the mid-1960s. They won further respect, both at home and abroad, by effectively managing the economy through a series of oil booms and busts during the 1970s and 1980s, and by implementing far-reaching reforms in fiscal policy, foreign trade, and the financial sector beginning in the early 1980s.

During the 1970s Indonesia's economy was heavily based on its rich natural resources, especially oil and gas, copper, gold, tin, rubber, and palm oil. Export revenues financed widespread infrastructure—roads, irrigation systems, ports, and schools—as well as massive health, family planning and education programs. "While there was clearly extensive waste and abuse, Indonesia managed its resources far better than most resource-abundant developing economies in the 1970s and 1980s" (Radelet 1999, p. 2). Agricultural output grew steadily beginning in the 1970s, supported by the government's investments in rural development, green revolution technology, and the relatively stable prices offered to rice farmers (see chapters 9 and 11).

In the early 1980s the government initiated a series of major financial reforms to deregulate the financial sector and promote a competitive economy

Three elements of macroeconomic management instituted by the New Order government in its early days guided the economy for decades.[23] First, the government required a balanced budget every year. This permitted the financial system to channel funds primarily to state and private enterprises that emphasized direct productive activities. It also prevented banks and the public from being forced to fund government deficits. While foreign borrowing was used to balance resources and expenditures, the balanced budget rule enforced a budgetary discipline that protected the economy from deficit spending and inflationary excess. Although there were some off-budget expenditures, the balanced budget rule worked well for years. But by the latter part of the Soeharto era, the rule may have helped hide growing off-budget expenditures and increasing lack of transparency.

Second, in what was considered a radical move at the time, the rupiah was made fully convertible in 1970. The open capital account placed a second external constraint on monetary policy; it compelled the government to take rapid corrective action when external or internal developments threatened the balance of payments. "The open capital account...ensures that any monetary mismanagement will show up almost immediately in an outflow of foreign exchange. Thus convertibility imposed the discipline needed to deal with monetary pressures whenever these arose" (Wardhana 1998a, p. 128). Over time the government adopted an exchange rate mechanism that aimed at maintaining the real international value of the rupiah by adjusting the rate to reflect movements in the domestic consumer price index relative to the international prices of its main trading partners.

But by the mid-1990s a highly leveraged, risk-taking corporate sector and foreign investors eager for Indonesian equity and debt could make use of the open capital account in ways that led to a substantial increase in private foreign debt (Kenward 1999, p. 80). As discussed later, much of this debt was unhedged and contributed significantly to the crisis in 1997.

Third, the government instituted a relatively conservative borrowing policy that lasted through the 1980s. For example, unlike many other oil-exporting countries, Indonesia had a debt service ratio of only 15 percent in 1984, the year before an international collapse in oil prices (Wardhana 1998a). Thus effects on the Indonesian economy of the falling oil prices of 1985–86 could be cushioned by expanding international debt.

But in the 1990s borrowing increased. A major source of the problem was the Soeharto family and friends, who used state banks to leverage funds from foreign banks for large, often nonviable, investment projects. By 1993 Indonesia was ranked by the World Bank as the fourth largest debtor among developing countries.

Another important aspect of macroeconomic policy in the 1980s was the emphasis placed on the rapid increase of nonoil exports. In 1984 oil and gas revenues accounted for nearly three-quarters of Indonesia's dollar earnings from exports, but by 1989 manufactured exports accounted for nearly a third of export earnings, while oil and gas contributed less than 40 percent of the total

(Wardhana 1998a). Major exports include plywood, textiles, garments, shoes, toys, and furniture.[24] Its large labor supply and relatively low wages give Indonesia a comparative advantage in labor-intensive products. In addition, most export industries are labor-intensive by government policy (although regulations and corruption have sometimes hindered implementation of this policy). Manufactured exports grew by nearly 30 percent a year between 1986 and 1996. As a share of the value of exports, manufactured goods rose from 2 percent in 1980 to 53 percent in 1993 (World Bank 1997, *World Development Report 1997*).

And the government increased efforts to deregulate the trade sector, sharply reducing multiple trade restrictions. It reduced and eventually removed numerous restrictions on foreign direct investment. And it adopted "a modern, simplified tax system that removed low-income wage earners from the tax net, eliminated, at least in principle, nearly all exemptions, and introduced the value added tax" (Stern 2000, p. 2).

The newly deregulated financial system was to operate within the prudential regulations. But this proved difficult to implement, often impossible

Financial reforms. In the early 1980s the government initiated a series of financial reforms to deregulate the financial sector and promote a competitive economy (see Wardhana 1994b, 1998a; Hanna 1994; McLeod 1994; Nasution 1994; Binhadi 1995; Cole and Slade 1996; and Stern 2000, forthcoming). Some of the most important of the reforms are summarized below.

The first reform, announced in June 1983, focused on deregulating credit. Credit ceilings were abolished. Liquidity credits from Bank Indonesia, the central bank, were reduced except for priority sectors. And banks were permitted to set their own interest rates on most loans and deposits. Among its other purposes, the June 1983 reform was crucial for the development of BRI's microbanking system.

In December 1987 a package of deregulation measures, known as PAKDES I,[25] was issued to activate and reform the stock market. Then in October 1988 a broad package of financial reforms, known as PAKTO 88,[26] was announced; one of its most important aspects was its emphasis on competition, especially within the banking sector. PAKTO 88 opened new opportunities for financial activity in rural areas. Restrictions on the operations of foreign banks were reduced. Requirements for opening new domestic banks were substantially eased. Banks wholly owned by Indonesian nationals were now permitted to open branches anywhere in Indonesia. And, in general, banks were given more autonomy and encouraged to expand their activities.

Included among the provisions were a relaxation of requirements for opening branch offices and encouragements for banks to introduce new products. Reserve requirements were lowered from an average of 11 percent to a uniform 2 percent on all deposits, reducing bank costs of intermediation. PAKTO 88 had a deep effect on the banking system. "The short-run impact of the PAKTO reforms was basically favorable. They had probably contributed to accelerating overall economic growth, without adversely affecting relative price stability and balance of payments equilibrium. In addition the banking system

became more competitive and customer-oriented and was rapidly expanding both its facilities and services" (Cole and Slade 1996, p. 115). But in the longer term, the proliferation of banks that ensued, combined with the growing corruption of wealthy and politically influential families and with inherent weaknesses in the financial system, contributed to the financial crisis of the late 1990s (see chapter 15).

Additional reforms followed, focusing on private securities markets, insurance, and promotion of instruments such as venture capital, leasing, and credit cards. PAKJAN,[27] a January 1990 reform package, ended or cut back many of the subsidized credit programs that were administered by Bank Indonesia and channeled through state banks. Most of these liquidity credit arrangements were abolished except for those supporting food self-sufficiency and cooperative and small-scale enterprise development. In a political tradeoff, however, PAKJAN also directed all domestic banks to allocate at least 20 percent of their loan portfolios to loans below 200 million rupiah (about $111,000 at that time).[28]

In 1970 about 60 percent of Indonesians lived below the poverty line. In 1996 the figure was 11 percent

But the growth of the financial system caused increasing concern about the need for better prudential regulation. In December 1990 the government provided for the privatization of the stock exchange, announced new regulations on loan loss provisioning, and required banks to adopt (over several years) the capital adequacy standards of the Basel Agreement. In the years that followed, the government's main priority for the financial system was to ensure that the newly deregulated system operated within appropriate prudential regulations. This effort included new measures of bank soundness and new laws on banking, insurance, and pensions that were approved by parliament in the 1992 Banking Law. Emphasis was also placed on restructuring bank management and operations so that banks could comply with the new regulations.

Underlying the multiple, multiyear financial reforms was the overall goal of moving from the previous pattern of direct government control of the financial system to oversight of the system through prudential regulation. As discussed later in the chapter and in chapter 15, however, effective implementation of the prudential regulations proved extremely difficult, often impossible, in the Indonesian political context of the 1990s.

Poverty reduction and human resource development. Indonesia's rapid and sustained growth in these years made possible massive reduction in poverty, a remarkable achievement. In 1970 about 60 percent of Indonesians lived below the poverty line. By 1976 the portion of the population below the poverty line had declined to 40 percent (or nearly 54.2 million people)—and by 1996, to 11 percent (or 22.5 million people; Biro Pusat Statistik [Indonesian Bureau of Statistics] 1996, p. 570).

Even during periods of financial difficulties, fiscal allocations and development expenditures for programs directly benefiting the poor were usually protected. In addition, industrial development was carried out in a policy environment that emphasized the creation and expansion of labor-intensive industries. The government was strongly committed to antipoverty programs and

made special efforts to identify and help the poorest villages and the poorest people (see Haryono Suyono, "Indonesian Family Empowerment to Alleviate Poverty," *Indonesia Times,* 6 September 1997, p.7). As noted, average income in the poorest quintile of the population grew faster between 1976 and 1990 than average income for the entire population. And real annual income for the average Indonesian was four times as high in 1996 than it had been in 1970.

Indonesia also invested heavily in rural development. As discussed, a substantial share of the oil wealth of the 1970s was invested in economic and social infrastructure—much of it in rural areas, where more than 80 percent of the population lived at that time. Improvements in agriculture enabled Indonesia to become self-sufficient in rice and, despite a growing population, allowed per capita food consumption to grow, resulting in widespread improvements in nutrition and health.

A substantial share of the 1970s oil wealth was invested in rural infrastructure, agriculture, education, and health and family planning

Family planning and primary education were made high priorities, and nationwide programs were effectively implemented beginning in the 1970s. Average annual population growth fell from 2.3 percent a year during 1970-80 to 1.7 percent during 1990-97. The total fertility rate decreased from 4.3 in 1980 to 2.6 in 1996,[29] while infant mortality (per 1,000 live births) plummeted from 90 to 49 during the same period. Life expectancy at birth rose from 41 years in 1960 to 53 in 1980; by 1996, life expectancy was 63 years for men and 67 for women (World Bank 1982, 1999).

Education also expanded rapidly. Ninety-seven percent of the relevant age group was in primary school in 1996 (compared with 71 percent in 1960 and 86 percent in 1977). And in 1996, 88 percent of both males and females reached grade 5. Forty-two percent of the secondary school age cohort was enrolled in school that year (compared with 6 percent in 1960 and 21 percent in 1977). By 1997 both females and males were expected to receive an average of 10 years of formal schooling (World Bank, 1980, 2000, 2001). In the 1990s increasing priority was placed on tertiary education as well.

Overall, the New Order government's macroeconomic policies and wide-ranging reforms achieved much over three decades, including substantial growth in GDP and per capita GNP, single-digit annual inflation from 1985–97, large increases in food supplies, dramatic nationwide successes in family planning and primary education, and a sharp reduction in poverty.

Indonesia in relation to other emerging economies. Among the 15 lowest of the world's lower-middle-income economies in 1995, Indonesia (with $980) ranked eighth in GNP per capita.[30] By far the most populated of the countries, in 1985–95 Indonesia ranked first among the 15 in average per capita GNP growth (6.0 percent a year, compared with the median of 1.0 percent). In 1995 Indonesia had one of the highest average GNP growth rates (7.2 percent, compared with the median of 2.3 percent). The share of income held by the poorest quintile of the population was highest in Indonesia and Egypt, both with 8.7 percent in 1995. Indonesia was at or near the median for all other economic and social indicators (World Bank 1997f, 1997g).

Because of Indonesia's large population and its location in Asia, it is also useful to compare indicators for the eight Asian countries with low-income and lower-middle-income economies that in 1995 had populations of more than 50 million—in descending order of size of population: China, India, Indonesia, Pakistan, Bangladesh, Vietnam, the Philippines, and Thailand. Indonesia, the third most populous but least densely populated of the eight countries, was above or near the median on all indicators. For the period 1985–95, Indonesia ranked third in average annual GNP per capita growth (after Thailand and China). It was third in 1995 GNP per capita (after Thailand and the Philippines). Among the eight countries, Indonesia was second highest in the share of income held by the poorest quintile in 1995 (8.7 percent), after Bangladesh (9.4 percent; World Bank 1997f, 1997g).

The economics team was known for both vision and caution—and for decades of stable macroeconomic management that enabled economic growth with equity

Economic growth with equity. Indonesia made extraordinary progress in economic and social development between 1967 and 1996. Under the New Order government, emphasis was placed simultaneously on raising economic growth and on reducing poverty; on improving agriculture and on increasing industry; on encouraging manufactured exports that are highly labor-intensive; on stimulating both public and private sectors; and on developing the country's natural and human resources.

The economics ministers worked as a team, drawing on a combination of caution and vision and a remarkable ability to learn from their mistakes, to implement tough policies, and to adapt to changing circumstances. Their stable and foresighted economic management was crucial for the country's development.

Since independence, however, Indonesia has been a country with a strong ruler and a weak state. As the economy grew it was also being undermined by political forces discussed below. This intricate disconnect could not continue indefinitely. The seeds of the recent crisis had long been germinating in Indonesian politics, even as the economy expanded year after year.

The government, the military, and politics during the Soeharto period

The Indonesian government operates under the original 1945 constitution which established a strong presidential form of government and a centralized administrative structure, and mandated the principle of government by consensus. The cornerstone of the preamble to the constitution is the Pancasila. The discussion below refers to the Soeharto period. Events that occurred after his resignation in May 1998 are discussed later in this chapter and in chapter 15.

The Indonesian military operates as both a military and a sociopolitical force under the doctrine of *dwifungsi,* or dual function—an outgrowth of the "middle way" that developed under Sukarno's "Guided Democracy."[31] An underlying principle of the dual function concept is that national unity and political stability are preconditions for economic growth. The role of the military, broadly conceived, has been to protect political stability and actively to prevent its deterioration—an umbrella that has covered a wide range of activities.

Under Soeharto, politics and the military were closely linked. A crucial aspect of Soeharto's rule was his role as general, commander-in-chief, and patron of the military. Another was his role in Golkar (*golongan karya*, or functional groups), the political arm of his regime. Golkar has been, in practice, controlled by the military—but both were controlled by Soeharto.

The government. Under the constitution, the president, who serves as head of state and government, and the vice president are elected to five-year terms by the People's Consultative Assembly (Majelis Permusyawaratan Rakyat, or MPR). The MPR, which must meet at least once every five years, is also responsible for reviewing and approving the government's broad policy goals.[32] During the Soeharto era, MPR decisions were consistently made by (Soeharto-orchestrated) "consensus."

The military has a dual function: to protect political stability and to prevent its deterioration—an umbrella that has covered a wide range of activities

Until the post-Soeharto reforms discussed later in this chapter, the 1,000-member MPR consisted of the 500 members of the legislature and 500 representatives from the regions, from political organizations, and members of Golkar from the armed forces. The 500-member legislative assembly, the Dewan Perwakilan Rakyat (DPR), consisted of 425 elected members and 75 members appointed by the president.

The Indonesian judicial system administers three kinds of civil law: Shari'a, or Islamic law, for Muslims; a civil law based on Roman law for Europeans; and a collection of statutes, not yet codified, for other Asians such as ethnic Chinese and Indians. The same criminal law applies to all.

As discussed below, however, a striking feature of Indonesian governance has been the wide gap between form and practice. Illustrating the Javanese concept of power, both the legislature and the judiciary were, in practice, under the direct control of President Soeharto, as was the MPR.

An important, but often overlooked, aspect of governance in the Soeharto period was the substantially increased role Indonesia came to play in regional and international peacekeeping and cooperation. Under Soeharto, Indonesia became a strongly stabilizing force in Southeast Asia. During the more than 30 years of New Order government the country fought no international wars[33]—more than can be said for the others among the world's four most populous nations (China, India, and the United States). Moreover, Indonesia has played an important role in the Association of Southeast Asian Nations (ASEAN), in the development of the worldwide Non-Aligned Movement (NAM), and more recently in the Asia-Pacific Economic Cooperation (APEC) forum.

The military. Under the doctrine of dwifungsi, or dual function, the armed forces (Angkatan Bersenjata Republik Indonesia, or Abri) play a major role at every level of society. From 1983 to 1998 between one-quarter and one-third of the seats in Soeharto's cabinets came from the military. Many village, subdistrict (*kecamatan*), and district (*kabupaten*) heads were also from the military, as were many of the provincial governors who are appointed by the central government.

Soeharto came from the army. He was born in 1921, the son of a village official in a poor village in Central Java. His parents, who divorced soon after he was born, both remarried. While growing up Soeharto moved among various extended family households. He attended junior high school but had to leave because his family could not afford the expense. But he later attended a school in Yogyakarta run by Muhammadiyah, a large Islamic organization, finishing his studies when he was 18. Soeharto enlisted in the Royal Netherlands Indies Army, but shortly afterwards the Dutch surrendered to the Japanese. He then enlisted in the Japanese-sponsored army of Indonesia; when the Japanese left Indonesia, he became an officer in the Indonesian revolutionary army. After independence Soeharto made his way up in the army and was eventually appointed head of the army's Strategic Reserve Command—the base from which he assumed control of the army on 1 October 1965, following the attempted coup. As president, Soeharto strongly supported the armed forces.

Illustrating the Javanese concept of power, Soeharto controlled the legislature, judiciary, People's Consultative Assembly, military, media, and opposition parties

> Soeharto came to power on the army's coattails and the repressive might of the army has been the single most important factor in undermining potential opponents throughout his tenure. The army has forcefully suppressed any number of demonstrations...But open shows of force are not really the New Order's style. Soeharto's—and the armed force's—objective is social control, not military control...The military has tried to prevent unwanted political activity rather than rely on repression once that activity has appeared.
>
> A second important feature of Soeharto's rule is his frequent and shrewd use of patronage to buy off critics particularly from within Abri...As the New Order progressed so did the art of patronage. Revenues collected from Soeharto's close business associates in sectors such as oil, construction, and agro-business—often washed through non-profit foundations—have enabled Soeharto to expand the distribution of patronage to potential critics in political, religious, and social circles.
>
> —Schwarz 1994, pp. 39–41

During the first half of the New Order government the army and Soeharto were practically synonymous (Schwarz 1994, p. 282). From the early 1980s on, however, the relationship grew more distant—especially in the 1990s with the escalating corruption of the Soeharto family and the rise of huge private wealth in corporate conglomerates. As the conglomerates grew in the 1990s, the influence of the armed forces (and the patronage it received) declined somewhat. Nevertheless, Soeharto maintained control over the military, both through patronage and by continually shifting the appointments of its officers.

The Indonesian military is not a monolith; its members hold a range of views. Some supported the preventive approach to political disruption as imple-

mented, while others thought Soeharto took prevention too far. By the mid-1990s many members of the armed forces said they thought it was time for Soeharto to leave office (Schwarz 1994, ch. 10). Some, especially retired generals, played an important role during the 1990s in criticizing Soeharto's excesses and his growing unwillingness to listen to others. As retired general Sayidiman Suryohadiproyo put it, "Soeharto no longer listens to anyone, not Abri nor anyone else. This is the danger we are facing" (quoted in Schwarz 1994, p. 284).

The politics. During most of the Soeharto era Indonesia had a two-party political system—but both were opposition parties. What they were opposing was technically not a party but a government-sponsored coalition of groups, Golkar.[34] Starting with an army-organized association of anticommunist functional groups known as Golkar, Soeharto announced in 1967 that Golkar would become his parliamentary vehicle. The original groups soon lost their influence within the organization as Golkar came to be controlled by the military, with active support from the civil service and its civilian members. As Schwarz (1994, p. 31) comments, "The mass-based groups present at Golkar's birth faded into insignificance, just as the masses disappeared from the political scene more generally."

Indonesia was micromanaged through a mixture of top-down control, largesse, religious and ethnic tolerance, military repression, and economic development

The military-backed Golkar quickly became the dominant political organization in the country, also controlling the opposition parties.[35] Semantics aside, Indonesia became essentially a one-party state. But the political power of Golkar was not held by the organization or by the army—it was held by Soeharto.[36] From 1973 until after Soeharto's resignation 25 years later, only two other political parties were permitted. The United Development Party (Partai Persatuan Pembangunan, or PPP) was formed in 1973 by the merger of four Islamic parties, and the Indonesian Democratic Party (Partai Demokrasi Indonesia, or PDI) was formed the same year from five Christian and nationalist minority parties. Several political groups (not parties) were also officially recognized.

However, the political opposition was carefully controlled by Soeharto and Golkar. Until Soeharto's resignation the two opposition parties continued to serve largely as actors in the stage-managed general elections and MPR's presidential elections. Government officers and the military were required to vote for Golkar. Civilian voters were coerced, threatened, and paid to vote for Golkar—an approach that routinely produced the large majorities Golkar predicted beforehand.

The MPR, most of whose members were appointed or approved by Soeharto, met every five years. Soeharto was elected seven times by unanimous acclamation, and his policies were routinely endorsed. As Juwono Sudarsono, minister of education in President Habibie's cabinet and minister of defense in President Abdurrahman Wahid's cabinet,[37] put it, "Every five years 1,000 people met in a congress and there was not one who was brave enough to stand up and say, 'Enough'" (quoted in *The New York Times,* 13 June 1999, p. 3).

Under Soeharto a large, complex, and pluralistic society was micromanaged through a carefully orchestrated mixture of top-down control, largesse, religious and ethnic tolerance, military repression, and economic development.

> Soeharto stood at the apex of the pyramid; his appointees sat in each of the key executive, legislative, and judicial branches of government. He dominated the cabinet and the state bureaucracy. He dominated the armed forces...He dominated the People's Consultative Assembly...He was the central figure in Golkar, the army-backed political movement, and had crippled the effectiveness of the two "opposition" political parties. He dominated the judicial branch, weak as it was, and had stacked its key positions with long-time associates, all of them generals. He appointed the men who sat in the Supreme Advisory Council...His writ extended into every department and into every state-run corporation; it reached down, if he chose, to every village. He wielded enormous power both because the 1945 Constitution confers enormous power on the president and because he was the dominant influence over the army, itself the dominant force in society. In short, he had established himself as the paramount figure in a society in which deference to authority is deeply rooted.
>
> —Jenkins 1984, pp. 13–14

The Soehartos were involved in corruption "in every form of state action that had an economic value." Indonesia was known internationally as a kleptocracy

It has also been argued, however, that the authoritarian nature of Soeharto's political regime made possible many of the policies that promoted the country's economic growth and development.

> The [authoritarian] nature of the regime made possible macroeconomic policies marked by moderation and continuity, encouraging savings and investment. It also permitted policies that favored long-term development in regard to oil, agriculture, and industry, which, over time, and on balance, were beneficial economically and socially.
>
> —Bresnan 1993, pp. 292–93

But the strong leader–weak state syndrome required that the country's underdeveloped judicial, legislative, political, and financial systems stay that way. And no implementable process for succession to the presidency could be developed while Soeharto remained president. "Mr. Suharto systematically neutered the most promising of his subordinates" (Seth Mydans in *The New York Times,* 6 May 2001, p.3).[38]

As Soeharto intensified his control, and as corruption mounted, cracks began to appear and then widen in the country's support for its president. This took place increasingly in the military, in religious and ethnic groups, and among

members of the media, students, intellectual leaders, civilian elites, and others. When the East Asian crisis hit Indonesia in 1997—sharply raising unemployment, prices, and poverty—the growing dissatisfaction spread to ordinary people as well.

Corruption and the growth of the conglomerates

Corruption was an intrinsic part of Soeharto's rule. An outgrowth of the authoritarian nature of the regime and its lack of transparency and accountability, corruption took both public and private forms—though the distinction was often blurred. There was the vast private wealth amassed by the Soeharto family and their friends—through monopolies, subsidies, tax and credit benefits, and the like—at the expense of the state, of other firms, and of the Indonesian people. The first family had major interests in virtually every sector of the economy: oil and gas, shipping, banks, mining, lumber, agroindustry, automobiles, toll roads, communications, and others. There was also massive funding for Golkar and its activities. These funds provided the means for the extensive patronage that kept Soeharto in power.

The 1990s saw the rapid growth of huge corporate conglomerates owned by the Soehartos and their friends and protected by the Soeharto regime

The rise of the conglomerates. The 1980s and 1990s saw rapid growth of huge corporate conglomerates owned by the Soehartos and their friends, and protected by the Soeharto regime. Closely related was the issue of the ethnic Chinese in the conglomerates. In return for their business skills, financial experience, and investments in the first family's ventures, some ethnic Chinese were given the monopolies, subsidies, licenses, and other favors that enabled them to compete unfairly with most indigenous firms (see box 8.1).

The scale of corruption was massive, pervasive, and continually escalating (Bresnan 1993; Schwarz 1994; Cole and Slade 1996; *The Economist,* 30 March 1996, pp. 41–42; *The New York Times,* 31 October 1997, p. C-7). "The [Soeharto] regime was immersed in corrupt practices in the granting of licenses, lending of funds, letting of contracts, and every other form of state action that had an economic value" (Bresnan 1993, p. 292).

By the 1990s the soaring growth in the private wealth of the few favored families—combined with decades of inaction in domestic political development—raised, both domestically and internationally, increasing concerns about the country's economic and political stability. Because the domestic press and other media were controlled by the government, they were not permitted to report or comment directly on high-level corruption or on many aspects of domestic politics. Some members of the media, however, became masters at writing or speaking between the lines and expressing opinions through analogies. Some wayang puppetmasters used the foibles and heroics of ancient kings, queens, courtiers, warriors, and commoners to provide indirect commentary on the current scene. It was difficult for the government to object to a performance of Rama teaching the principles of rule to Wibisana or other traditional wayang stories—and the messages being sent reached widespread popular audiences.

The international media, however, increased their forthright criticisms of the Soeharto family and the conglomerates during the late 1980s and the 1990s. Articles critical of the Soeharto family and rule were banned in Indonesia during the 1970s and 1980s, but the ban became difficult to enforce during the 1990s (because there was so much criticism), and censorship relaxed somewhat. By 1997 there was hardly an international newspaper or political or economic periodical that did not report high-level corruption in Indonesia. The international press referred to Soeharto's Indonesia as a kleptocracy (*The Boston Globe,* 2 June 1999, p. 26).

Soeharto was elected seven times by acclamation. "Every five years 1,000 people met in a congress and not one was brave enough to stand up and say 'Enough'"

The technocrats and the conglomerates. Struggles between the technocrats and the conglomerates occurred on numerous occasions, with Soeharto balancing one against the other. The role of the technocrats in attempting to contain the conglomerates was widely recognized. As Bresnan (1993, p. 282) put it, "They [the technocrats] provided Soeharto with two essential ingredients to economic policy: the confidence of the international financial community, and policies and programs that produced demonstrable results."

But powerful political and economic interests repeatedly sought to gain control of financial institutions and resources. One of the most important contributions of the technocrats in the Indonesian government, often with support from international financial institutions, was to contain these special interests. The technocrats were particularly skillful in maintaining their basic principles and using these to frustrate repeated attempts to circumvent financial controls and manipulate the financial system (Cole and Slade 1996, p. 355).

While the technocrats tended to be able to get Soeharto's approval for their policies in times of economic difficulty, ironically their influence diminished during periods when the economy was strong and financial resources were available for distribution. The technocrats managed to contain the conglomerates for many years. But in the mid-1990s the conglomerates' influence on Soeharto surged, while that of the technocrats declined.

Indonesia on its 50th birthday, 1995

At the time of its 50th birthday in 1995, Indonesia had accomplished much in a relatively short time—and in a large and geographically diverse country with multiple languages, ethnic groups, religions, and cultural traditions. Sukarno had led the struggle for independence, unified the country, and put Indonesia on the world map. Until mid-1997 Soeharto presidency's produced strong economic growth, widespread development (including increased food production, education, health, and family planning), and a substantial decrease in poverty. The country's regional and international responsibilities had increased substantially, and Indonesia provided a stabilizing force in Southeast Asia.

Yet at the 50th birthday celebration there were severe underlying problems and deep fissures in the political economy. The corruption of the Soeharto family and their friends, the president's control over the legislative and judicial branches, the political process, and the media, as well as the concerns—both at home

and abroad—about presidential succession had led to increasing unease and mounting opposition to Soeharto. Indonesia had never seen a peaceful transition in leadership. Power-sharing was not its strength, and there was little preparation for a transition to a new president.

Whatever Indonesians as individuals might have thought about the Javanese concept of power, there was a growing view that, in any case, the Soeharto family was not behaving in a manner befitting a holder of power in Javanese culture. A 1990 play about a fictional king and his four children who accumulated enormous wealth was closed by police order on its 11th day of playing to standing-room audiences in Jakarta—because the government found it to be anti-Pancasila and a threat to security (Schwarz 1994, p. 232). The play, *Suksesi*, by Nano Riantiarno, ends with the following chorus:

> Don't show what can be obtained
> so that the people won't want it.
> The king always tries to keep his subjects
> empty in heart,
> full in stomach,
> weak in desire,
> but strong in bones.
> The king always tries to make sure
> that the people don't know
> and those who know
> don't dare,
> let alone act.
> And in consequence
> all will be orderly and stable,
> orderly and stable...[39]

Some puppetmasters used the wayang to provide indirect commentary on current events. It was difficult to object to Rama teaching the principles of rule

By the nation's 50th birthday in 1995, many in Indonesia thought that Soeharto's continuing rule would not be in the interests of the Indonesian people.

The Indonesian Crisis and the Resignation of President Soeharto

It was in this context that the Southeast Asian crisis that began in July 1997 hit Indonesia.[40] The Thai baht collapsed, the currencies of neighboring countries came under pressure, and a regional crisis with global ramifications developed rapidly. It soon extended well beyond Southeast Asia and became known as the East Asian crisis.

> Banks and corporations...borrow[ed] large amounts of international capital, much of it short-term, denominated in foreign currency, and unhedged. As time went on, this inflow of foreign capital tended to be used to finance poorer-quality

investments. Although private sector expenditure and financing decisions led to the crisis, it was made worse by governance issues, notably government involvement in the private sector and lack of transparency in corporate and fiscal accounting and the provision of financial and economic data.

Developments in the advanced economies, such as weak growth in Europe and Japan that left a shortage of attractive investment opportunities and kept interest rates low in those economies, also contributed to the buildup of the crisis. After the crisis erupted in Thailand with a series of speculative attacks on the baht, contagion spread rapidly to other economies in the region that seemed vulnerable to an erosion of competitiveness after the devaluation of the baht or were perceived by investors to have similar financial or macroeconomic problems.

—IMF 1999e, p.1

The Thai baht collapsed, the currencies of neighboring countries came under pressure, and a regional crisis with global ramifications developed

The Indonesian crisis—which turned out to be the most severe in the region—erupted shortly after the collapse of the Thai baht. The primary cause of the crisis in Indonesia was not the underlying economy. It was the closely linked weaknesses in governance and in the financial system.

The nature and extent of the crisis

The value of the Indonesian rupiah plunged from 2,450 rupiah to the U.S. dollar at the end of June 1997 to 14,900 rupiah at the end of June 1998 (see appendix 1 and table 8.1). Most of Indonesia's corporations became technically bankrupt. Banks failed. And the financial system collapsed. Unemployment increased, and inflation was 53.4 percent for 1998. Even with its strong economic base and long record of high economic growth, Indonesia could no longer attract foreign capital. GDP, which had grown on average by nearly 8 percent a year for a decade, grew by just 4.7 percent in 1997 and contracted by 13.0 percent in 1998.

In addition to the financial crisis, in 1997 Indonesia faced its worst drought in 50 years. The resulting food shortages, hoarding of food by merchants, and soaring food prices occurred at a time when many farmers' incomes had fallen sharply. A large portion of dwindling foreign reserves had to be used to import food, and food shortages continued into 1998. Riots over the high prices of food and other basic commodities broke out in various parts of the country, often targeting ethnic Chinese.

At the same time, there was a sharp decline in international oil prices. In addition, a major new environmental problem developed—one that was directly related to corruption issues. Huge forest fires, occurring during the drought in Sumatra and Kalimantan, resulted in massive haze that caused widespread air pollution, respiratory illness, ecological destruction, and economic hardship in Indonesia. These fires affected other parts of Southeast Asia as well, including

Brunei, Malaysia, Papua New Guinea, the Philippines, Singapore, and Thailand (see Seth Mydans, *The New York Times,* 26 October 1997, international section, p. 3). Many of these fires had been set to clear land for large palm oil and industrial pulpwood plantations.

Indonesia's coffee, palm oil, cocoa, and rubber crops were harmed by the fires and the smoke, while the reduced sunlight that resulted slowed the growth of fruits and vegetables and decreased yields of maize and rice in the affected areas. These fires also "burrowed deep into vast peat bogs and seams of coal where experts say they may continue to smoulder for years" (*The New York Times,* 26 October 1997, international section, p. 3). In 1998 and 1999 new fires were set in Sumatra and Kalimantan for the same purposes, again causing widespread devastation.

> Well-connected palm oil plantation owners and pulp-and-paper companies in Indonesia have continued clearing land by burning off vast tracts of jungle, seemingly immune to laws or punishment... Indeed, the palm-oil producers, who have set most of the fires, may be one of the few beneficiaries. They have cleared huge new areas for planting, and as the disaster has spread, palm-oil prices have risen sharply on the world market.
>
> —*New York Times International Section,* 28 August 1999, p. B2

The value of the rupiah plunged from 2,450 to the U.S. dollar in June 1997 to 14,900 in June 1998

Shortly after the crisis began in mid-1997, unemployment and prices rose sharply. During 1997 and 1998 the government took steps to head off anticipated reverses in poverty reduction. Public employment schemes were instituted. The government guaranteed deposits in Indonesian banks. Government-subsidized credit schemes for small loans were expanded (with predictable results).

An emergency $42.3 billion financial aid soft loan package for Indonesia was developed by the IMF, World Bank, Asian Development Bank, and several bilateral contributors. The January 1998 IMF-supported economic reform program contained measures designed to eliminate cartels and monopolies, to remove subsidies and special privileges from some of the gigantic government-backed projects controlled by the country's wealthiest families, and to increase transparency generally. But when the agreement was signed, there were widespread doubts throughout Indonesia about whether these measures could be implemented. Serious implementation problems and delays did occur, resulting in postponed IMF payments on a number of occasions.

Soeharto, becoming increasingly confrontational, strongly resisted reforms that would harm the business interests of his family and friends. But the IMF know little about the Indonesian economy and its institutions. This unfortunate combination exacerbated the already full-blown crisis in Indonesia.

Soeharto had served six consecutive five-year terms as president when, in March 1998, he was "elected" to a seventh term. But the crisis continued to worsen, and it was increasingly believed that power, which Soeharto had held for so long, had deserted him. When the IMF agreement was signed, a picture

of Soeharto and Michel Camdessus, managing director of the IMF, was widely distributed through the Indonesian media. The picture showed Soeharto seated, signing the agreement. Camdessus stood by his side, arms folded in front of him. This picture was widely interpreted in Indonesia as a sign that power had left Soeharto. (Some thought that Soeharto's power had come to him through his wife, Ibu Tien Soeharto, and that power had left him at her death in 1996). But by early 1998 it was widely agreed that Soeharto, although still president, no longer held power.

In May 1998 corruption, the collapse of the financial system, soaring inflation, sharply contracting GDP, capital flight, business closures, withdrawal of international investors, escalating poverty, the unresolved succession issue, and increasing violence and social disorder brought a crisis of confidence in the government and forced Soeharto's resignation after 32 years in office. He resigned on 21 May 1998 and was immediately succeeded by his longtime friend and protégé, Vice President B. J. Habibie, a German-trained aeronautical engineer who had served as minister for research and technology from 1978–98.

The IMF established a $42 billion soft loan package that mandated economic reforms. But serious implementation problems in reforms delayed disbursements

The roots of the crisis

The economic, financial, and political components of Indonesia's economic downturn were mutually reinforcing. The roots of the crisis ran deep.

In an August 1998 speech Ali Wardhana, economic adviser to the government and former long-term finance minister, put it this way: "Let me be quite blunt. Much of the economic crisis had its roots in the serious and fundamental weaknesses of our financial system. Only after these have been tackled in a forthright manner can we look forward to a serious and sustained recovery" (Wardhana 1998b, p. 1).

Wardhana's analysis of the basic weaknesses of the Indonesian financial system is provided in box 8.2. "Our financial systems were encouraged to fund risky and unprofitable ventures. Government officials could, and did, direct loans to favored firms or activities" (Wardhana 1998b, p.2). As he shows, bureaucratic interference, lending to favored firms, close links between banks and conglomerates, and political pressure on bank regulators led to loans that were "rarely given even rudimentary economic and financial analysis." The result was a pattern of high-risk lending that was exacerbated by a widespread perception that banks were implicitly guaranteed by the government and by a mispricing of foreign credits that contributed to the large capital inflows. Firms with substantial foreign exchange exposure were vulnerable; "When we were forced to abandon our managed float, the depreciation of the rupiah created unmanageable debt burdens that effectively bankrupted a substantial portion of our corporations" (Wardhana 1998b, p. 3).

As the crisis unfolded, it became apparent that Indonesia had far more external debt than had been publicly known—much of it owed by companies owned by the few wealthy, well-connected families discussed earlier. The foreign debt of commercial banks had reached about three times the banks' equity. Private corporations, banks among them, owed an estimated $68 billion

Box **8.2** **Excerpts from Ali Wardhana's "Overcoming the Current Economic Downturn"**

The economic meltdown, and one can hardly describe it differently, that has hit Indonesia, had multiple causes. Some were self-inflicted, others were external...Let me be quite blunt much of the economic crisis had its roots in the serious and fundamental weaknesses of our financial system Let me highlight only two

First, our financial systems were encouraged to fund risky and unprofitable ventures In a banking system where state-owned banks play a significant role, bureaucratic interference is likely to be a serious problem Government officials could, and did, direct loans to favored firms or activities In addition the close links between banks and some of the conglomerates further reduced the likelihood that loans would be objectively evaluated Even when government pressure was absent and when banks did not engage in intra-group lending, loans were rarely subjected to even the most rudimentary economic and financial analysis. In part, such analysis was handicapped by the absence of disclosure requirements and accounting standards that would allow analysts to make a reasonable estimate of risk And in part political pressure was exerted on bank regulators so that they would not report some of the most flagrant violations of our banking laws

In such a situation financial institutions fail in their most basic function to serve as an efficient intermediary, channeling savings to their most productive use. It is of course true that all investments have associated risks But when savers, whether domestic or foreign, have no real capacity to evaluate the risks, the real cost of capital will be undervalued and the returns on investment overstated. As a result, scarce funds will be allocated to low-return, high-risk activities

Second, when neither investors nor lenders expect to bear the full cost of any failure, they will lower their guard against risky investments This is what is meant by the term "*moral hazard*" Moral hazard describes a situation where, in the presence of a perceived implicit or explicit guarantee, there is little incentive to avoid risky behavior. It is true that the Government of Indonesia never extended any explicit guarantees against bank or corporate failures But it is also true that involvement of well-connected parties in many of our economic activities generated a feeling that, to quote a line from a popular American movie, "*failure was not an option here*" Unfortunately, in the end, failure was very much an option here Actions by government and the central bank further encouraged the belief that Indonesian banks would not be allowed to fail. Thus, when the government supported a recapitalization of Bank Duta in 1990, provided support to Bank Danamon to stem a bank run in 1991, and in 1994 made good the losses suffered by BAPINDO, it inadvertently suggested to all that banks would be protected from failure. As Paul Krugman recently noted, such implicit guarantees can trigger asset price inflation, reduce economic welfare, and ultimately make the financial system vulnerable to collapse [1]

In a similar vein, our foreign exchange regime also encouraged risky behavior. Although Indonesia did not peg its exchange rate, as did some other Asian countries, we did maintain a *managed float* within a relatively narrow band Borrowers judged that the expected loss from currency depreciation was less than the cost of hedging their foreign borrowings For many years this proved to be correct The consequent mispricing of foreign credits contributed to the very large capital inflows and created vulnerability for firms with substantial foreign exchange exposure. When we were forced to abandon our managed float, the depreciation of the rupiah created unmanageable debt burdens that effectively bankrupted a substantial portion of our corporations

No one should doubt the severity of the current economic crisis Yet neither should anyone underestimate our capacity to set our institutions right The "*Asian economic miracle*" was not a mirage, it was real And many of the factors that allowed Indonesia

"Much of the economic crisis had its roots in the serious and fundamental weaknesses of our financial system"

Box **8.2** **(continued)**

to grow by over 7% per annum for over a decade are still here. strong infrastructure, a well disciplined labor force, and ample natural resources These are the elements that will power our growth in the future But before that can happen we must rebuild our financial institutions so that they are capable of performing the functions that a modern economic state requires to mobilize capital and effectively channel it to its most productive use

1 Paul Krugman, 1998, "What Happened to Asia?" Unpublished research paper
Source Wardhana 1998b, pp 1–3, 5–6

By early 1998 it was widely believed that Soeharto had lost his power. In May 1998 he resigned and was succeeded by Vice President Habibie

in foreign debt in 1997, with more than half of it thought not to have been hedged. Under these circumstances the fall of the rupiah in 1997–98 led to massive increases in foreign debt and debt service payments in rupiah terms, affecting the entire financial sector. By 1998 nonperforming loans (loans in default) accounted for about 70 percent of bank credit.

Another factor contributing to the crisis was related to the sudden spurt in the number of banks and bank branches that had followed the 1988 deregulation liberalizing the creation of banks and bank branches. Excluding People's Credit Banks (Bank Perkreditan Rakyat, or BPRs), the number of banks increased rapidly—from 129 in 1988 to 233 in 1994 (Cole and Slade, 1996, p. 114). But there was a shortage of trained staff to supervise these banks. And even staff who had been trained were, de facto, often unable to supervise effectively (or even to obtain accurate information) because of the lack of transparency at the banks, as well as the high-level political pressures on bank regulators to look the other way—as increasing numbers of banks provided loans to favored firms and to their own conglomerates. This moral hazard problem was well known, but it was off limits for reform. Transparency requires accountability, high accounting standards, and accurate information about the financial conditions of banks and their debtors and creditors. Typically none of these was available at the banks.

> The problem was not that the weaknesses of the banking system were unknown. Rather the problem was the lack of political support for those who wanted to improve bank supervision and strengthen the economy's financial foundations...Bank licenses were often handed out to politically favored persons, further weakening supervision, and bank owners who were often industrialists, used their banks to lend to their own enterprises, often in violation of bank regulations. In the end, the economic/political interests controlling the banks were more

> powerful and better connected than the policy makers who were trying to shape policy in this area.
>
> —Stern 2000, p. 5

As noted, the Indonesian economic and financial crisis had been largely unforeseen (although many had anticipated a possible political crisis arising from the growing concerns about corruption, civil rights, and succession issues). Lloyd R. Kenward, senior economist at the World Bank's Jakarta office (1994–98), analyzed the reasons for the Indonesian economic and financial crisis and "the warnings [that] were there, just below the surface" (1999, p. 71). He demonstrates that although the broadest macroeconomic indicators did not predict the crisis, extensive warning indicators of other kinds were recognized before the crisis (box 8.3). But as he shows, these warning signs tended to be viewed individually. Had they been analyzed collectively, they might have signaled the likelihood of crisis before it occurred.

Thus in 1996 and early 1997 the broad macroeconomic indicators for Indonesia were positive—robust economic growth, low and stable inflation, fiscal accounts in surplus, adequate official foreign exchange reserves, and others. But multiple warning signs had been identified, ranging from restraints on inflation that were only temporary to weaknesses in the current account caused by high international oil prices; from diluted deregulation packages to the country's weak microeconomic foundations (banks and other corporations known for structural weaknesses and risky behavior). And then there were Indonesia's euphemistically termed "issues of governance"—which commonly meant "corruption, cronyism, and nepotism." Had these and other trends been carefully analyzed together, the possibility of an emerging crisis might have been identified.

Most of the huge foreign debt (much of it owed by the conglomerates) was unhedged. With the collapse of the rupiah, the debt became unmanageable

Kenward also analyses the main indicators of the crisis that became clear only with hindsight: the exchange rate risk, the extent of unhedged foreign exchange positions, and personnel changes among high-level Indonesian officials that were "warnings to any government official who tried to enforce principles of transparency and even-handedness in vital areas such as banking supervision and privatisation. No matter how badly in need of reform, some areas were virtually untouchable" (p. 86).[41]

Readers who want to pursue in depth the reasons that the crisis was not predicted are referred to Furman and Stiglitz (1998) for the Asian crisis generally, and to Kenward (1999, 2000) for the Indonesian crisis. Kenward also provides lessons for practitioners "from the perspective of a macroeconomic practitioner close to the [Indonesian] instability as it was developing" (1999, p. 86). Among the types of lessons he presents are the Indonesian technocrats' precept that "good times make for bad policies" (Kenward 1999, p. 86, quotes Ali Wardhana: "Reform is rarely if ever undertaken for its own sake"); the dangers of complacency, especially after decades of success; various ways in which microeconomic weaknesses magnify macroeconomic shocks; and institutional problems that can constrain prediction of a crisis.

"No matter how badly in need of reform, some areas were virtually untouchable"

Box **8.3** **Excerpts from Lloyd R. Kenward's "Assessing Vulnerability to Financial Crisis: Evidence from Indonesia"**

In 1967 per capita income in Indonesia was less than one-half that of India, Nigeria, or Bangladesh By mid 1997, it was five times that of Bangladesh, four times that of Nigeria and three and a half times that of India Virtually all of the country's social indicators had improved significantly, too. This was an extraordinary track record that put Indonesia in the top 10% of performers among developing countries

Indicators that did not work...During the months and years before the financial crisis, virtually all of the broadest macro indicators were very reassuring . Economic growth was robust and driven by the private sector, inflation was low and quite stable, the fiscal accounts were in surplus, the government was pre-paying large amounts of foreign debt, the growth of some monetary aggregates was high, but generally in line with inflation and strong, investment-led growth, foreign direct investment was strong; medium and long-term debt service was declining in relation to exports (after allowance for debt prepayments), official foreign exchange reserves looked adequate and were trending upwards, and the deficit on current account of the balance of payments looked manageable The most controversial indicator in this context was external debt But even here, the overall situation was favorable...doubts arose only on examination of the breakdown between public and private debt .Judging only on the broadest of criteria, the years immediately preceding the crisis were the best of macroeconomic times for Indonesia...[And] if anything, the signals from sensitive, high-frequency (daily) financial market indicators were even more positive than the broadest macro indicators.

Helpful indicators. recognized warnings. [But some] analysts concluded [before the crisis began] that significant risks remained Inflation was being temporarily restrained by good luck on food prices and by delays in increasing certain administered prices the growth of monetary aggregates showed no clear tendency to decelerate Also, high international oil prices (and probably data limitations) were masking weaknesses in the current account, dependence on potentially volatile short-term capital was increasing key nontradeables (such as the property sector) were booming, and there were isolated signs of nervousness among foreign investors. The authorities even publicly acknowledged some of these indicators. [Kenward documents the recognition of each of these indicators before the onset of the crisis].

While the macro data were giving off mixed signals at best, there was little doubt about the quality of structural policies. Many had been moving in the wrong direction for at least one year...Recent deregulation packages had been weak and there was ample evidence that the deregulation drive—which had largely accounted for Indonesia's successes since 1986—had lost much of its momentum Moreover, issues of governance (the old euphemism for 'corruption, cronyism, and nepotism'.) were drawing increasing levels of international attention

Viewed individually, these slippages in structural policy seem unimportant But collectively, and considering the number of them, they raised the likelihood of crisis [There were] weak microeconomic foundations Indonesia's bank and non-bank corporate sectors have long been known for certain structural weaknesses and risky behaviour In the case of the banks, their fragile state was well-documented Indonesia's banking system would amplify any serious disturbance, spreading shockwaves throughout the economy, with destabilising feedback effects on the macroeconomy. Outside the banks, corporates were well known for their high leverage and risk-taking behavior. In many ways, therefore, the Indonesian economy was badly positioned to absorb a major macroeconomic shock.

Retrospective warnings. In addition to the warning signs documented above, there were a few signs of trouble that are only clear with the benefit of hindsight For example,

Box **8.3** **(continued)**

a standard measure of Indonesia's real effective exchange rate now suggests a modest appreciation for about two years before the onset of the crisis But the modestly appreciating trend (of only about 5% per annum, trough to peak) could not be spotted with any reliability until only a few months before the crisis broke, which was too late to be of much use. .Another indicator that deserved more attention was the extent of unhedged foreign exchange positions, particularly among non-bank corporates that were borrowing directly off-shore and through banks on-shore

With the full benefit of hindsight, there were several personnel changes among key Indonesian officials before July 1997 that constituted more subtle signs of trouble in the offing Individually, these incidents seemed to be of minor importance at the time But collectively and in retrospect they were warnings to any government official who tried to enforce principles of transparency and even-handedness in vital areas such as banking supervision and privatisation No matter how badly in need of reform, some areas were virtually untouchable

None of the preceding discussion is intended to imply that the warning signs indicated trouble of the order of magnitude of what eventually ensued Indeed the actual outcome exceeded the worst expectations

Source Kenward 1999, pp 73–86

In the end Soeharto harmed not only the state, but also the economy he had built. Two overall commentaries on the Indonesian crisis are instructive.

> The Indonesian monetary crisis was triggered and exacerbated by the general collapse of financial prices in Southeast Asia. The breakdown in confidence and the disruption of normal financial flows within the region was not immediately recognised by Indonesian policy makers (nor by many others)...Indonesian banks attempted to replenish their reserves from sources offshore, but this time such funds were not available...'Normal' patterns of capital flows available to Indonesia since the early 70s, in the context of an open capital account and stable macroeconomic policies, had dried up. Domestic corporates also rushed into exchange markets to try to cover or hedge their foreign exchange obligations, and thus drove down the exchange rate. Panic by domestic individuals and businesses both drew from and fed back into foreign investors' panic, resulting in massive capital outflows from Indonesia and from the region.
>
> —Cole and Slade 1998, pp. 62–63

And:

> The macroeconomic framework constructed in the 1970s and 1980s may not have been entirely consistent but it served Indonesia well. But by the 1990s the structure of the economy had changed, new interests had emerged, and Indonesia had become more integrated with the rapidly growing world financial markets. At that time the old weaknesses of the macroeconomic framework, which had been mere annoyances early on, became serious liabilities. When the Asian crisis reached Indonesia, the macroeconomic framework proved too weak to withstand the onslaught.
>
> —Stern 2000, p. 7

Commercial banks' foreign debt reached three times their equity. 70 percent of bank credit was in defaulted loans. The financial system collapsed

The discussion below turns to the period from the end of the Soeharto era in May 1998 to the early days of Megawati Soekarnputri's presidency, which began in July 2001. Soeharto's legacy, crucial for an understanding of Indonesia's current transitional period, includes three decades of extraordinary economic growth with equity and social development; a nation severely underdeveloped politically; a massive economic, financial, and political crisis—and the basic roots of the crisis themselves, many of them still deeply entrenched and very much alive.

Indonesia in Transition

Many changes have taken place in Indonesia since the resignation of President Soeharto in May 1998. It is still too early to understand fully the dynamics, the complexities, and the horse trading of Indonesia in the post-Soeharto era. After Soeharto's resignation, immediate rehabilitation efforts focused mainly on improving governance, implementing political reforms, strengthening the economy, rebuilding the financial system, and maintaining a safety net for the poor, whose numbers increased during the crisis. Results were mixed. Some reforms were accomplished that would have been unthinkable just a few years earlier. But many of the country's old problems did not disappear, some that had been buried resurfaced, and formidable new ones emerged.

Discussion here focuses on some major events from mid-1998 through mid-2001, during the presidencies of B.J. Habibie (1998–99) and Abdurrahman Wahid (1999–2001). (See chapter 15 for discussion of efforts to restructure the financial system during this period). This account is followed by a brief discussion of the impeachment of President Abdurrahman Wahid by the People's Consultative Assembly (MPR), and the MPR's replacement of Wahid as president by Vice President Megawati Soekarnoputri, Sukarno's daughter. These events occurred in July 2001, shortly before this volume went to press.

The economy and the financial system, 1998–99

A set of economic and financial reforms was instituted as part of the economic reform program financed by the IMF and other donors. These reforms included establishing a tight monetary policy to stem exchange rate depreciation, rescheduling banks' external debts, and establishing institutions to work out arrangements for the external debts of corporations. An Indonesian Bank Restructuring Agency (IBRA) was created to restructure and recapitalize the banking industry (chapter 15).

Monetary and banking reforms, along with the support from the IMF, helped the economy improve. The value of the rupiah relative to the U.S. dollar recovered from 14,900 at the end of June 1998 to 8,025 in December 1998, and to 7,085 at the end of 1999 (see table 8.1 and appendix 1). Moreover, Indonesia (which is the only Asian member of the Organization of Petroleum Exporting Countries, or OPEC) benefited from the soaring oil prices that began in 1999. There was a significant turnaround in GDP growth—from −13.0 percent in 1998 to 0.3 percent in 1999. Inflation reached 78 percent at its highest point during 1998. Annual inflation was 53.4 percent for 1998 but dropped to 20.5 percent for 1999.

A tight monetary policy, debt rescheduling, and IMF support helped the economy improve. But economic recovery has been slow, largely for political reasons

As noted, Indonesia had an impressive record of poverty reduction during the Soeharto era—with the portion of the population below the poverty line dropping from 60 percent in 1970 to 40 percent in 1976 to 11 percent in 1996 (Government of Indonesia 1996, p. 570). But during the crisis real wages and employment opportunities fell, and prices of food and other basic necessities rose. As a result some who had escaped poverty returned to it. In 1998 the share of the population living on less than $1 a day was estimated at 20 percent. By the end of 1999, however, it had dropped to its pre-crisis, 1996 level of 11 percent (but many "near-poor" people remain just slightly above the poverty level). And farmers who produce export crops (such as coffee, rubber, and palm oil) benefited from the booming export market that followed the fall of the rupiah.

The government, with assistance from international donors, developed a multipronged strategy for helping poor households during the crisis. Subsidized food, especially rice, was provided to many of the poor. Substantial employment was created, much of it through labor-intensive public work programs. And social services, particularly for health and education, were preserved. The government instituted a "stay in school" campaign and provided scholarship programs and block grants for schools. Social safety net programs were given high priority by the government and donors.

But many of the country's problems remained intractable. Still constraining the economy are difficulties with the restructuring of massive corporate foreign and domestic debt, the crippled banking system, and continuing large-scale corruption—exacerbated as before by the weak legal and judicial systems. Soeharto's family and cronies and their conglomerates, while weakened, are still wealthy and powerful. Many Soeharto supporters throughout the country remain active, in some cases working to create and maintain political instabilities. Ethnic and religious tensions have grown, and separatist movements have

accelerated. Investors have generally stayed away. The slow progress in Indonesia's economic recovery has been mainly a result of these and other related factors, rather than of weakness in the underlying economy. This volume went to press only a few months after President Megawati Soekarnoputri took office, and it is too early to know whether her government will be able to achieve significant economic improvement. Early indications of various kinds are discussed later in the chapter.

Governance and politics, 1998–99

Still constraining the economy are massive corporate debt, the crippled banking system, and large-scale corruption—exacerbated by the weak judicial system

Responding to mass demand after President Soeharto's resignation, President Habibie initiated a number of political reforms. Legislation concerning political parties and elections was revised, and restrictions on the formation of political parties were abolished. General elections were held in June 1999, and the presidential election by the newly constituted MPR was held in October of the same year. Controls on the media were greatly relaxed. In another widely publicized reform, Indonesia agreed to hold a referendum that would offer the province of East Timor a choice between independence and broad autonomy within Indonesia. East Timor had been a Portuguese colony (covering half an island and surrounded by Indonesian territory) until it was annexed by Indonesia in the mid-1970s. Issues of East Timor's status and allegations of human rights abuses carried out there by other Indonesians and by the government had been in contention between Indonesia and many in the international community since East Timor first became part of Indonesia.

Under the Habibie reforms new political parties proliferated. Long restricted by a one-party state with just two powerless and tightly controlled opposition parties, Indonesians explored their new options, fielding 48 parties for the June 1999 general elections. The front runners were the incumbent, B. J. Habibie, a lifelong Soeharto protégé and supporter but also one of the most Westernized of Indonesia's political leaders, and Megawati Soekarnoputri, Sukarno's daughter and the most visible challenger to Soeharto while he was in office. Megawati had been able to mount an open opposition to Soeharto during the last years of his rule largely because she is the daughter of the country's founding president. Soeharto's ability to control her opposition was limited, although he manipulated her removal from the officially recognized opposition party she led while he was president. She contested in the 1999 general elections as head of the Partai Demokrasi Indonesia-Perjuangan (Indonesian Democratic Party-Struggle, or PDI-P).[42]

PDI-P won a plurality with 34 percent of the 105 million valid ballets cast. Golkar, with President Habibie as its candidate, placed second with 22 percent of the vote. The remaining votes were divided among numerous parties, leading to months of coalition-forming negotiations, payoffs, battles, and deals that paved the way to the October 1999 presidential vote.

After decades of suppression, people spoke their minds during the campaigns. John Bresnan's comment in June 1999 about the forthcoming presidential elections was widely repeated: "I think there is a lot of sense of irony that Golkar

is seen as the status quo party but is headed by one of the most Westernized figures in Indonesian political history, whereas PDI-P, the party of reform, is led by a lady solidly rooted in the feudal past" (quoted in *The New York Times,* 22 June 1999, p. A3). But a well-known political commentator, Witmar Witoelar, when asked about criticisms that Megawati might not be smart or knowledgeable enough to become president, quipped, "We already have a rocket scientist as President and look where we are now" (quoted in *The New York Times,* 13 June 1999, p. 3).

The 1999 presidential election was held under a reformed system in which a 700-member MPR was composed of the 462 members of the legislature elected in the June 1999 general elections, 38 members of the legislature appointed by the military, and 200 government-appointed MPR members from regional and minority groups. Megawati and Habibie remained the frontrunners. Habibie, while tainted by his long and close association with Soeharto, had brought about considerable reform in his short time as president. Megawati had no government experience (like nearly everyone in Indonesia outside Golkar), but she is the daughter of the country's founding president, she had stood up to Soeharto, and she was (and is) popular with voters.

Responding to mass demand, President Habibie abolished restrictions on political parties, held general elections, and relaxed media controls

The newly constituted MPR convened in Jakarta in October 1999. It first ratified by consensus the landslide 30 August 1999 vote in which 87.5 percent of the people of East Timor had voted for independence—a vote that had been followed by the worst massacre in Indonesia since 1965. Indonesian militias with ties to the military opposed the independence of East Timor, resorting to burning, looting, and indiscriminate killings of East Timorese. More than 1,000 people were killed, about 70 percent of East Timor's buildings were destroyed, and more than 200,000 East Timorese were forced into camps controlled by the militias in the Indonesian province of West Timor on the same island. Order was restored only with international intervention. East Timor became a United Nations protectorate temporarily, but it is in transition to become an independent nation.

The MPR's next order of business was President's Habibie's formal accountability speech in which he reported on his presidency. After days of discussion, the MPR voted by a close margin—just hours before the 20 October 1999 vote for the presidency—to reject the president's accountability speech (the first such event in the history of the republic). The rejection in effect ended Habibie's candidacy for president, and he withdrew from the race.

Then, in Indonesia's first democratic election since 1955 and its first transfer of power through a vote of democratically elected representatives, the MPR elected as president Abdurrahman Wahid—a widely respected moderate Muslim religious leader with a reputation for being tolerant and incorruptible. The long-time head of Indonesia's largest Muslim organization, Nahdlatul Ulama with more than 30 million members, Wahid was known for his attitudes of tolerance and inclusion, for supporting human rights, and for championing the rights of non-Muslims, ethnic Chinese, and other minorities. But he is nearly blind and had been weakened by strokes. Wahid (who is widely called by his nickname Gus Dur) received 373 votes to Megawati Soekarnoputri's 313.

Wahid's Muslim-based Partai Kebangkitan Bangsa (PKB), or National Awakening Party, had received 13 percent of the popular vote in the June 1999 general elections. He had then supported Megawati's campaign, but broke with her in October and pushed ahead with a bid for the presidency. Few took his candidacy seriously until the last moment when Habibie withdrew his candidacy and other parties added their support to that of the National Awakening Party to elect Wahid president as a compromise candidate. On 20 October 1999, as Wahid rose to take the oath of office, President Habibie, who had received a vote of no confidence in the same room just hours before, took the new president's arm and helped him to the podium. The next day Wahid nominated as vice president Megawati Soekarnoputri, who was elected after last-minute, closed-door maneuvers convinced challengers from Golkar and the army to withdraw.

The MPR held presidential elections in 1999. It voted not to accept President Habibie's accountability speech, effectively ending his candidacy

President Habibie had served as president for 17 months. Too closely identified with the Soeharto regime to survive democratic elections, he nevertheless brought more reform to Indonesia in his short time as president than many had thought possible.

President Abdurrahman Wahid, 1999–2001

In October 1999 Abdurrahman Wahid became Indonesia's fourth president, elected in large part because of his ethnic and religious tolerance; his long record of support for democracy, clean governance, and human rights; and his reputation for honesty and incorruptibility. But, as president, Wahid soon became widely perceived also as mercurial, unfocused, and unorganized. Wahid himself joked, "The Suharto era here was known as the 'New Order,' the post-Suharto era led by B.J. Habibie was known for being 'Out of Order,' and the Wahid period is known as 'No Order,'" (*The New York Times,* 3 October 2000, p. A31). But, unlike his many widely quoted witticisms, this one was not a joke.

Wahid had to build a multiparty coalition government—which had not been seen in Indonesia for over 40 years. His first cabinet (known informally as Gus Dur's mixmaster cabinet) was widely inclusive, although of course many of its members had little government experience. Concerns focused on whether the new coalition government could hold together the Indonesian nation, control the army, restore the economy, build a viable financial system, implement the new president's ideas of honesty and tolerance, and build the institutions needed for a viable democratic government.

Unlike the economic crisis, which had not been predicted before its onset, by early 2000 it was widely anticipated that Wahid's new coalition government, riven by internal political rivalries, would not make substantial headway in meeting these extremely difficult and complex challenges. The predictions were correct. But President Wahid made some crucial contributions to Indonesia—of which the most important was to move the country toward democracy in ways that, this time, may be irreversible.

Wahid's 21 months as Indonesia's president are discussed first. Then three of the major issues that dominated that period are examined: bringing the Soehartos to justice, the secession issues, and the economy.

Early reforms and obstacles. President Wahid made some crucial reforms early in his administration. The media, tightly controlled under Soeharto, had been liberalized by Habibie. But it was Wahid who made the media fully independent. Although the Indonesian press suffers from a shortage of trained journalists, it—and the other media—are now playing a major role in leading the way to new openness and transparency in the country.

In one of his first acts after becoming president, Wahid placed the armed forces under civilian control (where they had been in the 1950s). He later suspended army chief General Wiranto (who had been Soeharto's last military commander, continuing under Habibie) from Wiranto's cabinet position as coordinating minister for political affairs and security. Along with four other high-ranking generals, Wiranto had been found at fault by an Indonesian government panel and the United Nations for the violence and destruction in East Timor that followed the vote for independence there. Wiranto resigned his cabinet position in May 2000.

In Indonesia's first transfer of power through a vote of democratically elected representatives, the MPR elected Abdurrahman Wahid as president

Wahid also reshuffled military officers, promoting reformers. And he pledged to hold the military accountable for past and present human right abuses. Indonesian investigators began questioning generals about the role of the military in the burning, looting, and killing that took place in East Timor in 1999. In May 2000 a landmark human rights tribunal convicted 24 Indonesian soldiers and one civilian of massacring 57 villagers during a 1999 operation mounted against rebels in the special region (*daerah istimewa*) of Aceh in northern Sumatra.

But despite President Wahid's early reform efforts, many deeply entrenched problems remained, and new ones arose rapidly. Wahid was unable to consolidate power. Although he pushed hard for institutional reforms, he had neither the political backing nor the administrative skills to achieve significant progress in the desperately needed legal, judicial, legislative, financial, and other reforms. And the obstacles the new president faced were formidable.

> In sharp contrast to Mr. Suharto...Mr. Wahid's ability to enact his policies is dangerously limited. As he built his top-down structure of personal control, Mr. Suharto so eviscerated the nation's institutions that his successors have inherited a hollow and nearly useless bureaucracy. "The government here is almost hydroponic," said a Western diplomat—a floating structure with dangling, ineffectual roots."
>
> —Seth Mydans, *The New York Times,* 3 June 2000, pp. A1, 4

And Daniel S. Lev, an expert on Indonesia, put it this way:

> He [Wahid] is a president without the institution of the presidency. Every major administrative institution and political institution has essentially been destroyed, crushed. There is really nothing left to work with. It doesn't matter, in a sense, how good

people are that you appoint because the institutions are devastated. There's corruption everywhere.

—Quoted in *The New York Times,* 3 June 2000, p. A4

Under President Wahid, constitutional amendments were drafted in preparation for presentation to the MPR in August 2000. Proposed amendments included direct presidential election, the creation of a two-house legislature, a system of judicial review, and decentralization of some powers to the provinces. But Wahid did not get far with these amendments. Political infighting, violence, bombings, growing secessionist movements, economic problems, and the instability promoted by Soeharto supporters, Muslim fundamentalists, and others took center stage. Wahid remarked, "even a hundred new presidents" won't solve Indonesia's problems (*The New York Times,* 30 April 2001, p. A8).

Wahid, a respected moderate Muslim religious leader, was elected largely because of his democratic views, tolerance, and honesty. But he could not govern the country

Constitutional amendments on governance, and institutional reforms generally, were indefinitely postponed. Thus the viable institutions needed for long-term democratic governance were not yet under construction. Wahid was unable to gain sufficient power to bring about the democratic government of shared power in which he believes. The strong ruler had gone, but the weak state remained.

The president and the parliament. Wahid and Megawati were democratically elected as Indonesia's president and vice president. But Indonesia now also had a democratically elected parliament (Dewan Perwakilan Rakyat, or DPR)—and little experience on how the two branches of government could work together. Wahid's small National Awakening Party had little say in parliament. Megawati's party, however had won a plurality in the general elections and was well represented in parliament. But a rift grew between Wahid and Megawati.

As noted, Wahid's first cabinet was a broad coalition that represented compromises with multiple political parties. But political rivalries among cabinet members, combined with the lack of organization and focus of the president and the distance kept by the vice president, essentially paralyzed the government. In August 2000, parliament—which is dominated by the Indonesian Democratic Party (PDI-P; the vice president's party) and Golkar—demanded that Wahid improve his erratic and uncoordinated leadership. In response, Wahid formed a new cabinet composed mainly of people from his own National Awakening Party (which controls only about 11 percent of the seats in parliament) and from the military. This cabinet, he said, was composed of professionals who would concentrate on results, not politics. But, if anything, political lines hardened. For example, despite PDI-P's power in parliament, Wahid did not appoint a single member of the PDI-P to his second cabinet. Megawati, officially in charge of cabinet affairs, did not attend the announcement of the new cabinet.

By April 2001, 18 months after his election, Wahid had been twice censured by parliament and had come under widespread criticism for arrogance,

unpredictability and capricious leadership; for his government's lack of focus, coordination, and implementation; for legislative gridlock, the slow pace of reforms, and insufficient emphasis on institution building. He was sharply criticized for failing to curb corruption, resolve secession issues, and prosecute key figures of the Soeharto regime, and for the deterioration of the economy (discussed later in the chapter).

At the beginning of 2001, a parliamentary investigative committee released a report stating that Wahid had been aware that his personal masseur (also Wahid's spiritual adviser) had embezzled $3.7 million from a government agency. It also criticized the president for failing to declare a $2 million donation from the Sultan of Brunei (which Wahid called a personal gift). But the panel found no proof that Wahid benefited personally from these transactions. The president's supporters said that compared with Soeharto, Wahid's lapses are "like chickenfeed." But parliament found that Wahid had acted improperly in both cases.

"The government here is almost hydroponic—a floating structure with dangling, ineffectual roots"

Parliament censured Wahid for misconduct in the two financial matters. But it was widely agreed that the alleged corruption was not the real issue. The corruption charge was simply the method used to express dissatisfaction with Wahid's governance of Indonesia (or lack thereof). As Calvin Sims commented in *The New York Times* on 4 February 2001 (p. A10):

> Behind the Indonesian Parliament's decision to censure President Abdurrahman Wahid for misconduct in two financial schemes last week, setting the stage for his impeachment, was widespread frustration with his erratic stewardship of the world's fourth largest population, which has been floundering...The corruption scandals were only the catalyst...For months there has been a growing sense of anger and despair that Mr. Wahid has failed to take the necessary steps to pull the country out of years of political and economic turmoil or end the separatist and religious violence that threaten to tear this archipelago apart.

Parliament again censured Wahid in April 2001, this time for incompetence and corruption. The vote was overwhelming: 363 to 52, with Wahid's defenders nearly all from his small National Awakening party. Impeachment proceedings (which can be initiated after two censures) could now legally take place. Although the military was now under civilian control, the army chief of staff, General Endriartono Sutarto, warned the president not to dissolve parliament as a method of avoiding possible impeachment proceedings.

In May 2001 Attorney General Marzuki Darusman, a widely respected former director of the National Human Rights Commission, cleared President Wahid of any involvement in the corruption cases that had led to parliamentary censure. But only days later parliament voted 365-4 to convene a special session of the People's Consultative Assembly (MPR) to decide whether President Wahid should be impeached. (In a cabinet shift the following month, Wahid

replaced Marzuki Darusman as attorney general, citing failure in the prosecution of former president Soeharto and his youngest son, Tommy Soeharto).

The MPR special session was convened in July. Urged to resign, Wahid refused. He declared a state of emergency, but the military refused to carry out his order. On 23 July 2001 the MPR voted 591-0 to impeach Wahid and to replace him with Vice President Megawati Soekarnoputri for the remainder of Wahid's five-year term which expires in 2004. Those in the 700-member MPR who opposed the impeachment boycotted the vote. The military supported Megawati and protected the assembly building with tanks during the vote. Ironically, Abdurrahman Wahid, the first Indonesian president to whom power was transferred democratically, also became Indonesia's first democratically impeached president. (Official impeachment procedures, starting with the first parliamentary censure, were carefully followed throughout).

Wahid was unable to gain sufficient power to bring about the democratic government of shared power in which he believes

Three of the most important issues that marked Wahid's presidency are discussed below. Each is presented simply as a snapshot of a situation at a particular point in time. But together they can provide some insight both into Indonesia during the 21 months of Wahid's presidency, and into the state of the nation that was entrusted to Megawati Soekarnputri on 23 July 2001—the month following the celebration of the 100th anniversary of her father's birth.

Taking on the Soehartos. President Wahid made a concerted effort to bring former president Soeharto to trial for corruption and abuse of power. But he was unable to do so. Shortly after taking office, Wahid sent a clear signal that (unlike former President Habibie), he intended broad anticorruption reforms. Charges were drawn up, and plans for Soeharto's trial were initiated. Wahid said that he would pardon the former president if he were convicted, provided that his illegally acquired wealth was returned to the nation. The pardon, however, would not extend to the Soeharto children (Soeharto's wife, Ibu Tien Soeharto, had died in 1996). But in the process of moving toward trial, the government found that the Soehartos' cronies and loyalists remain strong, wealthy, and widespread in Indonesia.

In early 2000 the government began to prepare the case against the former president. Then in May, Soeharto was placed under house arrest "to smooth the investigation and in order to finish the case as scheduled," according to the attorney general, Marzuki Darusman (*The New York Times,* 30 May 2000, p. A3). But Soeharto's doctors said that he was too ill to stand trial. Although his trial was to begin on 31 August 2000, Soeharto did not appear in court; his doctors testified that he could not appear because of illness. The case was adjourned until September 14, and the attorney general and government prosecutors continued with documentation and preparation. Then a spate of bombings rocked Jakarta.

Bombs were set off at the attorney general's office (where work on the case was in preparation), at a crowded parking garage underneath the stock exchange (on the eve of the scheduled resumption of the trial), at Christian religious organizations, and at other sites. It is widely believed that the bombings were car-

ried out by Soeharto supporters in an attempt to derail the Soeharto trial and to undermine efforts to restore the stability of the government. By the end of September, the court dismissed the case against Soeharto on the grounds that he was too ill to stand trial.

Meanwhile, in September 2000, in a reversal of a lower court decision, Indonesia's Supreme Court found Soeharto's youngest son, Hutomo Mandala Putra (known as Tommy), guilty of corruption in a multimillion-dollar land deal. He was sentenced to 18 months in prison—the first conviction of any member of the family for graft. But Tommy disappeared. After two months he was found by security forces, but Tommy disappeared again. "He [Wahid] said... Tommy had slipped away while officers were checking with the palace on whether to arrest him. 'When the timing is right, he will be detained,' said Mr. Wahid" (*The New York Times,* 30 December 2000, p. A4).

Wahid made a strong effort to bring Soeharto to trial for corruption and abuse of power. But he was unable to do so

President Wahid publicly denounced Soeharto's youngest son as a criminal and also ordered his arrest in connection with the Jakarta bombings. But, the government was not successful in arresting Tommy in connection with the bombings, or in having him serve his prison term for corruption. The Wahid government continued its efforts to bring members of the Soeharto family to court on corruption charges, but many Indonesians were highly skeptical that this would happen—and it did not.

In July 2001—just three days after Megawati Soekarnoputri took over as Indonesia's president—Syafiuddin Kartasasmita, the Supreme Court justice who had sentenced Tommy Soeharto to prison in the corruption case, was shot and killed in broad daylight by gunmen on motorcycles. According to the Jakarta police, two suspects were arrested and confessed. They said they had killed the justice under orders from Tommy Soeharto who had supplied the guns and paid them each 100 million rupiah ($10,500) for the killing. Jakarta police chief Sofyan Yacob accused Tommy Soeharto of masterminding the assassination, and the Jakarta police, assisted by National Police Headquarters, mounted a large-scale—but unsuccessful—search for the fugitive son of the former president. One of the men suspected of killing the justice was reported to have died in police custody.

In a telling commentary on the state of Indonesian justice, a year after the Supreme Court's September 2000 conviction of Tommy Soeharto for corruption, the court overturned its own conviction. Seth Mydans, in an article called "If Tommy's so hard to find, justice is indeed blind," quoted Hendardi, chairman of the Indonesian Human Rights Association, " Police officers are afraid that if they help catch Tommy, they could be killed." Mydans commented, "Did the message get through [to the court]?" And Amien Rais, speaker of parliament, said, "This spells disaster for the rule of law in Indonesia" (*The New York Times,* 4 October 2001, p. A4). But Indonesia's current president is the daughter of Sukarno—from whom Tommy's father, Soeharto, took power in 1966. Four months after Megawati Soekarnoputri became president, Tommy Soeharto was arrested (in a Jakarta mansion) and taken into custody by Jakarta police for allegedly plotting the murder of Supreme Court Justice Syafiuddin Kartasasmi-

ta. This arrest and the results that follow, which are far from certain, will be widely viewed as a signal of power and direction in Indonesia.

Can the center hold? As W.B. Yeats wrote in *The Second Coming* (1919), "Things fall apart; the center cannot hold." This was one of the most crucial issues that President Wahid faced (and that President Megawati now faces).

The Indonesian nation, forged with so much struggle in the 20th century, faces multiple, escalating separatist movements at the start of the 21st century. Recent surges of violence by secessionists in some provinces are thought to be assisted, in varying degrees, by Soeharto supporters intent on destabilizing the government.

Ethnic and religious rivalries, long controlled under the Soeharto regime, became openly violent and destabilizing

In Aceh, a special region in northern Sumatra that has rich oil and natural gas reserves, strongly Muslim secessionists have been fighting for an independent Islamic state for decades. Under the Soeharto government, the independence movement was repressed by the Indonesian military; 5,000 people, mainly civilians, are estimated to have been killed in Aceh during the 1990s (*The New York Times,* 17 September 2000, p. 9). The independence movement has become more overt, visible, and violent since Soeharto's resignation. Conflict between the independence movement and the military has turned Aceh into a "virtual war zone" (*The New York Times,* 11 November 2000, p. A3). Tens of thousands of Acehnese fled their villages for refugee camps. Despite an internationally brokered cease fire agreement between the Indonesian government and the Free Aceh Movement signed in Geneva on 2 June 2000, violence has continued. In November 2000, President Wahid blamed the army and police for escalating the violence on Aceh and for 19 civilian deaths that occurred there. He said, "Acehnese people are my religious brothers. I want to ask [the top military and police officials involved] 'Since when are guns used in negotiations? If you are using guns, then please retire'" (*The Boston Globe,* 11 November 2000, p. A15).

In an attempt at compromise, the government offered Aceh increased autonomy and a larger share of the profits from its oil and gas supplies. President Wahid even agreed that a form of Islamic law could be imposed in Aceh, even though the Indonesian nation has never been an Islamic state. But Wahid ruled out independence for Aceh. However, many Acehnese say they will settle for nothing less than independence.

A growing separatist movement exists in Papua (also known as Irian Jaya, located on the island of New Guinea)—which has giant copper and gold mines, vast timber resources, and offshore oil and gas. The indigenous Papuans of Irian Jaya have long aspired to independence from Indonesia. But Irian Jaya is resource rich, and is the home of the Freeport mine, a subsidiary of Freeport-McMoran Copper & Gold, based in New Orleans (Louisiana, United States). This mine is Indonesia's biggest taxpayer and largest private employer. Since 1992 P.T. Freeport Indonesia has paid $1.5 billion in taxes, royalties, and dividends, as well as $160 million for regional development. (*The Boston Sunday Globe,* 10 September 2000, p. A23).

Given the wealth and strategic locations of both Aceh and Irian Jaya, the Indonesian government is not prepared to consider independence for either province. Unlike the independence movement in East Timor, there is little international support for these independence movements because, if successful, they could destabilize the largest country in southeast Asia—and one that controls some of the world's most important shipping lanes.

But it is an open question as to whether these conflicts can be resolved, especially given the destabilizing aims of some Soeharto supporters and the dearth of functioning legal, judicial, and administrative institutions.

In other areas ethnic and religious rivalries, long controlled under the Soeharto regime, are now openly violent and highly visible. In the province of Central Kalimantan, animosity has existed for decades between the indigenous Dayaks and immigrants from other parts of Indonesia (mainly people from the island of Madura who were resettled in Kalimantan by the Indonesian government as part of its transmigration program). But recently, the clashes between the two groups escalated into a campaign of ethnic terrorism, with the Dayaks trying to drive the Madurese from what they consider Dayak homeland. Security forces have made little attempt to stop the murders and violence (see *The Boston Globe,* 27 February 2001, p. A9). But the future of Central Kalimantan is not the concern only of the Dayaks, the Madurese, and the government. Vast timber and mining interests operating in Kalimantan, many connected with the Soehartos, are also major players in the provincial maelstrom.

Wahid accused Soeharto supporters, some members of the military, and Muslim extremists of using sectarian violence to create political instability

In West Timor, the defeated East Timorese militias—reorganized, rearmed, and tacitly backed by some Indonesian military units—continued to terrorize and harass the East Timorese refugees who fled or were forced into West Timor during the violence that followed East Timor's vote for independence (an estimated minimum of 50,000 refugees remained in the camps as of September 2001).

But the East Timorese militias and their Indonesian military commanders were not brought to justice, and militia fighters continued to cross the border into East Timor, attacking both East Timorese civilians and United Nations peacekeepers stationed in East Timor. Only Eurico Guterres, the prominent militia leader widely believed to have been responsible for many of the worst crimes that took place during the East Timor massacre, was sentenced (on a charge of weapons possession)—to six months of house arrest.

> No one else—none of the other East Timorese militia leaders, none of the Indonesian officers who commanded them—has had to serve even a day in detention...Desperate to avert the creation of an international tribunal, Indonesia promised to conduct its own trials. The government formally agreed to share information with the new East Timorese administration and to provide witnesses and defendants for separate trials there. So far, both East Timorese and United Nations officials say, none of these promises have been kept...Former Defense Minister

> Juwono Sudarsono, in an interview, had little to say in defense of Indonesian justice. "The court system is in shambles," he said. In addition, President Abdurrahman Wahid is too engrossed in his own problems of political survival to push the issue and too dependent on the political support from the military to challenge it"..."It's been a farce all along" said one United Nations official in Jakarta.
>
> —Seth Mydans, *The New York Times,* 16 May 2001, p. A4

Efforts to restructure corporate debt and to build an effective and accountable banking system remain mired in political problems

In September 2000 the militias killed three United Nations aid workers who were working to repatriate East Timorese who were still in West Timor. Foreign workers then withdrew from West Timor. The Indonesian government pledged to disband the militias. But it did not (or could not) do so, and the militias remain active. In May 2001 a Jakarta court sentenced six militia members to prison terms, none of which exceeded 20 months, for the murders of the three United nations workers.

> This case apparently proceeded, unlike the others, because the victims were foreign United Nations employees. But the Indonesian prosecutors did not seem to have their hearts in the case, declining to charge the men with murder or manslaughter even though some of them admitted to stabbing the victims. "The sentences make a mockery of the international community's insistence that justice be done in this horrific case" the United Nations High Commissioner for Refugees said.
>
> —Seth Mydans, *The New York Times,* 16 May 2001, p. A4

Meanwhile, religious pressures have been rising in Indonesia, with fights between Muslims and Christians becoming commonplace in some parts of the country. Wahid accused Soeharto supporters, some members of the military, and Muslim extremists of using sectarian violence to create political instability. Much of the violence between the religious groups has occurred in Maluku province in eastern Indonesia where it erupted in 1999 and then spread in 2000 to the island of Lombok, east of Bali. When military and police were sent to restore order, some of them divided along religious lines, each supporting local groups of his own religion. Jakarta has also seen numerous bombings of churches, restaurants, and nightclubs carried out by Muslim vigilante groups.

Slow progress on economic and financial reform. Indonesia's progress in recovering from the crisis has been slow. The widespread corruption and deep political uncertainties are major causes of the country's continuing economic problems. And President Wahid, who did not allocate high enough priority to the economy, made some poor choices in selecting his economic advisers. Yet, there has been encouraging economic progress on some important fronts. GDP growth reached 5.2 percent in 2000, representing an 18.5 percent turn-

around in two years (see table 8.1). Inflation in 2000 was down to 3.7 percent. Oil prices stayed firm and there was strong external demand for Indonesian oil. And non-oil exports in 2000 were up substantially over 1999, reaching an all-time high (although their rate of growth was below that of their pre-1997 level). Mark Baird, the World Bank's country director for Indonesia remarked that in Indonesia, "you see a much healthier economy than you might expect reading reports overseas" (*The New York Times,* 1 November 2000, p. W1).

However, many difficulties remained. At the end of December 2000 the exchange rate was 9,595 rupiah to the U.S. dollar—compared with 7,085 at the end of 1999 (see table 8.1). And by the end of March 2001 the rupiah had declined to 10,400 to the U.S. dollar. The rupiah continued to slide, with the exchange rate at over 11,000 rupiah to the U.S. dollar from mid-April until July 23 when President Wahid was impeached and President Megawati took office. By August 14 the rupiah had appreciated to 8,425 to the U.S. dollar, but by the end of October 2001 it had again dropped to 10,435.

"The Indonesian Bank Restructuring Agency is at the epicenter of a struggle over Indonesia's economic soul"

A huge foreign debt remains, estimated at over $150 billion, with debt service at over 20 percent despite multiple debt rescheduling agreements (Barclays Bank Country Report, 28 November 2000). Efforts to restructure the corporate debt and to build an effective and accountable banking system, both needed for any significant growth in private investment, remain mired in political problems (chapter 15). Corporate governance remains a formidable challenge. In Indonesia, corporations have long been accustomed to operating in a closed and collusive environment. Changing this corporate culture under present circumstances is extremely difficult.

The government assumed the bulk of recapitalizing the banking system, which is expected to amount to over 50 percent of GDP (see Barclays Bank Country Report, 28 November 2000); some estimates run as high as 80 percent of GDP (Tim Healy and Tom McCawley, in *Asiaweek,* 13 August 1999). But progress in restructuring the banking sector—through bank mergers, management changes, loan collection efforts, and rescheduling of loans—has been slow, mainly because of continuing institutional weaknesses and political infighting.

The Indonesian Bank Restructuring Agency (IBRA) was created in 1998 to reorganize the banking system and to manage the liquidation, mergers, restructuring and recapitalization of failing banks. Its asset management unit was established to administer the bad loans of the banking system. It also plays a major role in restructuring corporate debt. IBRA's performance has been mixed. While some progress has been made, IBRA has often not been a match for the Soehartos and the conglomerates (chapter 15).

> [IBRA] has an impossible task and powerful opponents...[It] was created in 1998 to rescue a basket case of a banking system that included more than 200 poorly capitalized, opaque institutions burdened with billions of dollars in bad debt and usually owned by the debtors. IBRA today controls assets equal to 57 percent

> of GDP. Meanwhile it has become an inefficient, less-than-competent, sometimes corrupt bureaucracy supported...by a weak central government...IBRA is at the epicenter of a struggle over Indonesia's economic soul. On one side are the still-powerful forces of the old regime—Suharto's children and cronies. And on the other are economic reformers and activists who want retribution for the pain they see inflicted on the country by sweetheart deals and outright corruption.
>
> —Caragata 2001, p. 2

During the first half of 2001 the rupiah fell steeply, economic growth faltered, inflation rose, and dissatisfied donors held back disbursements

However, a new IBRA governance structure was adopted in 2000, including appointment of a governing board composed of independent professionals. Some progress on restructuring banks and corporate debt has begun to occur. But a recent high-level IBRA appointment has raised some concerns because it is widely believed that the official is closely connected to the Soehartos—who have strong vested interests in IBRA's asset sales, bank privatization, corporate debt restructuring, and other actions.

Vast amounts of funds are idle ($45 billion at the end of December 2000). At that time the average loan-to-deposit ratio of the banks was 36 percent (*The Nikkei Weekly,* 5 February 2001). Some large banks have loan-to-asset ratios as low as 6 percent. Rather than lending, bankers have been keeping their funds in the central bank. In part this is because, in an effort to curb inflation, the central bank interest rate has been as high as 4 percent above the rates offered by commercial banks. Partly it is because bankers do not want to expand lending at a time of high political risk. And partly it is because most of the larger banks have substantial funds in illiquid state bonds.

There were also problems at Bank Indonesia, the central bank. In late 2000 the Supreme Audit Agency reported that during the financial crisis, nearly $9 billion ($17.2 billion at December 2000 exchange rates) provided in emergency loans to private-sector banks, many controlled by Soeharto cronies, had been diverted to unauthorized loans and other spending. "The Supreme Audit Agency estimates that as much as 95 percent of the money may never be repaid. It blames Bank Indonesia for failing to track it. Much of the money went to banks controlled by Suharto cronies, and 59 percent was misspent, says the agency...If [the deficit] were all charged to the bank, it would go bankrupt" (*Asiaweek,* 22 December 2000).

Given the slow progress in restructuring public and private debt and in rebuilding the banking system, the continuing power of the Soeharto family and cronies, rampant corruption, the weak legal and judicial systems, regional unrest, ethnic and religious tensions, and political uncertainties, foreign investors are generally staying away from Indonesia. In a now-famous interview with Dow Jones newswires in May 2000, then-coordinating minister for the economy Kwik Kian Gie said, "If I were a foreign investor, I wouldn't come to Indonesia. The law enforcement is not there, but not only that, the whole thing is so confusing." The minister may have been impolitic, but he was not wrong.

Investors (domestic as well as foreign) were waiting to see whether President Wahid could establish enough political authority to create a viable investment environment. But during the first half of 2001 the rupiah was falling steeply, the country's slow economic growth was faltering, and inflation was rising.

The IMF and Indonesia's other donors had become dissatisfied with the glacial pace of agreed-upon reforms and with the growing political instabilities. In December 2000 the IMF suspended disbursement of a $400 million tranche of its aid program for Indonesia. And at the World Economic Forum in Davos, Switzerland in early 2001, Stanley Fischer, deputy director of the IMF, reported that the progress of structural reform in Indonesia had been very slow. In April 2001, the IMF again decided not to disburse the $400 million of scheduled assistance which was held back throughout the rest of Wahid's presidency because of the views of the IMF and other donors that Indonesia had not complied with parts of the agreement.

In early 2001 Japan, Indonesia's largest donor, informed the Indonesian government that its official development assistance to Indonesia would be reduced. The World Bank and the Asian Development Bank stated similar intentions. The World Bank announced that it would cut its annual loan to Indonesia from $1.2 billion to $400 million. The Bank's vice president for East Asia and the Pacific, Jamal-ud-din-Kassum, said "Improved governance and progress on the reform program will be key determinants of future levels of assistance from the World Bank" (*The Nikkei Weekly,* 5 February 2001).

Wahid declared a state of emergency but the military refused to respond. He became Indonesia's first democratically impeached president

Indonesia under President Wahid. Indonesia's fourth president was a tolerant, libertarian, intellectual who encourages debate and believes strongly in democracy and its institutions. He understood that for Indonesia to become a well-functioning democratic state, transparency and powersharing would be required. But Indonesia is still a neophyte in these areas. And the covert, but strong and well-financed, opposition to such reforms plays by its own rules. Because of the weak, corrupt legal system and judiciary, there are not only no accepted rules, but also few referees (those who attempt to provide justice, as Supreme Court Justice Syafiuddin Kartasasamita did, risk assassination).

The president's low level of managerial and administrative skills, poor health, and lack of support in parliament, the country's lack of functioning institutions, the strength and wealth of the Soeharto forces, the economic problems, the secessionist movements, and the generally chaotic political scene combined to make it impossible for Wahid to govern the country effectively. He was impeached in July 2001 in a democratic process, according the rule of law, at a time when the country needed to move on.

President Megawati Soekarnoputri

By vote of the People's Consultative Assembly (MPR), Megawati Soekarnoputri replaced former President Wahid in a peaceful transition of power on 23 July 2001. She is to serve as president until the 2004 general elections (she will be eligible to run for a five-year term as president at that time). However,

Megawati faces the same difficult problems as Wahid did. Indonesia is a weak state, lacking basic government and civilian institutions, and it is riddled with corruption and special interests. But a strong ruler in the mold of the country's first two presidents may no longer be acceptable to Indonesians.

President Megawati is known as a conservative nationalist. It is widely accepted in Indonesia that Megawati believes the power she now holds to belong to her by destiny.

> She is the immovable object—stolid, silent, imperious—a puzzle to her countrymen even as she commands unrivaled popularity...Her deep and dignified silences create a circle of awe around her...Perhaps, some say this could only happen here, where Javanese culture reveres silence and where power is seen as a mysterious mantle that...envelops a leader of its own accord.
>
> —Seth Mydans, *The New York Times,* 6 May 2001, p. 3

Vice President Megawati Soekarnoputri, Sukarno's daughter, replaced former President Wahid as president in a peaceful transition on 23 July 2001

But Megawati also commands the largest political party and the strongest political support from the people. And she is supported by the military. In the last few months of her vice presidency, when Wahid was concerned mainly with his political survival, Megawati made crucial decisions to restore relations with the IMF—over the objection of the then-coordinating minister for the economy. She adjusted and restructured the budget to bring it in line with the IMF-supported program, removed subsidies on fuel, and took other urgent actions.

In contrast to the MPR's decision about the presidency, the vice presidential election by the MPR was embroiled in bitter partisan politics. There were two leading candidates. One, Akbar Tandjung, is closely associated with the Soeharto regime. At the time of the election he was the speaker of the Indonesian parliament (DPR). He was also the leader of Golkar. The other candidate was Hamzah Haz, a conservative Muslim politician who had been a leader of the opposition to Megawati's candidacy for the presidency after the 1999 general elections, and who lost to her in the 1999 contest for vice president. The view he expressed then was that "Islam does not allow women to lead governments."

In 2001 Hamzah, leader of the United Development Party (a Muslim party), won the election for vice president in the third round of a close race. The political infighting for the vice presidency prompted one political commentator, Chatrib Basri, to comment on a concept of power now emerging in Indonesia (quoted by Seth Mydans in *The New York Times,* 26 July 2001, p. A8): "What's most scary is to see how the elite aren't at all disturbed about what's going on. If there's been any profitable business in these last years [the post-Soeharto times] it's been the business of buying and selling power." It is not that money was never before exchanged for power in Indonesia. But the image is different now, perhaps reflecting deeper changes under way. In the new image power is bought and sold. In the traditional image money flows from power.

President Megawati's choices for her cabinet were widely praised both in Indonesia and internationally. "Much to the market's delight she chose people

well-known and generally highly regarded in business circles to fill the key economics, finance and business posts" (James Castle, *Business Times,* 10 August 2001). *The Jakarta Post* commented, "Megawati names rainbow cabinet...Most key cabinet posts, particularly in the economic arena, were given to professionals and bureaucrats, but there were enough seats left to placate the political factions and secure her the crucial support of the legislature" (10 August 2001). Only 4 cabinet positions (out of 32) are held by members of the military.

In Indonesia cabinets are named. Megawati named hers the *Gotong Royong* Cabinet. Gotong royong is a phrase that is deeply imbedded in Indonesian consciousness. It refers to the ancient but continuing tradition of mutual help found in Indonesian villages—with the idea that everyone contributes to a project, and everyone benefits.

It is widely accepted that President Megawati believes the power she now holds to belong to her by destiny

Economics and finance. With her strong cabinet appointments in economics and finance and her restoration of Indonesia's relations with the IMF, President Megawati showed early indications of a serious intent to restore the economy. Shortly after Megawati's first month in office, the government signed a new agreement preparing the way for resumption of a $5 billion IMF loan program and its long-delayed $400 million installment. The agreement included limiting the budget deficit and setting a timetable for selling or privatizing failing corporations and banks. *The Jakarta Post* (24 August 2001) editorialized:

> A new agreement with the IMF will...strengthen market confidence as it will greatly help smooth Indonesian relations with its creditors...One should not take lightly the good understanding shown on the part of foreign creditors, given the government's foreign debts of about $65 billion and corporate foreign debts of almost $70 billion...The hardest part of the job is for the government to demonstrate its real implementation capability in delivering on [its] promises...Learning from the bitter experiences and mistakes of the previous government, the Megawati administration should develop the kind of capability that reflects three fundamentals in the strategic interactions between people and government officials: accountability, transparency and predictability.

The minister of finance in the Gotong Royong cabinet, Boediono, had presented seven strategic points for stabilizing the Indonesian economy to an international Conference on Indonesia held in Tokyo on 30 March 2001:[43]

- Restoring Indonesia's battered self-confidence.
- Reestablishing law and order.
- Improving policy decisionmaking and implementation.
- Normalizing the financial system.

- Achieving true economic recovery, propelled by new investments as well as a more productive use of existing resources and assets.
- Maintaining macroeconomic balance.
- Managing poverty and inequality.

If these goals can be effectively implemented, Indonesia would be well on its way to recovery. It is too early to comment on the new government's progress toward its economic goals. But as is discussed below, it is worth noting that concerns are beginning to surface that little change appears to be under way and that the cabinet's economics team is running into the same difficulties faced by a variety of predecessors.

Megawati made strong cabinet appointments in economics and finance and showed indications of a serious intent to restore the economy

Other government priorities. In her Independence Day speech on 16 August 2001, President Megawati outlined a number of the government's priorities (see Seth Mydans, *The New York Times,* 17 August 2001, p. A8). Megawati emphasized national stability, human rights, and the need for fighting corruption—about which she said, "Unlike in a feudalistic society, which doesn't consider corruption a serious mistake, in a democratic society it is a big problem." She apologized for human rights abuses committed by the military in separatist rebellions and said the military must reform itself. "We need to pay more attention to human rights. We need a security force which is effective, highly disciplined, and under the control of the government."

For the first time, Megawati acknowledged the independence of East Timor, which she had opposed in 1999. But she ruled out independence for Aceh or Irian Jaya, encouraging them to "help build a new Indonesia."

Megawati also stated that the country's constitution (prepared in 1945 by her father, later abrogated, but reinstated by him in 1959) needs to be revised and updated. She proposed that an independent constitutional commission be established to seek the people's views on issues and then provide a comprehensive draft of the amendment for review and enactment by the People's Consultative Assembly (MPR). MPR Speaker Amien Rais responded positively to this proposal, and discussion of the proposed commission is expected by the MPR.

The issues now are whether President Megawati will be able to implement her government's priorities and achieve for Indonesia a balance between stability and reform—while also controlling the military, reigning in the Soehartos, keeping the country united, maintaining the nation with the largest Muslim population in the world as a non-Islamic state (and managing Indonesia's response to issues resulting from the war in Afghanistan), building relations with the IMF and the international donor community, and holding her support in the legislature and with the people.

These are difficult tasks and there are formidable obstacles. But Megawati has the support of most Indonesians, of the army, and of a majority in parliament. The issue is political will. Three recent views illustrate, in different ways, growing concerns about corruption, inertia, and lack of political will.

It seems that the more things change, the more they stay the same. Corruption flourishes in new, inventive ways, there is no functioning structure to penalize wrongdoing, economic and legal reform is at a standstill and businessmen are refusing to repay debts. Indeed, more than three years after Soeharto's downfall, there is little fundamental difference in how Indonesia's...people are being governed...It all adds up to a familiar gloomy picture. Megawati began her term in office with great promise by appointing well-regarded economics ministers. But the so-called "dream team" is already showing signs of paralysis—thanks in large part to a lack of political will on the part of the president...Says former Attorney-General Marzuki Darusman..."The government is fast becoming immobilized because of inertia."

—John McBeth, *Far Eastern Economic Review,* 1 November 2001, pp. 17, 19

But inertia is strong. "Corruption flourishes...there is no functioning structure to penalize wrongdoing, economic and legal reform is at a standstill"

Modern Indonesia is a crazy place. Incoherent, unprincipled and cynical...It's not a good time for anyone with decency to be in government.

—Sarwono Kusumaadmadja, a cabinet minister in the Soeharto and Wahid governments, quoted by John McBeth, *Far Eastern Economic Review,* 1 November 2001, pp 18–19

Unlike Habibie and Abdurrahman [Wahid], the new president [Megawati] possesses both the legitimacy and the power base that are requisites for becoming an effective leader in the post-Soeharto era. But where is Megawati's political capital being used? Unfortunately, the answer is, towards no apparent end...If Megawati were to be more courageous and ask her followers to support her in making the hard decisions on economic reform and national security, her opponents would have a difficult time in maintaining the status quo of yesteryear. Megawati and her cabinet have the political capital to make a difference in Indonesia's future, but they should be mindful of the old adage, "Use it, or lose it."

—James Van Zorge, *The Jakarta Post,* 19 November 2001

Although President Megawati is not known as a reformer, she has demonstrated courage and political skills under difficult circumstances. Megawati and her government have the political capital to make the hard decisions on the economy, to crack down on corruption, and to begin building the institutions Indonesia so desperately needs. But as of this writing in 2001, it is still too early to know whether the government will exercise the political will needed to meet these challenges effectively.

Democracy and the Messy State

Her father built the Indonesian nation. It is much to be hoped that Megawati will build the institutions that enable a strong democratic state

Indonesia's future is well beyond the scope of this book, as well as beyond its author's crystal ball-reading abilities. But history may provide some perspective. Sukarno led the independence struggle and unified the country. Soeharto took over an economy in chaos and provided three decades of unprecedented economic growth and development. The vast corruption that permeated the country under Soeharto, along with the decades of arrested political development, were recognized and challenged by the same people who had grown up better fed and housed, healthier, and better educated because of the priorities and policies for economic development of Soeharto's New Order government and its economics ministers. President Habibie, Soeharto's protégé, began the political reform process that President Wahid then broadened and deepened.

The country's long-term commitment to its national goals of growth, equity, and stability remain intact (although its goal of harmony seems more problematic). But Indonesia's history as a weak state with a strong ruler led, in the Soeharto era, to a system of governance characterized by pervasive corruption and a severe lack of transparency and accountability. Eventually the governance choked the development. The ensuing crisis was devastating. The transition from the Soeharto regime could not have been easy under any circumstances. But it has been especially difficult because of the severe crisis that triggered the end of the era.

The political climate has provided a major impediment to the country's much-needed institution building. The Soeharto forces are still able to evade justice, undermine reforms, and destabilize the country. And the dearth of experienced national leaders is a direct Soeharto legacy.

Confidence in the Indonesian economy has not returned, and few foreign investors are back. Viability has not been restored in the corporate sector. Severe difficulties stand in the way of restructuring the financial system—the outcome of which will affect the future distribution of wealth in Indonesia.

In addition, the growing religious violence poses a threat to minority religions—and perhaps eventually to the choice made at the time of independence that Indonesia would not be an Islamic state. And the separatist movements provide dangers to the country's unity and to Southeast Asian stability.

On the other side of the ledger, the transition from President Wahid to President Megawati took place peacefully, lawfully, and democratically. Parliament is no longer a rubber stamp. International donors have begun to return. The military is controlled by civilians (though to what extent the military is under control is an issue), and the role of the armed forces has been reduced. The press and other media are free to write and say what they see and what they believe. And on 30 August 2001 East Timor, a United Nations protectorate, elected its first government—in preparation for a transition to independent statehood in 2002. And the many East Timorese refugees remaining in West Timor began to go home.

Box **8.4** **Excerpts from Thomas L. Friedman's "What a Mess!"**

In the cold war we had authoritarian, democratic, and Communist states. Now we have authoritarian states (North Korea, Iraq), democratic states (America, France), democratizing states (Poland, Chile, Hungary), failed states (Sierra Leone, Liberia) and messy states—namely Russia and Indonesia

In messy states the old authority structure that allocated resources, enforced contracts, and collected taxes—President Suharto in Indonesia and the Communist Party in Russia—has broken down but has not been replaced by a new authority that can play the same role The result, in Indonesia and Russia, is rampant corruption and a fragmentation of power in which neither the army, the Parliament, the executive, nor the remnants of the old order have the strength to assert their will Messy states too big to fail, too messy to work

That's why in messy states you never quite know—when arms are sold, people murdered, or payoffs demanded—whether this is by design of those ostensibly in charge or because no one is in charge "In Suharto's time," said Witmar Witoelar, Indonesia's popular talk show host, "things were clear—you always knew who to pay and how long to wait Now you never know who's in charge Before people were being killed by the government Now they are killed because of no government "

Source Thomas L Friedman, "What a Mess!" *The New York Times*, 3 October 2000, p A31

"No one should doubt the severity of the current economic crisis. Yet neither should anyone underestimate our capacity to set our institutions right"

These are among the many remarkable achievements that have occurred in the short period since Soeharto's resignation. And Indonesia continues to have abundant resources: human capital (including a large and educated labor force), ample natural resources, a highly strategic location, an extensive infrastructure, a large domestic market, and long experience with sustained economic growth and development.

In his strategy for the stabilization of the economy, Minister of Finance Boediono listed first the restoration of Indonesian self-confidence. Many Indonesians have suffered financially, physically, and emotionally in recent years. And some have lost pride and confidence in their country. Restoring self-confidence is a sine qua non for restoring the economy and addressing the nation's problems.

Building responsible, accountable institutions that can take over the broad political and administrative functions previously performed by the military is the most difficult, the most pressing, and the most important challenge for President Megawati Soekarnoputri. Her father built the Indonesian nation. It is much to be hoped that Megawati will build the institutions that enable a strong democratic Indonesian state.

Indonesia has become known internationally as a 'messy state': "too big to fail, too messy to work" (box 8.4). But as Mulyono (1981, pp. 178-80) points out in his chapter entitled, "The Wayang: Messy but Loved Down the Centuries," wayang performances (with their "sometimes grotesque incongruities") have been teaching for thousands of years how truth is found beneath mess.

There is no doubt that there are difficult and messy times still ahead. But with its extensive human and natural resources, it is likely that Indonesia will recover and move on. As Ali Wardhana (1998b, p. 5) put it, "No one should doubt the severity of the current economic crisis. Yet neither should anyone underestimate our capacity to set our institutions right."

Notes

1. The 1999 and 2000 GDP growth data are preliminary figures from Biro Pusat Statistik (BPS), the Indonesian Bureau of Statistics.

2. Javanese refers to an ethnic and linguistic category of people who have traditionally inhabited the central and eastern parts of the island of Java. Another group, the Sundanese, are found in the western part of the island. However, some Javanese live in other parts of Indonesia, while other minorities also live on Java (see Koentjaraningrat 1985).

3. For discussion and analysis of Indonesia's history, society, and politics, see Raffles (1977 [1817]); Crawfurd (1993 [1820]); Soedjatmoko (1960, 1967); Palmier (1960); Feith (1962); Soedjatmoko and others (1965); Shaplen (1969); Zainu'Ddin (1970); McVey (1967); U.S. Central Intelligence Agency (1968); Anderson and McVey (1971); Neill (1973); Emmerson (1976); Anderson (1990); Jackson and Pye (1978); McDonald (1980); Jenkins (1984); Van Neil (1984); Robison (1986, 1988, 1990, 1992, 1993); Crouch (1988 [1978]); Crouch and Hill (1992); Bresnan (1993); Mackie and MacIntyre (1993); Vatikiotis (1993); and Schwarz (1994). For discussion and bibliographic references, see Neill (1973) for Indonesia's environment and early history; Geertz (1963, 1984), Koentjaraningrat (1975a, 1975b, 1985), Fox (1980), and White (1983) for Indonesian culture and society; Anderson (1990), Bresnan (1993), and Schwarz (1994) for political history; and Booth and McCawley (1981a, 1981b), Cole and Slade (1996, 1998), Wardhana (1994b, 1997b, 1998a, 1998b), Prawiro (1998), Kenward (1999, 2000), and Stern (2000, forthcoming) for the economy and finance. For analysis of Indonesia in recent years, see also various articles by Seth Mydans in *The New York Times* (Mydans is bureau chief of the *Times* for Southeast Asia).

4. Not all wayang is performed with puppets, although this is its most common form. Wayang orang (human wayang) is enacted by people who play the roles of the wayang characters.

5. The names and episodes given here are those used in Javanese wayang performances of the Ramayana; they differ somewhat from those in the Valmiki Ramayana and from those used in India today.

6. Vibhishana in the Indian versions of the episode.

7. Ravana in the Indian versions.

8. Sita in the Indian versions.

9. In 1999, 14 percent of Indonesians age 15 and older were reported to be illiterate (World Bank 2002, *World Development Report 2002*). But statistics based on census and survey data often use low standards to determine literacy and thus may overstate functional literacy.

10. Other agricultural products include cloves, coconuts, fruits and vegetables, peanuts, soybeans, sugarcane, sweet potatoes, tobacco, and goats, pigs, sheep, and cattle. Both fishing and fish farming are common.

11. "At the time of independence in 1945 there were only 230 *pribumi* [indigenous Indonesians] and 107 ethnic Chinese higher education graduates" (Cole and Slade 1996, p. 324).

12. See Schwarz (1994, chapter 1) for an excellent, succinct analysis of the ideology and politics of the Sukarno era. This section draws heavily on that chapter.

13. Indonesia's first (1945) constitution was superceded by its second constitution (1949), which was written following negotiations with the Dutch over a cease fire. The1949 constitution, considered tainted by Dutch influence, was replaced in 1950 by a third constitution written by Indonesians. In 1959 Sukarno abrogated the 1950 constitution and decreed a return to the 1945 constitution.

14. In 1958 a group of military officers set up a rebel government based in West Sumatra. "The Revolutionary Government of the Republic of Indonesia (PRRI)...did not seek to break up the Indonesian nation. Rather, its formation reflected the frustration of regional military commanders with the armed forces headquarters and the civilian political leadership in Jakarta, and their desire to see a new national government " (Schwarz 1994, p 13). Against the advice of the U.S. embassy in Jakarta, the rebel government received logistical and military aid from the U.S. Central Intelligence Agency (CIA), which was concerned that Sukarno was too close to the Indonesian communist party.

15. Jenkins (1984, p 2) points out that although the phrase "the middle way" is commonly attributed to Nasution, it was Professor Djokosutono who named the concept "the middle way."

16. See Higgins (1968 ch. 3); Glassburner (1971); Mackie (1971); Booth and McCawley (1981b); and Arndt (1984) for analysis of the economic situation during this period. For articles on many aspects of the Indonesian economy, see issues of *Ekonomi dan Keuangan Indonesia* and *Bulletin of Indonesian Economic Studies.*

17. For various viewpoints about the controversy surrounding the attempted coup, its background, and its effects, see U.S. Central Intelligence Agency (1968); Anderson and McVey (1971); McDonald (1980); Crouch (1988 [1978]); Bresnan (1993); Schwarz (1994); Kahin and Kahin (1995); and Gardner (1997). A recently declassified official U.S. State Department history that describes U.S. policy on Indonesia in the mid-1960s states: "Gradually the [U.S.] embassy came to realize that Indonesia was undergoing a full-scale purge of P.K.I. influence and that these killings were overlaid with longstanding and deep ethnic and religious conflicts." The history includes a 2 December 1965 memorandum from Ambassador Marshall Green to the State Department supporting payment to a key civilian member of an organization known as Kap-Gestapu, which was involved in the campaign against the communists that was backed and coordinated by the army. The ambassador's memorandum commented, "The chances of detection or subsequent revelation of our support in this instance are as minimal as any black bag operation can be" (*The New York Times,* 28 July 2001, p. A3).

18. Schwarz (1994, p. 20) considers these the most credible estimates of the number killed, noting that estimates of deaths range from less than 100,000 to more than 1 million. The Indonesian word *amok* (uncontrolled, berserk) is often used to characterize the events of these months.

19. Sementara, which means temporary, was added to the acronym MPR because the People's Consultative Assembly (MPR) was called to meet at a time when there had been long-postponed elections (McDonald 1980, p. 58). The People's Consultative Assembly meets every five years to elect the president and approve basic policy. In practice, until after Soeharto's resignation in 1998, the MPR had a strong tendency to elect the incumbent and rubber-stamp government policy. In this case "the MPRS was still dominated by Sukarno's appointees...but did Soeharto's bidding after hearing an unusually contrite Sukarno" (McDonald 1980, p.58).

20. Schwarz (1994, p. 46) quotes a 1991 Soeharto statement: "I have always asked God to guide me in each of my tasks. And thank God, to this day...I have never felt that I have failed. And if people think I have been wrong, I think: Who is it who can

rightfully gauge my mistakes? Who decides if something is wrong? I believe that whatever I do, after I've asked for guidance and direction from God, that whatever the results, these are the results of His Guidance."

21. "The police and other branches of the military responded to a rise in the crime rate in 1983–85 by executing some 5,000 suspected criminals in various cities throughout Indonesia, all without benefit of trial. In many cases the bodies were dumped in public places to serve as a warning to the community. At the time the military vigorously denied responsibility for the wave of mysterious killings, which was called *petrus* in Indonesian...But some years later, in his autobiography, Soeharto admitted that *petrus* had been a government-sponsored operation from the start" (Schwarz 1994, p. 249).

22. See Bresnan (1993, ch. 3), Cole and Slade (1996), and Stern (forthcoming) for discussion of the technocrats and their role in Indonesia.

23. This section draws from Wardhana 1994b, 1997b, 1998a; Cole and Slade 1996; Prawiro 1998; and Stern 2000, forthcoming. I am grateful to Joseph J. Stern, an expert on the Indonesian economy, for his help in providing economic data for this chapter.

24. By 1994 Indonesia was the world's 3rd largest exporter of footwear in the world (after Italy and China), 11th largest exporter of garments, 12th largest exporter of textile fibers, and 13th largest exporter of furniture.

25. PAKDES I is an acronym for Paket 23 December 1987.

26. Paket October 1988.

27. Paket January 1990.

28. See discussion of Kredit Usaha Kecil (KUK) in chapter 9. In April 1997 the requirement was changed to 22.5 percent of the loan portfolio or 25 percent of net bank credit expansion.

29. The number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates (World Bank 1997f).

30. The 1996 GNP per capita of the 15 countries ranged from $770 for Lesotho to $1,390 for Ecuador. The remaining countries (from lowest per capita GNP to highest) were Egypt, Bolivia, Macedonia FYR, Moldova, Uzbekistan, Indonesia, the Philippines, Morocco, Syria, Papua New Guinea, Bulgaria, Kazakhstan, and Guatemala.

31. See Jenkins (1984), Crouch (1988), and Schwarz (1994) for discussion of the role of the military in Indonesia.

32. The MPR is also the only body that can amend the constitution.

33. There were, however, numerous instances of guerrilla fighting within Indonesia, often generated by regional independence movements (as in Aceh, East Timor, and Irian Jaya), with varying degrees of military involvement. There were also guerrilla engagements across neighboring country borders, as in Papua New Guinea

34. Technically the joint secretariat of the Golkar functional groups is a government-sponsored coalition of groups such as agricultural workers, factory workers, women, youth, and businesspeople.

35. In 1993 Soeharto arranged for Information Minister Harmoko to became the first civilian Golkar leader, but Golkar was still controlled by the military.

36. For discussion of Indonesia's political economy, see Bresnan 1993 and Schwarz 1994; see also Cole and Slade 1996, ch. 10.

37. Upon Soeharto's resignation in May 1998 he was succeeded by B. J. Habibie, the vice president. In 1999 general elections were held and Wahid was elected president by the MPR.

38. The former president spells his name Soeharto, and this is the spelling normally used in Indonesia. The foreign press, however, often uses the spelling Suharto.

39. See Schwarz (1994, ch. 6) for discussion of this play, the third in a trilogy, and the context in which it was ordered closed.

40. For analysis of the crisis in Indonesia see Wardhana (1998b); Cole and Slade (1998); World Bank (1998b); Radelet (1999); Kenward (1999, 2000); and Stern (2000). For discussion of the East Asian crisis more broadly, see World Bank (1998a); Furman and Stiglitz (1998); IMF (1999c, 1999d, 1999e); Lane (1999); Lane and others (1999); Radelet and Sachs (1998, 1999); Stiglitz and Yusuf (2001).

41. Furman and Stiglitz (1998, p. 71) argue that while countries would do well to improve transparency, this does not inoculate them against a crisis. "In the case of Indonesia, there is a plausible case that...the crisis may have been due to the expectation that corruption was going to be reduced. A substantial fraction of the profits and value of many companies...may have been based on their political connections to the Suharto regime and the favors that followed from them. The worrisome news in the fall of 1997 was not that this corruption and nepotism existed. Rather, it was that these connections or favors might dry up, either because of the increased transparency promised by the reforms or because of the increased likelihood that Suharto's regime would end because of his poor health or political vulnerability. The costs of this openness for many investors—rather than corrupt practices by the government—may have played a role in the large outflow of capital that was the central feature of the crisis."

42. Megawati's earlier party was the PDI. When Soeharto realized that she was attracting attention and support as head of PDI, he had her removed as party leader. She then formed PDI-P; the P for Perjuangan (struggle) symbolizes the struggle against the Soeharto regime.

43. "The International Conference on Indonesia: Strategy for the Stabilization of the Indonesian Economy and its Sustainable Development in the Future," at Mita Kaigisho, Tokyo, 30 March 2001.

9 Rural Development and Rural Financial Institutions in Indonesia

Located on the world's largest archipelago, Indonesia is home to more than 200 million people and hundreds of ethnic groups, most of whom live in rural areas. The country encompasses a large variety of environments ranging from dense tropical rainforests to terraced rice paddies to tiny islands of coral reef. Its rural areas contain a rich variety of natural resources, including oil, natural gas, and an abundance of minerals. The main food crop is rice—grown in irrigated wetlands, drylands, swamps, and even jungles where small plots of land are burned and cultivated in rotation. Other food crops—maize, cassava, vegetables, and fruits—are cultivated on rainfed lands, while plantation agriculture, a legacy of the Dutch colonial era, produces export crops such as palm oil, rubber, coffee, tea, and the spices for which the Indonesian islands are famous. With its

thousands of islands, the country also has a large supply of fish, although the industry is not fully developed.

This chapter examines Indonesia's rural development and its century-old history of rural financial institutions. The country is home to the world's largest sustainable microfinance system and many local commercial microfinance institutions. But a long-standing tension prevails between those who promote massive rural credit subsidies and those who foster independent commercial financial institutions. A similar tension exists between supporters of member-based financial cooperatives and those who advocate publicly or privately owned rural financial organizations that serve the public. Examples are provided of these and other recurrent themes in Indonesia's rural finance.

Indonesia is home to the world's largest financially self-sufficient microbanking system and many smaller commercial microfinance institutions

The green revolution came to Indonesia in the 1970s, making possible major gains in the production of rice and other food crops. The government invested much of its oil wealth in rural areas, developing infrastructure, agriculture, and human capital. New methods of rice cultivation brought higher yields and multiple cropping that at first benefited mainly rural elites with valuable irrigated ricelands. But soon the benefits reached smaller farmers as well, and the increased labor requirements of multiple cropping offset labor displacements caused by new cultivation techniques. Eventually the commercialization of agriculture and growing off- farm employment opportunities brought substantial production growth, rapidly increasing monetization, and rising per capita incomes to rural areas. By the early 1990s many areas of rural Indonesia had gained substantially from the green revolution. But considerable rural poverty remained, as did significant regional and local disparities in income distribution and employment opportunities.

Rice production in Indonesia increased from 22 million tons of dry unhulled rice in 1976 to 50 million tons in 1996. As incomes rose, so did per capita rice consumption and food consumption generally. In addition, massive investments in education, health, and family planning improved nutrition and health and increased awareness, skills, and expectations. Roads and communication facilities opened up inter-island travel and migration. Middle- and upper-income rural households generally prospered, especially in irrigated lowland regions. Many less developed rural areas also saw economic growth and increasing employment opportunities, though to a lesser extent. But inhabitants of poorer regions, especially on some eastern islands, had fewer opportunities for development.

In Indonesia a century-old tension exists between those who promote rural credit subsidies and those who foster independent commercial financial institutions

Until the late 1980s rural Indonesia was served by few commercial banks other than the unit desas of Bank Rakyat Indonesia (BRI). There were, however, many commercial financial institutions in rural areas, usually owned by provincial or local governments. But these institutions typically operated on a relatively small scale. In the late 1980s banking deregulation led to a substantial increase in the number of banks and bank branches in the country. Some of these operated in rural areas, but usually only in well-developed regions. The market share (in value of outstanding loans) of rural financial institutions in the financial system hardly varied between 1985 and 1995—it was about 2.5 percent in 1985 and about 2.1 percent in 1995. In 1995 the unit desas, which are examined in chapters 11–15, accounted for 48 percent of the number of loans in microfinance institutions, 63 percent of the value of outstanding microcredit, 76 percent of the number of savings accounts, and 81 percent of the value of savings.

The subsidized credit programs implemented by commercial banks and funded by the government and donors generally suffer from high costs and high arrears. They often do not reach the poor—or reach them in ways that do not suit borrowers' needs. And the programs are not sustainable. Worse, they deflect attention (and adaptation) from Indonesia's long history of commercial, viable microfinance in rural financial institutions, some private banks, and the unit desas.

This chapter examines both commercial and subsidized rural financial institutions and programs. First the century-long development of Indonesia's commercially oriented People's Credit Banks (Bank Perkreditan Rakyat, or BPRs) is reviewed. This is followed by discussion of rural finance in the 1980s, government initiatives in the 1990s, and development of the BPRs after the 1992 Banking Law. Finally, the chapter analyzes six very different rural financial institutions and programs using data from 1995–98. These organizations—four BPRs (public and private), a Grameen Bank replicator, and a large subsidized credit program linking banks and self-help groups—illustrate well the range of approaches to microfinance in Indonesia—and their results—as well as the current dilemmas and recurrent themes in Indonesian rural finance.

The first three BPRs discussed (two public and one private) are sustainable financial intermediaries that serve both poor and non-

poor clients. The fourth BPR, as it operates in one district, provides a classic example of how corruption, politicization, and lack of accountability can prevent profitable commercial microfinance while putting poor savers' money at risk. The highly subsidized Grameen replicator offers a rigid, targeted microcredit program in a province that already has hundreds of experienced BPRs offering flexible microfinance programs. As a result the replicator has low capital, low outreach, and 39 percent financial self-sufficiency in 1995 (Seibel and Parhusip 1998, p. 15). The subsidized program linking banks and self-help groups—a large, unnecessarily complicated, inefficient program with layers of intermediaries—attained substantial outreach but at very high cost (in fiscal 1995/96 the annual effective interest rate would have had to have been 277 percent to fund full program costs). Moreover, borrowers paid high annual effective interest rates—typically more than 100 percent and in some areas up to 450 percent.

Commercialization of agriculture and off-farm employment resulted in production growth, increasing monetization, and rising rural per capita incomes

In 1997 the start of the economic crisis and a severe drought caused substantial hardship in many rural areas. Agricultural growth fell to less than 1 percent in 1997, a sharp decline from the 3 percent growth of 1996. Marginal areas and poor people were hit particularly hard by the drought and the crisis, as employment decreased and prices rose. Social safety net programs were crucial for the rural poor, yet in many cases were inadequate. There was considerable variation in food security by province and district, with some provinces facing severe food shortages. But the 1998/99 and 1999/2000 rice harvests were good, and production of other food crops improved as well. In addition, especially on some of the Outer Islands where the rural economy is dominated by export crops such as palm oil, coffee, and rubber, the plunging rupiah resulted in increased exports and substantial incomes for farmers. But as discussed in chapter 8, as of mid-2001 economic and political difficulties continue in Indonesia.

Yet even as Indonesia's financial system collapsed during the crisis, the leading commercial microfinance institutions—a number of the BPR systems, BRI's unit desas, and Bank Dagang Bali—remained liquid, profitable, and stable. Together these institutions serve about half the county's households—providing a powerful lesson about the stability of sustainable microfinance institutions even in times of severe economic, financial, and political crisis.

In 1976, 80 percent of Indonesia's 136 million people lived in rural areas (World Bank, *World Development Report 1980*). Although there has since been a substantial increase in the urban population, much of it due to rural-urban migration, the country remains predominantly rural. In 1999, 60 percent of Indonesia's 207 million people lived in areas classified as rural (World Bank, *World Development Report 2000/2001*). But there are substantial differences among the many Indonesian islands, and rural conditions vary considerably. For example, the 1995 population density on Java—where 59 percent of the country's population lived on 7 percent of its land—was 900 per square kilometer. In Irian Jaya (now Papua)—where 1 percent of the population lived on 22 percent of the country's land—population density was 8 per square kilometer (Government of Indonesia 1996, p. 47). Infrastructure, agriculture, communications, education, health, and the like tend to be more developed in rural Java and Bali and less developed in rural Papua, Nusa Tenggara, and Kalimantan. Parts of Sumatra and Sulawesi fall along different points of this continuum.

Massive investments in agriculture, education, health, and family planning improved nutrition and health and increased awareness, skills, and expectations

Geographic and Demographic Diversity

There is enormous geographic variation in the Indonesia archipelago. The country has mountains, hills, plateaus, plains, rivers, lakes, and volcanos. It has tropical rainforests, swamplands, savanna, elevated coral reefs, areas of intensive irrigated agriculture on rich alluvial soils, and places where little grows on dry, leached-out earth. Indonesia is rich in natural resources, with oil and natural gas, tin, coal, bauxite, nickel, gold, silver, manganese, copper, and other minerals.

Asian land vertebrates are found in the western islands of Sumatra, Java, Bali, and Kalimantan, which had land connections to the continent when the Sunda shelf, part of the Asian continental shelf, was largely exposed during the Pleistocene period. Similarly, Australian animals moved overland into Irian Jaya and other eastern Indonesian islands when much of the Sahul shelf, part of the Australian continental shelf, was exposed. Alfred Russel Wallace, the British naturalist who explored Indonesia in the mid-19th century, found that a line drawn through the Makassar and Lombok Straits (east of Bali and west of Sulawesi) marked the division between Asian and Australian fauna. It was later found that Asian and Australian fauna coexist in a transitional area in the central Indonesian islands[1] around Sulawesi, the largest of a group of islands that lies between the two great shelves.

Rainfall is highest in the western part of the country and decreases toward the east; the typical range is from more than 200 inches a year to less than 40 inches. The country's rural population is concentrated in areas where there is recent or continuing volcanic activity. Young volcanic soils are highly fertile and permit the growth of the dense rural populations found in Java and Bali.

Stated on Indonesia's national emblem are the words *binneka tunggal ika* (diverse but united). The country is home to several hundred ethnic groups, most with mutually unintelligible languages. Java is populated by a Javanese

majority, a large minority of Sundanese primarily in West Java, and several smaller ethnic minorities. Moving from west to east across the archipelago, small ethnic groups and small speech communities become more pronounced until in Irian Jaya there are small bands with separate languages spoken by fewer than 100 people (Koentjaraningrat 1975b, p. 54). But except for some elderly people, nearly all Indonesians now speak the national language, Bahasa Indonesia.

Indonesia is heavily Islamic, with Muslims making up nearly 90 percent of the population; the largest minorities are Protestant, Roman Catholic, Hindu, and Buddhist. In studying the cultures of Indonesia, Koentjaraningrat (1975b, pp. 57–60) placed the hundreds of ethnic cultures into four general categories:

- Small groups of isolated peoples whose livelihoods are based on shifting cultivation, found mainly in the smaller eastern islands and in Irian Jaya.
- Interior peoples whose livelihoods are based on swidden[2] or irrigated agriculture, with rice as the main crop. These groups live in village communities and interact with people in nearby administrative towns. Examples are found in North Sumatra, Central Sulawesi, and the eastern islands.
- Coastal peoples who cultivate rice as their main crop. This is a heterogeneous mix of maritime peoples descended from Malays, Javanese, South Indians, Arabs, Persians, Portuguese, English, Dutch, and Chinese.
- Interior settlements of people whose subsistence is based on wet rice agriculture. These village communities, characterized by significant social stratification, are located most notably in Java and Bali. Elaborate agrarian-based royal courts developed in some of these areas. The Javanese gentry have dominated Indonesia's government and development since independence.

6 rural microfinance institutions are used to illustrate the range of approaches and results in Indonesian rural finance

However, many changes have occurred since Koentjaraningrat's 1975 classification. The opening of road travel throughout Indonesia, rural-urban migration, inter-island migration, the green revolution, the growth of overseas employment opportunities, and the explosion of infrastructure, communications, and education have changed the country greatly. Koentjaraningrat's categories remain relevant and important for understanding Indonesia, but the dynamics of these groupings are shifting. As James J. Fox (*The Independent Monthly,* 17–19 February 1990, p. 18) put it in a discussion of Java:

> But, in truth, Java is a single settlement. What makes it a single settlement is its incredible flow of traffic. The Dutch left the island with a peasant population very much tied to the land in separate subsistence-oriented villages. But over the last 20 years Mitsubishi and Mercedes Benz have managed to open up the villages; Mitsubishi with its mini-van, the Colt, that could—and did—reach the most isolated villages, and then Mercedes with huge buses that take passengers across the island in less than a day.

Rural Development

Given its geographic and cultural variety, it is not surprising that many types of agriculture are found throughout the Indonesian archipelago. The country supports a vast range of food types and other agricultural products.

Varieties of agriculture

The main rice supply comes from sawah (irrigated riceland) agriculture.

> *Sawah* is a field that is meant to be flooded; it is surrounded by a small dike, and if it is on the mountainside, the slopes must be terraced. Sometimes the flooding is left to the rains, but the result of this procedure is unpredictable, for rainfall might be too much, too little, or poorly timed. Usually ditches or bamboo pipes lead water to the *sawah* from a nearby stream.
>
> —Neill 1973, p. 43

When the financial system collapsed during the crisis, BRI's unit desas, BDB, and many People's Credit Banks (BPRs) remained profitable and stable

Sawah, which refers to wet-field cultivation on irrigated rice fields, regardless of the source or quality of irrigation, is the environment in which most rice is grown in much of Java, Madura, Bali, and Lombok, parts of Sumatra and Sulawesi, and in scattered parts of other areas.

Estate (plantation) agriculture was introduced to Indonesia by its Dutch colonizers. Plantation crops include palm oil, rubber, sugarcane, tobacco, coffee, tea, and spices. These crops are grown on large estates but most are also cultivated by smallholders. Depending on the crop, plantations are found in both highlands and lowlands. Timber production is concentrated in the Outer Islands (outside Java and Bali).

Another type of cultivation is known as *tegalan* (dryland) agriculture; this refers to land that is normally continuously cropped but is not irrigated. Rice, maize, cassava, sweet potatoes, peanuts, soybeans, vegetables, and fruits are common in rainfed agriculture. *Pekarangan* (mixed garden) cultivation is usually found in small household or village plots. In *ladang* (or swidden) agriculture, an ancient technique, a small forest area is burned and rainfed crops are grown in the ashes. The cultivated area is productive for a few years but then yields decline rapidly and the cultivator moves on, burning a new plot on which to plant yams and other root crops, rice, and other crops. After some years the original plot is often cultivated again, and the cycle begins anew. Ladang cultivation is common in parts of Sumatra, Kalimantan, Sulawesi, and Maluku and other eastern islands. In 1995, 23.9 percent of the country's land was in estate cultivation, 19.6 percent was in ladang, 16.5 percent was in wooded areas, and 14.6 percent was in sawah. The rest was used for housing and other purposes (Government of Indonesia 1996, p. 151).

Rice, the primary staple food of Indonesia, is grown on irrigated wetlands, on drylands, in swamps, in garden areas, and in shifting ladang cultivation. Animal husbandry is common, especially for goats, cows, buffalo, poultry, and (in non-Muslim areas) pigs. Fish come from both salt and fresh waters and from

fish cultivation in brackish water ponds, fresh water ponds, cages, and flooded sawah fields.[3] Shrimp cultivation has also been developed in recent years.

Cultivation on Java in the early 20th century

Thomas A. Fruin, president of the Algemeene Volkscredietbank (AVB), a precursor of BRI, wrote an extraordinary manual for the AVB in 1935. *The Provisional Manual for the Credit Business of the General Popular Bank* was based on decades of work that had brought Fruin and others into close contact with Indonesian farmers. The AVB and its predecessor, the Volkscredietwezen (Popular Credit System)—early credit institutions established in Indonesia by the Dutch colonial administration to provide banking services to indigenous Indonesians—are discussed in chapter 11. What is of interest here is the analysis of indigenous farming in Indonesia that Fruin constructed to learn how best to provide and recover loans from different kinds of farmers. Many of the inputs into the manual came from articles by Fruin and others in the monthly journal *Volkscredietwezen*, published under several names beginning in 1913, but from 1931 on known as *Volkscredietwezen*.

On Java in 1995, 59 percent of Indonesia's population lived on 7 percent of its land. In Irian Jaya 1 percent of the population lived on 22 percent of the land

Many of today's rural banks could learn from Fruin's section on types of loans in indigenous farming on Java (Fruin 1994 [1935], p. 132). He begins:

> If one examines the credit business of any former popular credit bank one is often struck by the large measure of uniformity revealed; this is due to the fact that no more than one or two different types of loans can be found. Further study then reveals that exactly the same types were used by many similar institutions. In other words, insufficient account was taken of the different kinds of agriculture within a region or of the differences between regions. If this situation is to be improved, each local office will have to investigate, district by district, what the normal types of farming are. It is not therefore sufficient to know what the principal crops are in the region, to consult monthly figures on planting and harvesting of each crop, to have some idea about the kinds of fruit trees which are grown, about trade or about employment; one must consider farming as an organic whole, i.e. find out how crop rotation operates in particular types of farming, how large such a farm has to be to support the farmer and his family, which crops are intended for sale, which exclusively for food and which for both, and in the latter case in what proportions they are divided, whether and to what extent such a business usually derives cash income from horticultural and orchard produce, whether cottage industries or coolie work normally provide additional income, and so on.

The KUPEDES loan instrument, created much later for BRI's unit desas, reflects Fruin's lessons. KUPEDES provides loans in a wide range of amounts,

offering 36 combinations of repayment and maturity options so that borrowers can select loans appropriate for their particular needs.

In the 1920s and 1930s Fruin painstakingly analyzed different types of farming from the viewpoint of credit extension (see chapter 11). These included cycles of rice cultivation on irrigated wetlands and on higher-elevation rainfed drylands, crop rotations of rice and secondary crops such as maize, cassava, and vegetables, and cultivation of both cash crops such as tobacco and coffee and of crops that may be for subsistence or for sale (rice, cassava, fruits). Although Fruin's purpose was to examine farming in order to establish credit procedures, much can also be learned from his manual about the various types of farming and the marketing of farm produce that were then common in different areas of Java. While there have been considerable changes in farming in Java (and elsewhere in Indonesia) as a result of the green revolution, Fruin's principles of agricultural credit and many of his observations about Javanese agriculture remain relevant today.

The main rice supply comes from irrigated ricelands. But rice is also grown on rainfed drylands, in swamps, and in forest areas using shifting cultivation

The green revolution

In the mid-1960s international agricultural research began to demonstrate that new high-yielding technology could significantly increase agricultural productivity. Based on high-yielding seed varieties, substantial growth in the use of chemical fertilizers, insecticides, new cultivation and management techniques, expanding irrigation, and in some cases new agricultural machinery, the green revolution resulted in a large-scale shift to commercial cultivation of foodgrains in many developing countries. In Indonesia—as in most countries—the results varied by region, by crop, and by farmers' access to land, water, labor, credit, and marketing facilities.

Cultivation patterns. The green revolution made possible major gains in the production of rice and other food crops. Increases in rice production have come from both intensification, primarily on Java and Bali, and extensification, primarily on some of the Outer Islands. Increases in rice production from intensification have come from higher yields and increased cropping intensity (two or three crops a year instead of one). Other areas that have achieved significant rice intensification are North, West, and South Sumatra and South Sulawesi. In 1996 average yields in sawah paddy production were 54 quintals[4] of dry unhulled paddy (*gabah*) per hectare on Java and 40 quintals per hectare off Java, with a range in average quintals per hectare from 28 in Irian Jaya and East Timor to 55 in East Java. For Indonesia as a whole the average yield for sawah paddy production was 47 quintals of gabah per hectare, while the average yield for dryland paddy cultivation was 22 quintals of gabah per hectare (Government of Indonesia 1996, pp. 164–65).

In contrast to intensification, rice extensification occurs by bringing new lands under cultivation. Beginning in the 1970s, far more new land was cultivated with rice off Java than on Java. But much of the land used to extensify rice cultivation outside Java is only marginally suitable for rice growing (see

chapter 11), and Java produces more than 60 percent of the country's rice. Overall, rice production in Indonesia increased from 22 million tons of gabah in 1976 (when the population was 136 million) to 50 million tons in 1996 (when the population was 197 million). But the demand for rice increased faster than the population. As incomes rose, so did per capita rice consumption. Most of those whose main diet had been cassava or maize switched to rice when they could afford to do so. In 1996 Indonesia produced 17 million tons of cassava, of which 55 percent came from Java, and 9 million tons of dry loose maize, of which 61 percent came from Java (Government of Indonesia 1996, pp. 166–67).

Thus Java remains Indonesia's principal source of rice and other staple food crops. The Outer Islands contribute much of the country's export crops, such as palm oil, coffee, rubber, and timber, as well as oil, natural gas, and minerals.

The green revolution significantly increased food production. But the results varied by farmers' access to land, water, labor, credit, and markets

Results. The effects of the green revolution in Indonesia, especially for rural Java, have been much debated (see Manning 1987). During the 1970s many social scientists reported that the commercialization of agriculture on Java was causing increasing inequalities among the rural population (Penny and Singarimbun 1973; Collier and others 1974; Budhi-santoso 1975; Hinkson 1975; Sinaga and Collier 1975; White 1976, 1979; Palmer 1977b; Gordon 1978; Hart and Sisler 1978; Sinaga 1978; Sayogyo 1982 [1973]). It was argued that:

- The benefits of the new agricultural technologies reached primarily large farmers who had access to irrigation, credit, and high-yielding inputs appropriate for well-irrigated sawah.
- The new methods, especially for weeding, harvesting, and rice hulling, lowered costs for cultivators but decreased employment opportunities for laborers (Collier and others 1974; Collier, Soentoro, Hidayat, and Yuliati 1982; Budhisantoso 1975; Sinaga and Collier 1975; Singarimbun 1976; Sinaga and others 1977; Collier 1978; Sinaga 1978; Manning 1987, ch. 4).
- Rural elites and urban residents were consolidating the fragmented lands that poor farmers could no longer afford to cultivate.
- New agricultural methods and changing forms of labor contracts weakened the patron-client and communal ties believed to demonstrate Geertz's (1963) concept of a cultural norm of "shared poverty" (Collier and others 1974; Budhisantoso 1975; Ruttan and Binswanger 1978; Collier 1981; Hart 1986a, 1986c; Manning 1987, ch. 5).[5] In addition, attention was drawn to the increasing replacement of cottage industry products by manufactured goods.

There is some truth to all these statements. But the dismal picture of increasing income inequality, poverty, and polarization portrayed in much of the literature of the 1970s and early 1980s was oversimplified and did not provide an accurate representation of rural realities.[6]

Thus while the new methods for cultivating rice benefited the rural elites earlier and more extensively than was the case for small farmers, some farmers with small plots also gained from the higher yields and multiple cropping made

possible by the new technologies. In addition, the increased labor requirements of multiple crops offset much of the labor displacement and employment distribution problems caused by the new cultivation techniques and labor contracts.

The government's extensive investment of oil wealth in rural areas in the 1970s—in agriculture, infrastructure (irrigation, roads, markets), health, family planning, and education—had generally succeeded, by the 1980s, in improving agriculture, creating employment, and raising rural incomes. But the distribution of these benefits varied considerably by region, locality, social and economic status, occupation, and gender. Increasing employment generation included both off-farm work in rural areas (trade, construction, food processing, services) and employment opportunities for rural workers in urban areas (both in informal petty trade, transportation, construction, and small-scale manufacturing, and in then-emerging formal sector labor-intensive export activities).

Although large farmers often control more irrigated riceland (sawah) than they own, sawah is generally not concentrated in large holdings

Although large farmers often control more irrigated riceland (sawah) than they own, sawah is generally not concentrated in large holdings. This outcome is probably due to the multiple employment activities that enabled many small farmers to retain their lands, and to the better education and increasing investment opportunities available to large farmers who were able to diversify their economic investments.

Most middle- and upper-income rural households have prospered, especially in the irrigated lowland regions of Java, Bali, and Sulawesi. Two or three crops a year are now normally cultivated in these regions, creating additional employment. In 1996 agriculture accounted for just 17 percent of GDP, yet employed 44 percent of the Indonesian workforce (Government of Indonesia 1996, p. 45). Yields have increased considerably, and crops are frequently sold in bulk for cash. Widespread improvements in roads and related growth in transportation—popularly called the "Colt revolution"[7]—in combination with the greater employment opportunities generated by labor-intensive exports, expanded income sources beyond the village. This, in turn, increased remittances and transfers of funds to rural areas.

Overall, irrigated lowland villages saw economic growth and increasing monetization, much higher crop yields, added employment opportunities for the many landless, an emerging pattern of multiple income sources (including new off-farm activities in manufacturing, services, and trade), and higher mobility (see Keyfitz 1985 and Fox 1990 for accounts of the rapid development of two East Java villages over time).[8]

Many less developed rural areas were similarly characterized, though to a lesser extent, by economic growth, rising employment opportunities, multiple income sources, and increasing monetization. But the inhabitants of poorer regions, especially in parts of Kalimantan and some eastern islands, had fewer opportunities for development.[9] In 1996 the rural population below the poverty line varied across provinces from 3.5 percent (Bali) to 33.1 percent (East Timor) (Government of Indonesia 1996, p. 574).[10] Special programs, public and private, were instituted to reach the "left behind" (*tertinggal*) people and villages. Even in Java some poor villages remain left behind. In the mid-1980s I talked

with a man who worked in Jakarta as a laborer for a microenterprise that sorted and sold recyclable waste purchased from ragpickers. From this work he was able to send about $20 a month to his family in a poor Central Java village. I asked him what was the main difference between living in the city and living in his village. He answered without hesitation, "In Jakarta I can eat every day and as much as I want. I can eat until I burst. In the village I might eat today but I won't know today if I will eat tomorrow."

Rural development during the Indonesian crisis

In 1997 the economic crisis, along with the devastating drought, eroded and in some cases erased gains that had been made in rural development. Particularly hard hit were marginal areas and the poor. The social safety net programs discussed in chapter 8 were crucial for the rural poor, but many of the poor were not reached, were not adequately provided for, or were not reached at the time of greatest need. As a result the number of people below the poverty line increased from 11 percent in 1996 to an estimated 20 percent in 1998. Some rice eaters switched back to cassava, maize, and sweet potatoes. Prices rose, employment dropped, some children left school, health care and medicine were not always available or affordable, and the gap between prevailing conditions and people's expectations widened.

But the 1998/99 and 1999/2000 rice harvests were good, and production of other food crops—maize, cassava, soybeans, potatoes, and peanuts—improved as well. In addition, especially in some outer islands where the rural economy is dominated by export crops such as palm oil, rubber, and coffee, the precipitous fall of the rupiah resulted in increased exports and substantial incomes for farmers. By the end of 1999 the percentage of people below the poverty line was back to the pre-crisis 1996 level of 11 percent. Overall, the impact of the crisis on the poor was generally more severe in urban areas than in the countryside.

Employment was generated by the labor requirements of multiple crops and rural off-farm work, and by opportunities for rural labor in urban areas

Even with the substantial difficulties Indonesia faces as of mid-2001, there is no question that its rural poor have made strong gains over the past three decades. Although some rural inhabitants are still below the poverty line, most have benefited from more diverse employment opportunities, increased real incomes, and better nutrition, health, education, and housing. Huge government investment in rural areas during the Soeharto era—in agricultural technology, infrastructure, education, health and family planning, communications, and food processing and other off-farm rural activities—laid a firm foundation for continuing development. When Indonesia achieves the political stability and will to implement needed economic and financial reforms, these rural assets can serve as a springboard for future development.

Developing Rural Financial Institutions

Indonesia has a long history of rural financial institutions, dating to the late 19th century when the early Volksbank (People's Bank) and Afdeelingsbank (Dis-

trict Bank) were introduced by the Dutch colonial administration. After independence, different kinds of rural financial institutions continued and many new ones were developed, variously called rural banks, village banks, market banks, people's banks, and the like. The generic term for these small local banks is Bank Perkreditan Rakyat (People's Credit Bank, or BPR), but as will be discussed, this term has multiple meanings.

BPRs are small independent rural financial institutions, widely scattered. Many offer both savings and credit facilities. Until recently, with the publication of Steinwand (2001), relatively little had been published about most of them—with the exception of the Badan Kredit Kecamatan (BKK) of Central Java and the Badan Kredit Desa (BKD) of Java and Madura, and a few other well-known systems. This chapter and others in this book (chapters 11, 14, and 17) explore selected Indonesian BPRs. Readers interested in more in-depth study of Indonesia's nearly 9,000 People's Credit Banks are referred to Steinwand (2001), which begins with the BPRs' European antecedents in earlier centuries and traces their development in Indonesia from their beginnings during the Dutch colonial period up to the current Indonesian crisis.[11]

Some villages remain poor. As one man said, "In Jakarta I can eat every day and as much as I want. In my village I won't know today if I will eat tomorrow"

In addition to the BPRs and BRI's unit desas, Indonesia's rural areas have long had ubiquitous rotating savings and credit associations (ROSCAs) as well as nonrotating associations (ASCAs) and other forms of savings and loan associations. But most of these informal associations have had limited outreach. Informal commercial moneylenders provided most of the credit in rural areas. And most rural Indonesians kept most of their savings at home. In the second half of the 1980s, however, things began to change.

In analyzing the development of microfinance in rural Indonesia, certain recurrent themes emerge—in both colonial and Indonesian contexts. These themes underlie much of the discussion throughout volume 2. (Most are also relevant, in various ways, to microfinance in other countries, as discussed in volume 3.)

- *Policies and politics.* Indonesia has a century of experience with different kinds of unsubsidized, profitable microfinance institutions. Many different kinds of People's Credit Banks have been developed without assistance from donor agencies (donors have been involved only on rare occasions). Initial funding came from wealthy individuals or local governments. Equity was created from retained earnings. But Indonesia also has a history of large-scale subsidized rural credit programs. A long-standing tension has continued, generation after generation, between supporters and opponents of credit subsidies (see Schmit 1991). There is a similar dynamic between those who support member-based cooperatives and those who advocate nonmember-based financial institutions. Examples are provided here of the same political tensions in different periods—tensions that have resulted in both policy oscillations over time and simultaneous implementation of contradictory policies. Generally the tendency has been for the Ministry of Finance and the National Development Planning Board (Badan Perencanaan Pembangunan Nasional, or BAPPENAS)

to support commercial microfinance, while the Ministries of Cooperatives and Agriculture have frequently advocated subsidized credit programs channeled through village cooperatives. Both sides were powerful, and both approaches reached every Indonesian village. (It should be remembered that in Javanese philosophy, opposites are part of the same whole.)

- *Financial intermediation.* Many People's Credit Banks have been (and are) financial intermediaries, not microcredit institutions. Loans are generally financed from savings and equity, and in some cases with commercial bank loans. From the beginning of the People's Credit Banks in the 19th century, there has been a strong view in Indonesia that self-sufficient financial intermediaries work better than microcredit programs.
- *Rural financial institutions: public and private.* Most of Indonesia's commercial People's Credit Banks, as well as BRI's unit desas, are public enterprises, providing a sharp contrast to the currently dominant international view that potentially self-sufficient microfinance institutions are best located in the private sector. The Indonesian experience has demonstrated that commercial microfinance can flourish in both sectors.
- *Learning from experience.* There has been a long history in Indonesia that, when institutions do not work well, lessons are learned and new models are developed—whether it be conversion from cooperative to noncooperative banks during the colonial era or the BRI unit desas' transformation from subsidized credit delivery to commercial financial intermediation toward the end of the 20th century. Examples are provided throughout this volume.

The impact of the recent crisis on the poor was generally more severe in urban areas than in the countryside

These themes are as relevant for Indonesia today as they were a century ago. But as will be discussed, much has been accomplished in the interim.

European background

European banking began more than 500 years ago in Italy with the provision of credit to the aristocracy and the church, and with payment services for long-distance trade. But the Italian banks did not provide financial intermediation. Between 1490 and 1520 German and Swiss banks developed into financial intermediaries and took the lead in European finance. As Bergier (1979, quoted by Steinwand 2001, p. 49) put it, "The Italians had given banking its name and its instruments. The Germans gave it its place in the economy and society." By the 18th century the development of microbanking had begun.

> The structural changes from an agricultural based society to an industrial one and the rapid demographic growth after the end of the extended European wars (1618–1648) led to a tremendous increase in poverty in Europe. One response was the establishment of various forms of microfinance institutions during the 18th and 19th centuries... Their common goals were to fight poverty and to release the poor from the grasp of the moneylenders. They can be grouped into four categories: credit-

> focused charity funds...community based funds which started with donated funds but developed over time into fully fledged commercial intermediaries; savings banks...and the cooperative banks.
>
> —Steinwand 2001, p. 51

In Indonesia there has been a strong view for over 100 years that self-sufficient financial intermediaries serve the poor better than microcredit programs

Indonesia's early people's banks and district banks were introduced by the Dutch at the end of the 19th century. The founders of these banks were directly influenced by the growth of microfinance institutions in 19th century Europe. A few examples of the European antecedents will be useful (for further discussion see Steinwand 2001, chapter 3). One was the Irish loan funds started in 1720 by Jonathan Swift, author of *Gulliver's Travels,* which provided small loans to poor traders (see Hollis and Sweetman 1997, 1998 and Steinwand 2001). This model was widely copied by other wealthy individuals, and by 1840 the loan funds reached about 20 percent of Irish households.[12] Another model was the savings banks that began in Germany in 1778 and spread to many European countries in the early 19th century. As Tilly (1994, p. 305) comments: "The chief motive [for the development of the savings banks] was to encourage thrift and economic self-dependence among the poorer segments of the population...and not the mobilization of financial resources to finance investment."

A third important influence was the cooperative banks that began in two regions of Germany in about 1850. Schultze-Delitzsch started his first credit association, mainly urban-based, in the northeast of the country, and Freidrich Raiffeissen began his first savings and loan association, mainly rural-based, in the southeast. The two models had somewhat different approaches. Among the differences, the Schultze-Delitzsch model incorporated limited liability for members (to attract deposits from clients who were not poor), whereas in the Raiffeisen model members' liability was not limited. Another difference is illustrated by Wolff (1893, p. 64; quoted in Steinwand 2001, p. 56): "Schultze-Delitzsche throughout put the lender's interest foremost, Raiffeisen the borrower's." It was Raiffeisen's approach to cooperatives that eventually became the model for most European cooperative banks.[13]

In the Netherlands the first savings banks were established in 1817 with the explicit aim of assisting low-income people. But these banks were not effective in reaching poor clients (Steinwand 2001, p. 59). In the 1880s, however, an agricultural crisis led to the formation of a Netherlands government commission to advise on improvements for the agricultural sector. The commission recommended establishing local cooperative banks modeled on the German Raiffeisen banks. The first such bank in the Netherlands was officially opened in 1897, and the banks, which eventually became known as Rabobanks, multiplied. By 1920 there were some 1,250 Rabobanks in the Netherlands.[14]

The early Indonesian people's banks

The Dutch colonial administrators in Indonesia introduced various forms of People's Credit Banks beginning in 1895. The establishment of a series of banks

that eventually became Bank Rakyat Indonesia (BRI) began that year (see chapter 11). But it was not only BRI that was developed by Dutch colonial officials; many district banks and *lumbung desas* (literally "village granaries," but known as paddy banks) were begun at about the same time in Java and Madura. The original plan was to construct a cooperative rural banking system in Indonesia based on the Raiffeisen model. The lumbung desas would form the village-level credit cooperatives, and the district banks would become the second tier of the cooperative structure.

District banks. Seventy-one district banks disbursed an average of 755 loans in 1926. Data for 1929 show that nonperforming loans (loans in default) in the district banks were 3 percent of the amount of outstanding loans.[15] More than half of the district banks' deposits were from (predominantly European) time deposits in 1913, but by 1926 time deposits had declined to 23 percent of total deposits, while 55 percent of the banks' deposits came from (mainly Indonesian) savings accounts (Steinwand 2001, pp. 73–83).

These financial intermediaries soon became financially self-sufficient. In 1911 there were 75 district banks, of which 67 (89 percent) were subsidized. But by 1926 only 6 of 90 banks (7 percent) were subsidized (Suharto 1996, quoted in Steinwand 2001, p. 80).

The Indonesian experience demonstrates that commercial microfinance can flourish in both public and private sectors

Lumbung desas. By 1910 there were 12,542 lumbung desas in Java and Madura; the number gradually declined to 5,451 by 1940. The original lumbung desas were supposed to be funded by members' donations paid at the end of the Muslim fasting month. But this approach did not work well, and a modified system was introduced that did not follow the Raiffeisen model so closely. The modified lumbung desas were not strictly member-based: they had external financing as well as members' contributions, and grew much faster and performed better than those developed using the earlier model.

Originally the lumbung desas provided (and collected) loans in paddy. Their main purpose was to level out seasonal fluctuations in rice supply. But by the early 1900s some of the lumbung desas in the more developed regions of Java began to lend and collect loans in cash. As a result of this development, in 1904 the colonial administration introduced bank desas (village banks) operating on a currency basis.

The lumbung desas achieved wide and deep outreach in Java and Madura but did not work well in many outer islands where paddy farming was less important. By 1918 there were no lumbung desas outside Java and Madura. But in 1926 the lumbung desas reached nearly 1.3 million borrowers, 16 percent of the approximately 8 million households in Java and Madura. The loans provided by the lumbung desas were short, small, and profitable.

However, outstanding loans as a share of total lumbung desa assets were 27 percent in 1913, and only 2 percent in 1926. "Thus 98 percent of the Lumbung Desas' funds were idle and were not used for making loans to villagers! Of course, such a low rate of investment was only possible because the Lum-

bung Desas were owned by the villages and funded to 99% by equity" (Steinwand 2001, p. 91). The source of the lumbung desas' equity was retained earnings. Because paddy stored for a number of years deteriorates in quality (and sometimes in quantity, as it can be eaten by rats), the lumbung desas sold most of their paddy stock and deposited the funds in the district banks.

Bank desas. When the bank desas opened in 1904 and began lending in cash, there was considerable demand for these loans. The main sources of the bank desas' startup funds were the government, district banks, local lumbung desas, and repayable villagers' shares. In 1926, 4,754 bank desas on Java and Madura had 941,000 borrowers, and outstanding loans were equal to 56 percent of total assets (down from 74 percent in 1913 because the banks' equity had grown faster than their loan portfolios; Steinwand 2001, p. 97). Default rates were generally low, averaging about 1 percent, and overhead costs were minimal because the banks operated through the offices or residences of the heads of the villages where they were based. These bank desas were highly profitable. During the first two decades of the 20th century they yielded an average 50–58 percent annual net return on the average outstanding loan amount (Steinwand 2001, pp. 96–97).[16]

Large-scale microcredit began in the 18th century with the Irish loan funds started in 1720 by Jonathan Swift, author of Gulliver's Travels

> The Bank Desas were fully initiated by the government and funded with external resources. Hence their establishment finally marked the end of...[the] idea to establish a cooperative system based on Raiffeisen's self-help principles at the village level...During the following decades plans to transform the Bank Desas and the district banks into a two tier cooperative system surged from time to time among the colonial officials, however they were never realized.
>
> —Steinwand 2001, pp. 92–93

In 1907 the lumbung desas and the bank desas were regulated under a decree for Badan Kredit Desas (BKDs). These regulations were modified several times until 1929; the 1929 version is still valid (see chapter 14).

Bank Perkreditan Rakyat (People's Credit Banks, or BPRs)

The term Bank Perkreditan Rakyat (BPR) was introduced by Bank Indonesia in 1978 as a generic term for people's banks. The term includes the village-owned BKDs (the lumbung desas and the bank desas), the Lembaga Dana dan Kredit Pedesaan (LDKPs, rural financial institutions owned by provincial, district, or subdistrict governments, often in combination, or by villages), and other small financial institutions variously called People's Credit Banks, rural banks, village banks, market banks, cooperative banks, and others. Such institutions vary widely in ownership, activities, legal status, supervision, management, and size. After the 1988 financial reforms of PAKTO 88, new secondary banks were established; these were also called BPRs. PAKTO 88 stipulated that BPRs meet

certain requirements, including paid-up capital or savings of 50 million rupiah ($28,885 in 1988). Existing BPRs were given two years to fulfill the new requirements.

But in 1989 the PAKMAR reform package extended indefinitely the time limit for preexisting BPRs to meet the new regulations, essentially grandfathering them from the PAKTO 88 requirements. However, the Banking Law of 1992, which recognized only two types of regulated banks (commercial banks and BPRs serving the rural population), in effect reversed PAKMAR in this regard, stating that rural financial institutions are required to meet the BPR criteria. But following the crisis of the late 1990s, the requirements for rural financial organizations to meet BPR regulations were substantially changed. As a result the future status of rural financial organizations that are not licensed BPRs remains unresolved (see the discussion later in this chapter).

People's Credit Banks were introduced in Indonesia by Dutch colonial administrators in the late 19th century

Today the term BPR has two primary meanings. It refers to rural financial institutions that meet the criteria specified in the 1992 Banking Law (licensed BPRs). But it is also used for the nearly 9,000 People's Credit Banks of all kinds that exist today in Indonesia (generic BPRs), most of which do not meet the new criteria. At independence, Indonesia had several thousand small rural financial institutions, but the district banks had been merged in 1934 into the Algemeene Volkscredietbank (General Popular Bank), a precursor of BRI (see chapter 11). By 1966 there were more than 4,000 bank desas and nearly 2,700 lumbung desas, according to the central bank (in later Bank Indonesia statistics these institutions were grouped together under the category BKDs). The LDKPs, however, were not included in central bank statistics until after the 1988 financial reforms.

The LDKPs developed further during the 1970s and 1980s. The BKDs (which are discussed in chapter 14, as they are supervised by BRI) continued to provide financial services to many villages in Java and Madura, but they were not permitted to serve other areas of the country or to open new units. This is generally attributed to the fact that the village-owned BKDs, although they do not operate as originally planned on the basis of Raiffeisen self-help principles, are relatively autonomous. The rural financial institutions favored by President Soeharto were those under direct government control: the BRI unit desas, the LDKPs under provincial government authority, and the state-controlled (subsidized and loss-making) village cooperative system (Koperasi Unit Desa, or KUD).

Some of Indonesia's People's Credit Banks perform exceptionally well. Others perform poorly, and many are in between. But BPRs that do not perform well have generally been allowed to die out. This is a lesson that still needs to be learned in many other countries.

Rural Finance in the 1980s

In 1985 BRI's unit desas accounted for about 1.0 percent of the value of outstanding loans in the Indonesian financial system; all other rural financial in-

From 1900–20, early village banks on Java and Madura earned an average annual net return of 50–58 percent of the average outstanding loan amount

Table **9.1** **Outstanding loans in Indonesia's financial system, 1985**

Type of financial institution	Amount: Billions of rupiah	Amount: Millions of U.S. dollars	Share of financial system (percent)
Banks	22,933 0	20,384 9	96 83
Bank Indonesia (direct credits)	964 0	856 9	4 07
State banks	15,145 0	13,462 2	63 95
Other commercial banks	4,106 0	3,649 8	17 34
Foreign banks	1,073 0	953 8	4 53
Development banks	640 0	568 9	2 70
Savings banks	1,005.0	893.3	4 24
Nonbank financial institutions	162 0	144 0	0 68
Rural financial institutions	589 1	523 6	2 49
BRI unit desas	229 0	203 6	0 97
Secondary banks	214 3	190 5	0 90
Bank Pasar	193 0	171 6	0 81
Village banks	19 0	16 9	0 08
Paddy banks	2 3	2 0	0 01
Pawnshops	64.8	57 6	0 27
Other rural nonbank financial institutions	81 0	72 0	0 34
BKKs, KURKs, and so on	31 0	27 6	0 13
KUDs	50 0	44 4	0 21
Total credit outstanding	23,684 1	21,052 5	100 0

Note BRI stands for Bank Rakyat Indonesia BKK stands for Badan Kredit Kecamatan, or Subdistrict Credit Organization (Central Java) KURK stands for Kredit Untuk Rakyat Kecil, or People's Small Enterprise Credit Institution (East Java) KUD stands for Koperasi Unit Desa, or Village Cooperative Unit

Source Bank Indonesia data, World Bank 1987

stitutions accounted for about 1.5 percent (table 9.1). These other institutions included secondary banks, government-owned pawnshops, regional credit programs under provincial government supervision, privately owned financial institutions, village cooperatives, and various kinds of village credit organizations. Although there were many active rural financial institutions, their outreach was typically small.

Thus only 2.5 percent ($524 million) of the value of outstanding loans in the country's financial system in 1985 ($21 billion) was provided through rural financial institutions—although 75 percent of the country's population lived in rural areas. Another 0.7 percent of the value of outstanding loans ($144 million) came from nonbank financial institutions. The other 97 percent of the value of outstanding loans in 1985 was in banks.

In 1983 only 17 percent of agricultural households received government credit (Agricultural Census of Indonesia 1983),[17] primarily through BRI's

BIMAS, the government-subsidized rural credit program provided at the unit desas.

Rural borrowers who were able to qualify for the larger loans available in urban bank branches could obtain subsidized credit in district (*kabupaten*) capitals. The KIK (Kredit Investasi Kecil, or Small Investment Loan) and KMKP (Kredit Modal Kerja Permenen, or Small Permanent Working Capital Loan) programs offered subsidized loans up to 15 million rupiah ($13,333 in 1985). But very few rural households were eligible for these and for the other subsidized programs for larger loans sponsored by Bank Indonesia.[18] And minimum loan sizes at standard commercial banks were prohibitive for nearly all rural dwellers.

Most rural credit to low-income households was through the informal sector. Typical monthly effective interest rates charged by informal commercial lenders—professional moneylenders, commodity suppliers, traders, landlords—to low-income borrowers in rural Indonesia ranged from about 10 percent to more than 60 percent.[19] Daily or weekly loans, when calculated as effective monthly rates, ranged from about 10 percent to more than 1,500 percent (see chapter 1, box 1.1). Yet in 1985 inflation was just 4.5 percent. The highest-interest loans tended to go to the lowest-income borrowers because these borrowers had little bargaining power and few or no other options, and because smaller loans are usually more expensive for lenders than larger ones.[20]

People's Credit Banks that do not perform well have generally been allowed to die out—a lesson that many countries still need to learn

Loans were often obtained at low or no financial cost from relatives, friends, or rotating savings and credit associations (ROSCAs, called *arisan* in Indonesian). But as discussed in chapter 6, such credit may entail nonfinancial costs and is typically provided only for emergencies, special occasions, or relatively small loans. These loans are frequently not fungible and are often inappropriate (in amount, timing, or option to reborrow) for working or investment capital.

Rural savings facilities were scarce except for BPRs and some credit cooperatives. Most rural people kept their cash savings in the house and in ROSCAs. Savings in gold, crops, animals, raw materials, and finished goods were common. Most commercial banks did not collect voluntary savings from rural areas, and especially not from poor people. Interest rates at state banks were regulated by the government, and with annual effective interest on loans set at 12 percent and interest on most savings accounts set at 15 percent, collecting savings was unprofitable. Even at BRI, after a decade of offering savings accounts nationwide through the unit desa system, savings at the units totaled only $18 million at the time of the June 1983 financial deregulation. But by the end of the 1980s the transformed, commercialized units had $471 million in savings.

The defining moments for microfinance in the 1980s were, first, the 1983 financial deregulation, which made it possible for banks to set their own interest rates on most loans and savings accounts; and, second, PAKTO 88 (and reform packages that followed), which substantially liberalized restrictions on opening new domestic banks and bank branches and encouraged autonomy and competition in the banking sector. Some effects were immediate. For example, shortly after PAKTO 88 was issued Bank Dagang Bali opened branch-

es in many areas of Bali where the bank had previously served clients through a de facto mobile banking service (because it had not been permitted to open branches; see chapter 10). As discussed in chapter 8, PAKTO 88 had long-range effects, both positive and negative, on the banking sector. It also had important effects on the development of BPRs, considered later in this chapter.

Government Microfinance Initiatives in the 1990s

The 1983 financial deregulation that allowed banks to set interest rates on most loans and savings accounts was a defining moment for microbanking

By the early and mid-1990s new government initiatives and presidential instructions on microfinance in rural areas were thick on the ground. At one end of the continuum was the Banking Law of 1992, which defined banks, their roles, and their supervision, and which aimed at strengthening the banking industry, including banking for low-income people. At the other end were a wide variety of politically motivated credit programs—ranging from an effort to provide massive numbers of highly subsidized $9 loans with an additional grant of less than $1, to a directed credit program through which Indonesian banks were required to allocate 20 percent of their loan portfolios to loans of up to 200 million rupiah ($105,000 in 1990) for small enterprises. The impetus for many of the credit programs of the mid-1990s—which emphasized with considerable fanfare their importance for indigenous Indonesians (*pribumi*)—was mixed. It stemmed from a government priority to provide finance to low-income indigenous Indonesians, from the need to maintain rural elites' active support for Golkar (it being correctly assumed that rural elites would receive a substantial share of the banks' directed credit), and from attempts to deflect attention from the growing wealth and corruption of the conglomerates and to defuse rising resentment against ethnic Chinese.

The 1992 Banking Law and BPRs

The 1992 Banking Law had been in preparation since the early 1980s but had been repeatedly delayed because of interagency disagreements (especially between the Ministry of Finance and Bank Indonesia) about basic issues. A compromise version mediated by the leading technocrats was submitted to Parliament in 1991, and the law was passed in 1992. Among other issues, the Banking Law defined banks, set limits on bank supervisors, specified the extent of specialization by banks, and delineated the role of and supervision for very small banks (see Cole and Slade 1996).

The law recognized two types of regulated banks: general banks (*bank umum*) with paid-in capital of 10 billion rupiah ($4.8 million in 1992) and People's Credit Banks (BPRs) serving the rural population as well as low-income people and small and microenterprises in urban areas, with a minimum capital requirement of 50 million rupiah ($24,250 in 1992). Mariyanto Danoesputro, then managing director of Bank Indonesia, said in 1997 that "the objective of BPR is to modernize the rural population and to help free the small people from the moneylenders" (quoted in Steinwand 2001, p. 161).

Box **9.1** **Excerpts from David C. Cole and Betty F. Slade's *Building a Modern Financial System: The Indonesian Experience***

With the existence of nearly 8,000 rural financial institutions at the time the Banking Law was being examined, it was necessary to give consideration to their special requirements These financial institutions had different types of ownership, size, activities, legal status, and supervision For example, some only gave loans but did not collect deposits PAKTO, 1988 did not deal directly with these institutions, but instead authorized the licensing of BPRs The BPR had to be either a limited liability company, a regional government enterprise or a cooperative, and it had to have paid-up capital or basic and compulsory savings (as the case warranted) of at least Rp 50 million Existing BPRs were given two years to adjust to the new regulations

Following PAKTO it became clear that the failure to consider the special aspects of the other types of rural institutions and the implicit requirement that these institutions must adhere to the BPR rules was not in the best interests of rural finance In March 1989 (the PAKMAR package), the time limit for existing BPRs to adjust was made indefinite, i e they were *grandfathered*—given the status of old-style (grandfathered) BPRs Thus there were the old BPRs and the new BPRs By the time the Banking Law passed parliament there were 848 new BPRs, including a few that transformed from other status to the new BRP status

The 1992 Banking Law defined BPRs as banks which are permitted to accept deposits only in the form of time deposits, savings, and/or *other of similar types* BPRs included all banks other than general banks, therefore the BPR category included both the grandfathered rural financial institutions and all the newly licensed BPRs Article 58 recognized the existence of rural financial organizations, and basically gave flexibility to the government to set rules for the change of status of LPDs, BKDs, BKKs, BKPDs or other organizations similar to BPRs But it was clear that PAKMAR had been reversed rural financial institutions would have to meet BPR requirements [But in 1999 the effects of the crisis resulted in significant changes in requirements for rural financial organizations with regard to meeting BPR requirements]

Source Cole and Slade 1996, p 129

The 1992 Banking Law defined banks and their roles. It aimed at strengthening the banking industry, including banking for low-income people

The Banking Law limited the BPRs "in terms of location, function and portfolio composition. They are precluded from taking demand deposits and participating in the payments system. Their main role is to take time and savings deposits and to extend credit" (Cole and Slade 1996, pp. 128–30; see also Sukarno 2000 and Steinwand 2001). The changing status of the BPRs during the late 1980s and early 1990s is summarized in box 9.1.

Although the Banking Law stated that rural financial institutions are required to meet BPR criteria, the crisis and the collapse of the Indonesian financial system in 1998 caused changes in Bank Indonesia's views and in government policy. The crisis provided a strong incentive for Bank Indonesia to reduce the number of financial institutions under its supervision. In 1999 new regulations increased capital requirements for opening new BPRs or branches by 10 times, to 500 million rupiah. Adjusting for inflation, the new capital requirement was more than three times the previous requirement (Steinwand 2001, p. 181; see also Timberg 2000, p. 18).

> Assuming that the [1999] regulatory framework for BPR...does not undergo substantial changes...it is very likely that the...two-fold banking system consisting of commercial banks and BPR will develop into a three-fold system with large commercial banks, new medium sized BPR that work on a provincial level and operate an extensive network of branches and service posts, and the small unit-bank BPR as well as the LDKP and BKD at the bottom level.
>
> —Steinwand 2001, p. 182

"The objective of BPR is to modernize the rural population and to help free the small people from the moneylenders"

KUK and commercial banks

In 1990 the government introduced a new directed credit program called Kredit Usaha Kecil (Small Business Credit, or KUK; see Martokoesoemo 1993; McGuire, Conroy, and Thapa 1998; Ravicz 1998; Timberg 2000; and Steinwand 2001). All Indonesian banks were required to lend at least 20 percent of their volume of credit to small enterprises. However, the maximum loan size was 200 million rupiah ($105,000 in 1990); in 1997 the maximum was raised to 350 million rupiah ($75,000 at the end of 1997).

Banks could meet the KUK loan quota in three ways: direct lending to enterprises, lending to BPRs or banks that would onlend to small enterprises, or by issuing Surat Berhaga Pasar Uang (SBPU-KUK), a special money market instrument. Most commercial banks do not have extensive branch networks, and they had little experience making loans of this size; most of their loans were much larger. Thus the banks often tried to channel their KUK funds through other institutions, typically BPRs. The Association of Indonesian National Private Banks and the Association of Indonesian Rural Banks jointly created a foundation to receive funds from commercial banks and to onlend to BPRs, funded by a 1 percent spread between the rates at which the foundation received and lent funds.

But many BPRs could not absorb all the KUK funds supplied by commercial banks, and a substantial amount of these funds went to the interbank money market rather than to small businesses. Another problem was that the large KUK funds discouraged BPRs from mobilizing savings. In theory KUK loans had no minimum and were supposed to be made available for small enterprises. In practice these loans rarely reached poor clients, though they did reach some small and medium-size enterprises. But many banks filled their KUK quotas by financing cars and housing rather than small enterprises (Martokoesoemo 1993, p. 108).

During the crisis the obligation for banks to provide KUK loans was suspended, and KUK lending declined rapidly from 65,890 billion rupiah in fiscal 1998 to 38,171 billion rupiah in fiscal 1999 (Steinwand 2001, p. 179). In December 1998 nonperforming KUK loans (loans in default) were 23 percent of outstanding KUK loans (Timberg 2000, p. 21)—a very high default rate by microfinance standards, but much lower than Indonesian commercial banks' nonperforming loans as of the same date (officially 59 percent of outstanding loans, but widely believed to have been considerably higher).

Levying corporations and wealthy individuals for funds for subsidized credit programs

A 1994 Ministry of Finance regulation and a 1995 presidential instruction required state-owned enterprises (including banks) to use 5 percent of their profits to support small and medium-size enterprises and to reduce poverty (the Badan Usaha Milik Negara, or state-owned enterprise, policy; see McGuire, Conroy, and Thapa 1998; Meyer 1998; Ravicz 1998; and Steinwand 2001). The levy, which was outside the tax system, was collected and administered by a foundation created by President Soeharto. In addition, private corporations and individuals with annual incomes above 100 million rupiah ($43,328 in 1995) were required to donate 2 percent of their profits or income to the Soeharto foundation to be used for poverty reduction. Half of these funds were to be used for loans to low-income people at low interest rates, usually 6 percent a year. The other half was used for poverty-related training and research (30 percent) and for support of the state-owned cooperative credit insurance company (20 percent).

Indonesian banks were required to lend at least 20 percent of their credit volume to small enterprises—up to loans of $105,000. But the poor were rarely reached

The Prosperous Family Program, implemented by the National Family Planning Coordinating Board (Badan Koordinasi Keluarga Berencana Nasional, or BKKBN) through its village outlets, was a major recipient of these funds. Known as Tabungan Kesejahteraan Rakyat (Savings for a Prosperous Family, or TAKESRA) and Kredit Usaha untuk Kesejahteraan Rakyat (Credit for a Prosperous Family, or KUKESRA), the program operates through women's groups. When a group is established, each woman receives a grant of less than $1. Poor women receive initial loans of $9 at a highly subsidized 6 percent annual effective interest rate; 10 percent of the payments are returned to borrowers who repay the loans. The program received about 500 million rupiah during its first year of operation ($210 million in 1996). By mid-1997 nearly 10 million households were reported to have participated in this program. The Prosperous Family Program was not expected to cover the cost of its loans (and in any case had little experience collecting loans).

The National Family Planning Coordinating Board has built a vast infrastructure throughout Indonesia and enjoys a well-deserved international reputation for its role in substantially reducing Indonesia's population growth rate since the 1970s. But its Prosperous Family Program, a large, highly publicized, unsustainable microfinance program, emphasized short-term political priorities at the expense of viable microfinance development. In addition, its large-scale delivery of highly subsidized credit put the program in unfair competition with the BPRs and BRI's unit desas, which provide loans to much the same market at commercial interest rates. This is just one of many examples of opposing microcredit policies and approaches being implemented simultaneously in the same villages during the mid-1990s.

"Left-behind" villages: INPRES Desa Tertinggal

A 1993 presidential instruction created the INPRES Desa Tertinggal (IDT) program for backward (literally, "left-behind") villages (see McGuire, Conroy, and

Thapa 1998, Seibel and Parhusip 1998, and Parhusip and Seibel 2000). Coordinated by the National Development Planning Board (Badan Perencanaan Pembangunan Nasional, or BAPPENAS), the program provided $600 million over three years (1994–97) for about 28,000 rural villages identified as being especially poor—about one-third of the country's villages. Most are located on the Outer Islands, and the program represents an effort by the government to redress long-standing regional inequalities. The program provides funds for developing physical infrastructure, for income-generating activities of poor people organized into self-help groups, and for personnel (teachers, social workers, and others) who help these groups.

A political strategy developed that emphasized visible (but not viable) credit for poor indigenous Indonesians, undermining commercial microfinance

Each of the program's villages received 20 million rupiah ($9,100 at the end of 1994) for the income-generating component. These funds were provided as grants to the self-help groups, which then make loans to group members in a revolving credit scheme. Each group decides the terms on which the loans are made; the groups are not required to set interest rates that cover costs. By mid-1997 about 3.3 million people had participated in the program, with an average loan of $85 (McGuire, Conroy, and Thapa 1998, p. 158). Ismawan (2000, p. 4) reports that as of February 2000 Bina Swadaya (Self-Reliance Development Foundation), which helps groups link with banks in many parts of Indonesia, had consulted and held policy discussions with about 100,000 IDT self-help groups.

A 1995 evaluation concluded, however, that the IDT program had multiple problems, including the role played by facilitators without backgrounds in commercial or production activities, the development of business plans that had little potential for profit, and—once again—an emphasis on short-term political gains derived from highly publicized disbursement of loans to the poor rather than on professional program design and implementation (Seibel and Parhusip 1998, pp. 3–4).

Bank Indonesia, government ministries, and rural credit programs

Bank Indonesia and several ministries have been involved in rural credit projects and programs in different ways. Bank Indonesia implements the government's Microcredit Project as well as the Linking Banks with Self Help Groups Program, a subsidized credit program partly funded by the German Agency for Technical Cooperation (Gesellschaft für Technische Zusammenarbeit, or GTZ).[21] The central bank's main role in microfinance, however, is to provide subsidized liquidity credits channeled through the banking system (see chapter 12). Major recipients of Bank Indonesia credit subsidies include government-sponsored village cooperatives (Koperasi Unit Desas, or KUDs) which, while important for state ideology, have a long history of defaults and mismanagement; and Kredit Usaha Tani (Credit for Farm Enterprises, or KUT), a Ministry of Agriculture program channeled through BRI's branches (but not through the unit desa system), also with a poor repayment record.

As noted, the Indonesian government is not a monolith when it comes to credit subsidies. But with the rise of the conglomerates in the early and mid-1990s, the massively increasing crony capitalism, and the growing resentment against eth-

Box **9.2** **Excerpts from Camilla Nestor's contribution to Ohio State University's online Development Finance Network, 2 February 1999**

I've become increasingly dismayed with the mounds of subsidized credit the Indonesian government, the World Bank, and UNDP (among others) are pumping into Indonesian villages, ostensibly as a response to the economic crisis Within the past four months, distortions have emerged in the rural credit markets—cheap credit has begun to squeeze local financial service providers who must charge a market interest rate to survive If this continues, the risk of failure for BPRs (rural banks) and other rural financial institutions will be compounded—subsidized competition on top of an economic crisis If RFIs [rural financial institutions] stumble as a result of the subsidized loan programs, where will people save? And where will they borrow once the subsidized projects end? Furthermore, there's the risk of devaluing the term "loan " If these government/donor subsidized credit projects, which charge 0%—20% interest per year, have no enforceable repayment requirements and no penalties for default, people will consider the loan a gift.

Perhaps [this occurs] because donors cave into pressure from the government, which views charging market interest rates on micro-loans "harmful" to the poor, and politically unwise

We know that 1) directed credit most often ends up in the hands of those with connections to the distributors, rather than with the worthiest clients, 2) loan programs with vague repayment terms and subsidized interest rates are unlikely to see very impressive repayment rates, and 3) subsidized credit eventually dies—the donors cannot keep injecting such vast amounts of money Why perpetuate this?

Source Camilla Nestor, 2 February 1999

"The government views charging market interest rates on micro-loans "harmful" to the poor and politically unwise"

nic Chinese, a political strategy was adopted that emphasized visible (if not viable) benefits to poor indigenous Indonesians. During the 1990s rural credit subsidies increased to massive proportions, as illustrated in a February 1999 letter to Ohio State University's Development Finance Network from the Indonesia project manager of Catholic Relief Services (box 9.2). Catholic Relief Services is active in microcredit development in Indonesia and other developing countries.

Rural Finance in the 1990s

Following PAKTO 88, the 1988 deregulation package that liberalized the banking sector, and the 1992 Banking Law, new banks and bank branches proliferated rapidly. By 1998 there were 222 commercial banks in Indonesia: 130 private national banks with 3,976 offices and a 46 percent share of the total assets of commercial banks; 7 state-owned banks with 1,602 offices (excluding the unit desas) and 40 percent of commercial bank assets; 58 foreign and joint venture banks with 121 offices and 13 percent of assets; and 27 Regional Development Banks (Bank Pembangunan Daerah, or BPDs) with 555 offices and 2 percent of assets (Steinwand 2001, pp. 147–48).[22] The number of BPDs and state-owned banks did not change between 1987 and 1998, but the number of private banks doubled, from 64 to 130, and the number of foreign and joint venture banks more than quintupled, from 11 to 58.

Table **9.2** **Loans and savings in Indonesia's financial system, 1995**

Type of financial institution	Number of units	Credit: Amount: Billions of rupiah	Credit: Amount: Millions of U.S. dollars	Credit: Number of loans (thousands)	Savings: Amount: Billions of rupiah	Savings: Amount: Millions of U.S. dollars	Savings: Number of savings accounts (thousands)
Microfinance institutions	12,843	5,077	2,203	4,712	7,423	3,220	19,084
BPRs and secondary banks	1,948	1,566	679	1,232	1,226	532	2,969
LDKPs	1,978	224	97	261	118	51	456
BKDs	5,345[a]	93	40	955	63	27	1,176
BRI unit desas	3,482[b]	3,194	1,386	2,264	6,016	2,610	14,483
Commercial banks	240	234,611	101,783	91,168	214,764	93,173	49,904
Total	13,083	239,688	103,986	95,880	222,187	96,393	68,988

Note BPR stands for Bank Perkreditan Rakyat (People's Credit Bank, excluding here the LDKP and BKD) LDKP stands for Lembaga Dana dan Keuangan Pedesaan (Rural Fund and Credit Institution) BKD stands for Badan Kredit Desa (Village Credit Organization) BRI stands for Bank Rakyat Indonesia

a Only 4,806 BKDs were active in 1995

b Table 12 7, based on BRI data, shows 3,512 unit desas at the end of 1995 The figure in this table probably came from an earlier month in 1995

Source Adapted from Seibel and Parhusip 1998, table 1 3, and Parhusip and Seibel 2000, table 7 3

By the mid-1990s the rural financial sector had also expanded considerably. Indonesia was home to a plethora of financial institutions operating in rural areas, some old and some new (those opened after PAKTO 88). These included state-owned and private commercial bank branches; provincial government banks; credit organizations owned by provincial, district, and subdistrict governments and by villages; cooperatives; licensed BPRs, old and new, public and private; and thousands of generic BPRs. But many of the new BPRs had been opened immediately after PAKTO 88, and their owners and managers often had little banking experience.

The values and numbers of loans and deposit accounts in Indonesia's commercial banks and microfinance institutions at the end of 1995 are shown in table 9.2. Although data for the microfinance institutions are often of poor quality, the general picture is clear. Comparison with table 9.1, which provides 1985 data on loans in the financial system and in rural financial institutions, is useful. Between 1985 and 1995 average annual inflation (GDP deflator) was 8.8 percent (World Bank 1997). In 1985 outstanding loans in the financial system totaled 23,684 billion rupiah ($21.1 billion); in 1995 the total was 239,688 billion rupiah ($104.0 billion).

Tables 9.1 and 9.2—which are derived from different studies and different sources—are not directly comparable.[23] Still, they show that the value of outstanding loans in rural financial institutions (including BRI's unit desa system) as a percentage of total loans in the financial system hardly varied between 1985

and 1995—it was about 2.5 percent in 1985 and about 2.1 percent in 1995. The other 98 percent or so was in banks. Table 9.2 also shows that in 1995 microfinance institutions had about 5 percent of the number of loans in the financial system, 28 percent of the number of savings accounts, and 3 percent of the value of savings.

Data are not available, however, on commercial banks' share of outstanding rural loans or microloans, or of small savings accounts. These shares likely increased somewhat between 1985 and 1995, but there is no way of knowing how significant that increase might be.

Table 9.2 also enables comparison of BRI's 3,482 unit desas with 9,271 other (heavily rural) microfinance institutions in 1995. With only 27 percent of the aggregate number of units in these microfinance institutions, the unit desas dominated with 48 percent of the total number of loans, 63 percent of the value of outstanding loans, 76 percent of the number of savings accounts, and 81 percent of the value of savings.

The value of loans in rural financial institutions as a share of total loans in the financial system was 2.5 percent in 1985 and 2.1 percent in 1995

Developing the BPRs

After PAKTO 88 and the passage of the 1992 Banking Law, indigenous Indonesians were encouraged to open BPRs. Most of the BPRs that opened after 1988 are privately owned and financed commercially from local resources: savings, commercial debt (mainly from KUK loans during most of the 1990s), and equity. But in 1999 Bank Indonesia allocated concessional lines of credit to the BPRs.

In September 1998 there were 8,699 generic BPRs, reaching 5.6 million clients. Table 9.3 shows the number of units and clients for the 1,576 private licensed BPRs, for an estimated 2,317 local-government-owned LDKPs (including those that are licensed BPRs),[24] and for the 4,806 active village-owned BKDs. To provide a more complete picture of Indonesian microbanking, the table also shows data for BRI's unit desas.

Steinwand (2001, p. 188) notes the well-known difficulties of collecting data for thousands of small, independent BPRs and the "notorious inconsistency of BPR statistics." But he has made an important contribution by collecting and analyzing much previously unpublished data.

In tables 9.3 and 9.4 licensed BPRs that are privately owned are shown separately from those that are publicly owned (mainly former LDKPs). These tables are based on Steinwand's tables and therefore reflect his data organization. Because he was interested in comparing public and private BPRs and most of the licensed BPRs are privately owned, Steinwand used the larger data set of generic BPRs for his comparison. In his tables he separated the private BPRs from the public LDKPs and BKDs, and he included former LDKPs that are now licensed BPRs in the LDKP category (see table 9.3).

In 1998 the 2,262 licensed BPRs, private and public, had $175 million in outstanding loans, $56 million in savings, and $83 million in time deposits (Steinwand 2001, p. 190). Among the three BPR categories (private BPRs, the LDKPs, and the BKDs), private BPRs had the fewest active units (1,576) but

Table **9.3** **BPRs and BRI unit desas: number of units and clients, September 1998**

Institution	Active units: Number	Active units: Share of total (percent)	Clients: Number[a]	Clients: Share of total (percent)
BPR systems	8,699	70	5,615,215	26
Private licensed BPRs	1,576	13	3,107,612	14
LDKPs[b]	2,317[c]	18	1,700,000[c]	8
BKDs	4,806	39	807,603	4
BRI unit desas	3,703	30	16,050,000	74
Total	12,402	100	21,665,215	100

Note BPR stands for Bank Perkreditan Rakyat (People's Credit Bank, excluding here the LDKP and BKD). LDKP stands for Lembaga Dana dan Keuangan Pedesaan (Rural Fund and Credit Institution) BKD stands for Badan Kredit Desa (Village Credit Organization) BRI stands for Bank Rakyat Indonesia.

a For the BPRs Steinwand uses the number of savers for the number of clients because every borrower has a savings account For the unit desas, the author's calculations estimate the number of clients from the number of savings accounts All borrowers in unit desas also have savings accounts, but since individuals may have more than one, the number of savings accounts is larger than the number of savers (clients) BRI does not track the number of savers, only the number of accounts In September 1998 there were 21 4 million savings accounts in the unit desas Estimating that roughly a quarter of the savers had two accounts, this would leave 16,050,000 savers (clients)

b Includes former LDKPs that are now licensed BPRs

c Estimated

Source Steinwand 2001, table VI 2, BRI unit desa monthly report for September 1998

Among microfinance institutions, BRI's unit desas had 63 percent of the value of outstanding loans and 81 percent of the value of savings in 1995

the most clients (3.1 million) in September 1998 (table 9.4). Private BPRs also had the most assets ($308 million, compared with $91 million for the LDKPs and $28 million for the BKDs; Steinwand 2001, p. 230).[25]

The BPRs and BRI's unit desas. BRI's unit desas, with 30 percent of the combined number of BPR and BRI bank units, had 74 percent of the total clients. Private BPRs, with 13 percent of the units, had 14 percent of the clients. But the public LDKPs and BKDs, with 57 percent of the units, had only 12 percent of the clients. While tables 9.2 (for 1995) and 9.3 (for 1998) are drawn from different sources and are not directly comparable, they indicate clearly that during the crisis years the unit desa system retained its dominant position in microfinance. But tables 9.3 and 9.4 also show that the generic BPRs had, in aggregate, substantial numbers of small loans and savings accounts during the crisis.

As at the unit desas, BPR savings increased during the crisis, and the BPRs were able to place the funds in high-yielding commercial bank deposits. Nonperforming loans at the BPRs and at the unit desas did not increase significantly. The BPR and unit desa figures are not always comparable, however. For example, the village-owned BKDs, still operating under 1929 regulations, are limited in their writeoffs; thus their default rate includes substantial bad debt accu-

Table **9.4** **BPRs and BRI unit desas: average loans and deposits, 1997**

Institution	Average outstanding loan: Rupiah (thousands)	Average outstanding loan: Percentage of GNP per capita	Average savings balance: Rupiah (thousands)	Average savings balance: Percentage of GNP per capita	Average time deposit: Rupiah (thousands)	Average time deposit: Percentage of GNP per capita
Private licensed BPRs	1,338	26	141	3 0	8,165	158
LDKPs						
LPNs	582	11	77	1.5	2,182	42
LPDs	535	10	130	2 5	2,204	43
BKKs/CJ	424	8	134	3 0	4,026	78
BKDs	142	3	14	0 3	27	0 5
BRI unit desas	1,791	35	424	8 0	8,739	169

Note In June 1997, just before the crisis began, the exchange rate for rupiah was 2,450 to the U S dollar, but by December 1997 the rupiah had fallen to 4,650 to the U S dollar Percentage of GNP per capita ($1,110 in 1997) is calculated based on the year-end exchange rate BPR stands for Bank Perkreditan Rakyat (People's Credit Bank, excluding here the LDKP and BKD) LDKP stands for Lembaga Dana dan Keuangan Pedesaan (Rural Fund and Credit Institution) LPN stands for Lumbung Pitih Nagari (People's Credit Bank, West Sumatra) LPD stands for Lembaga Perkreditan Desa (Rural Credit Organization, Bali) BKK/CJ stands for Badan Kredit Kecamatan/Central Java (Subdistrict Credit Organization) BKD stands for Badan Kredit Desa (Village Credit Organization) BRI stands for Bank Rakyat Indonesia
Source Steinwand 2001, table VI-3, BRI unit desa monthly report for December 1997, World Bank 1997g, author's calculations based on Steinwand and BRI data

mulated from the past. But BRI's unit desas have an automatic system for writing off bad debt (chapter 12).

None of the three BPR systems (private BPRs, the LDKPs, and the BKDs) has an adequate loan loss reserve policy. Underprovisioning for loan losses by the BPRs disguises their real position and prevents timely adjustments for future lending. In contrast, BRI's unit desas provision according to Bank Indonesia regulations, follow international accounting practices, and are required to have regular audits.

BPRs: public and private. Indonesia's nearly 9,000 generic BPRs can be analyzed based on their age, legal status, and ownership. First, old and new BPRs can be differentiated depending on whether they were opened before or after PAKTO 88 (October 1988). Second, BPRs are defined by their legal status. Licensed BPRs, most of which opened after 1988, meet Banking Law criteria and other subsequent regulations.

The third distinction is between public and private BPRs. Most licensed BPRs are privately owned, though a number of publicly owned former LDKPs are also licensed BPRs. The public unlicensed BPRs are officially considered in transition to becoming licensed BPRs.

Private BPRs are a heterogeneous group with many kinds of owners, including individual investors, limited companies of investors, commercial banks,

industry groups, and NGOs. These BPRs tend to be clustered in well-developed areas with intense competition (Jakarta, Surabaya, Yogyakarta, Bali), while public BPRs operate in rural areas in many parts of the country, typically allocated by subdistrict.

Steinwand (2001, ch. 6) points out some important differences between private and public BPRs:

- *Competition.* Private BPRs compete with one another. Public BPRs generally do not compete because of their separate locations (although they may have other competitors, especially BRI's unit desas).
- *Savings.* Public BPRs mobilize more savings at a lower cost than do private BPRs. This pattern is attributed to greater trust by communities, related to implicit or explicit government deposit guarantees.
- *Loans.* Public BPRs have smaller average loans and lower default rates than do private BPRs (see table 9.4). Steinwand suggests that since public BPRs have a lower cost of savings than the private BPRs, they are generally able to charge lower interest rates on loans and make lower-risk investments. In addition, fierce competition among private BPRs in Java and Bali has led to high defaults (see chapters 18 and 19 for discussion of how intense competition among institutions providing microcredit in Bolivia and other Latin American countries in the late 1990s also resulted in high defaults).
- *Commercial bank links.* Licensed BPRs, most of which are private, are supervised by Bank Indonesia. Private licensed BPRs have no formal links with commercial banks (except for BPRs owned by commercial banks). But many have deposit accounts at commercial banks, and some have loans. And some BPRs have formed BPR networks. In contrast, public BPRs have close links, both financial and supervisory, with commercial banks. "The public BPR are better supervised both by the formal supervisory agencies as well as by informal control mechanisms compared to their private counterparts" (Steinwand 2001, p. 267).
- *Profitability.* Public BPRs are more profitable than private ones, but because many BPRs do not adequately provision for loan losses and do not undergo regular audits, reported profits are often not adjusted for loan loss provisions and writeoffs or for inflation. This makes it difficult to obtain a true picture of BPR profitability (see Ravicz 1998). As Steinwand (2001, p. 292) shows, unadjusted figures indicate that in 1997 the average returns on assets for private licensed BPRs was 1.0 percent; for the three main systems of public LDKPs, 4–6 percent; and for the village-owned BKDs, 10 percent. Unadjusted figures also indicated a return on equity in 1998 of 5 percent for private BPRs, compared with 17–34 percent for the three public LDKP systems and 11 percent for the BKDs. But Steinwand (pp. 249, 251) comments:

> In absence of more audited data, we calculated a "reserve-adjusted ROA [return on assets]" under the assumption that

8,699 generic BPRs continued to serve 5.6 million clients in 1998—as the country's financial system collapsed

> collateral value is zero and that all adjustments have to be made within one year... Under this "worst case scenario" the adjusted ROA of all BPR [groups] would be negative, however those of the BPR unit banks [private licensed BPRs] would be more than twice as low as those of the other BPR systems: –15% for the BPR unit banks; –7% for the LPN; –2% for the LPD; –3% for the BKK; and –6% for the BKD.

The real situation is likely to fall somewhere between the reported figures and the worst case scenario. It is of course different for different institutions, and is further complicated by regulations on writeoffs. Moreover, these are 1997 figures. By the end of 1997 Indonesia was in the midst of its worst crisis in three decades.

Steinwand (p. 293) concludes: "The public LDKP are the most successful BPR system and... outperform... the private ones, a finding quite in contrast to mainstream thinking which clearly favors private [microfinance institutions]." These results raise some interesting issues and questions.

The public BPRs, as a group, have higher savings, lower default rates, deeper outreach, and higher profits than the newer private BPRs

The private BPRs are new, primarily urban or semiurban, heterogeneous in ownership, generally not well supervised, without strong links to commercial banks, and they often have relatively little banking experience, at least at the start. In contrast, public BPRs tend to be more experienced and more trusted; they are rural; owned by provincial, district, and subdistrict governments or by villages; and are supervised by commercial banks. As a group the public BPRs have higher savings, lower default rates (though still high compared with the unit desas), deeper outreach, and higher profits than the private BPRs.

But the three LDKP systems used as examples in many of Steinwand's comparisons with the private licensed BPRs (primarily because of the relatively reliable data available for the LDKP systems) are among the best LDKPs in Indonesia. The Lembaga Perkreditan Desa (LPD) of Bali is widely considered the best LDKP system in Indonesia, and the Badan Kredit Kecamatan of Central Java (BKK/CJ) is generally considered the second best (see Steinwand 2001, pp. 292–93). Had the three systems been compared with the best of the private BPRs, the results might have been somewhat different. The officially licensed BPRs (both public and private) have a wide range of performance, and some are in the process of upgrading. As Timberg (2000, pp. 21, 25) notes:

> It is reported [in December 1998] that 45% of BPRs are not healthy or almost healthy... The BPRs, though generally in better shape than the commercial banks, need to go through a parallel process of closing some BPRs and restructuring others... Further, there is a need for a tightening of procedures and lessening of costs and a more aggressive marketing

> orientation. Upgrading management is already occurring as networks of BPRs put out standard management packages—just like a franchisor. I visited one bank, taken over by a private chain, which had moved from 95% NPL [non-performing loans] to under 5% in one year.

It is also worth noting that many public BPRs operate in quasi-monopolistic environments. Yet private BPRs, generally operating in areas of high competition, have higher assets and wider outreach than public ones. In 1998, with only 18 percent of the number of BPR units (8,699), private licensed BPRs served 3.1 million clients, or 55 percent of the number of BPR clients (see table 9.3).

Many public BPRs are quasi-monopolies. Yet private BPRs, generally operating in highly competitive areas, have on average higher assets and wider outreach

Private BPRs, not born with linkages like their public counterparts, are developing links—both with commercial banks and with other BPRs. And private BPRs are learning to operate in an intensely competitive environment—which is likely to be where the future of microfinance lies (see chapter 21).

The public LDKPs and BKDs had smaller average loans and savings balances than the private BPRs (see table 9.4). But this would be expected because, unlike public BPRs—which are typically dispersed to cover as many rural subdistricts as possible—private BPRs tend to cluster in relatively well-developed areas, many of them urban and semiurban. Yet with an average outstanding loan of 1.3 million rupiah in 1997 ($288 at the end of 1997, or 26 percent of per capita GNP) and an average savings balance of 141,000 rupiah ($30, or 3 percent of per capita GNP), private BPRs appear to be providing financial services to low-income segments of the developed areas in which they operate.

Private BPRs serve better-off clients as well; their time deposit accounts had an average balance of $1,756 in 1997 (158 percent of GNP per capita). The fixed deposits increase the size of the average savings account, making it possible for private BPRs to serve small savers profitably. The fixed deposit accounts also make available substantial funds for lending, enabling the wider outreach that private BPRs have achieved relative to public BPRs.[26]

There are important lessons here. First, both public and private microfinance institutions can be financially self-sufficient. Second, as Steinwand (2001, pp. 250, 324) shows, the BPRs are more likely to be self-sufficient if they are financial intermediaries, funding loans with savings. Third, over time, public BPRs that performed badly died out. The same is likely to happen to private BPRs (if donors do not interfere); in another decade it is possible that private BPRs that survive will be substantially improved.

The crucial point is that as a group the generic BPRs, like BRI's unit desas—and in sharp contrast to commercial banks—survived the Indonesian crisis, maintaining outreach, liquidity, and in some cases profitability. The public and private BPRs, the state-owned BRI unit desas, and the private Bank Dagang Bali together demonstrate unmistakably that commercial microfinance—in very different kinds of institutions—can be extremely stable even in times of exceptional economic, financial, and political crisis.

Six examples of rural financial institutions and programs

Six quite different rural microfinance institutions, projects, and programs are discussed below to illustrate the varied trends of the 1990s discussed above and the range in performance (table 9.5). These examples were selected based on the quality of available data and on geographic and program diversity. BRI's unit desas are not considered here because they are examined in detail in later chapters. The oldest of the BPRs, the Badan Kredit Desas (BKDs), and the Income Generating Program for Small Farmers and Fishermen (Pembinaan Peningkatan Pendapatan Petani-Nelayan Kecil, or P4K) are also not discussed here because they are supervised or administered through BRI's branches and are discussed in chapter 14. The well-known LDKP system, the Lembaga Perkreditan Desa (LPD) of Bali, is examined in chapter 17 as a part of an analysis of village banks.

As a group the generic BPRs, like the BRI unit desas—and in sharp contrast to commercial banks—maintained outreach and profitability during the recent Indonesian crisis

The organizations discussed below include three public LDKPs, a licensed private BPR, a Grameen Bank replication project that receives funding from the Grameen Trust Fund and from an Indonesian state bank, and a large government- and donor-sponsored program linking banks and self-help groups. These organizations vary considerably in age and size, and also in the environments in which they operate—ranging from Sumatra in the west to Nusa Tenggara Barat in the east. For each I have used the most recently published information I could find (varying from 1995 to 1998). It should be noted, however, that the data are of uneven quality and depth, and that there are sometimes inconsistencies among sources for the same institution. In addition, types of information and definitions of indicators vary by organization.

Published information is not yet available on how most of the organizations discussed in this section were affected by the Indonesian crisis. But given Steinwand's (2001) assessment that BPR systems generally survived quite well during the crisis years (as well as corroborating evidence from BRI's unit desas and Bank Dagang Bali), it seems likely that the first two of the LDKP systems and the private BPR considered here would have weathered the crisis to varying degrees. However, the third LDKP and the two programs discussed had serious problems—conceptual, financial, structural, or political (and in some cases all four)—even before the crisis.

An early microfinance pioneer: the Badan Kredit Kecamatan of Central Java (BKK/CJ). The oldest, best-known, and best-documented of the six organizations is the Badan Kredit Kecamatan of Central Java (BKK/CJ), an LDKP system owned by the provincial government of Central Java and administered through rural credit organizations located at the subdistrict level (Gadway, Gaway, and Sardi 1991; Patten and Rosengard 1991; Gonzalez-Vega and Chaves 1993; Mosley 1996; Riedinger 1994; Chaves and Gonzalez-Vega 1996; Meyer 1998; Steinwand 2001).

Central Java, along with neighboring D.I. Yogyakarta, is a world-renowned center of Javanese culture and traditions. Central Java is a densely populated area with 30 million people; in 1995 the province had 911 people per square kilometer. It is a fertile, rice-producing area with well-developed irrigation and in-

Table **9.5** **Loans and savings in five rural financial institutions and the PHBK program**

Name, year of data	Province; institutional status; year started	Number of outstanding loans	Value of outstanding loans (U.S. dollars)	Typical effective monthly interest rate on loans (percent)	Type of loans	Adjusted arrears rate (percent)	Adjusted default rate (percent)	Number of savings accounts	Value of savings (U.S. dollars)[a]
BKK/CJ, 1998	Central Java; LDKP owned by provincial, district, and subdistrict governments, 1970	—	10 4 million in the 204 BKKs/CJ that had BPR licenses	2–11	Individual	—	12 7 (1997)	—	7 1 million in the 204 BKKs/CJ that had BPR licenses
BKK/SK, 1995	South Kalimantan, LDKP owned by provincial government, 1985	34,518	3 4 million	3 9–16 0	Individual and group	5 9[b,c]	3 5[b,c]	—	427,357
LKP (four LKPs in one district), 1995	Nusa Tenggara Barat, LDKP owned by provincial government; 1989	4,148	312,963	8 3	Individual	20 0[c,d]	5 5[c,d]	—	28,249
Bank Shinta Daya, 1995	D I Yogyakarta, private licensed BPR 1970	12,656	2 1 million	2 3	Group and individual	3 5[e]	2 0[e]	30,340	2 2 million
Mitra Karya, 1995	East Java, Grameen replicator project, 1993	255 groups with 1,078 loans to 1,125 members	31,899	2 5[f]	Group	2 0[e]	1 0[e]	1,125	5,329 compulsory savings only
PHBK, 1996	16 provinces, project providing technical assistance to banks, NGOs, and borrower groups; 1989	6,800 group loans	5 5 million[g]	4–35	Group	5 7[e,h]	Estimated below 4 percent[e]	—	895,345 compulsory savings only

Table **9.5** **(continued)**

— Not available
Note BKK stands for Badan Kredit Kecamatan (Subdistrict Credit Organization) of Central Java (CJ) or South Kalimantan (SK) LDKP stands for Lembaga Dana dan Keuangan Pedesaan (a publicly owned Rural Fund and Credit Institution) LKP stands for Lumbung Kredit Pedesaan (Rural Credit Organization) PHBK stands for Program Hubungan dan Kelompok Swadaya Masyarakat (Program to Link Banks and Self-help Groups)
a Compulsory and voluntary combined except where noted
b Calculated only for the 34 original BKKs
c Calculated by dividing the volume of loans in arrears and in default by the volume of outstanding loans The volume of loans in arrears is defined as the percentage of loan volume in arrears net of previous year's defaults All loans more than 90 days overdue are considered to be in default (Ravicz 1998, p 35)
d Average for three LKP units The fourth LKP unit studied had adjusted arrears of 78 percent in 1993, but data for this unit were not available for 1994 or 1995
e The arrears rate is not defined but probably refers to loan payments more than 30 days overdue The default rate is also not defined, but in accordance with Indonesian bank regulations, it would refer to loans more than 90 days overdue
f Compulsory savings were not included in the interest rate calculation, had they been included, the effective interest rate would be higher
g Total loan volume for fiscal 1995/96
h Arrears are defined as the volume of payments one day late or more as a percentage of the volume of outstanding loans
Source Ravicz 1998, McGuire, Conroy, and Thapa 1998, Seibel and Parhusip 1998, Parhusip and Seibel 2000, Steinwand 2001

frastructure. Central Java also has other food crops, commercial crops, and industries (including tourism), and is well known for its art and handicrafts.

The early years. The BKK/CJ began in 1970 as a project of the Central Java provincial government and by 1975, 486 BKKs/CJ had been established—covering all but 6 of the province's 492 subdistricts. The BKK/CJ is owned by the provincial government (50 percent), district governments (35 percent), and Provincial Development Bank (Bank Pembangunan Daerah, or BPD; 15 percent).[27] Each subdistrict unit was capitalized by an initial loan ($2,400 in 1972) from the provincial government, with a maturity of 3–5 years at an interest rate of 1 percent a month.

Although the BKKs/CJ operate under the Central Java provincial government, each is locally administered and financially autonomous. "This has ensured consistency of overall system policies, standards, and procedures, and at the same time maintained local accountability and incentives based on local performance" (Patten and Rosengard 1991, p. 28).

Starting in the early 1970s the BKKs/CJ provided small, short-term individual loans to rural households and collected compulsory deposits from borrowers. Loan maturities ranged from 22 days to six months, with several repayment options varying from daily installments to seasonal repayments. Effective monthly interest rates ranged from 2.2–10.8 percent depending on the type of loan; the shorter the loan maturity and repayment intervals were, the higher the interest rates were (Patten and Rosengard 1991, p. 27; Steinwand 2001, p. 134). Loans were financed by retained earnings, local government loans, and compulsory savings. Retained earnings and current profits grew from 34 percent of funding in 1975 to 62 percent in 1985.

But during the 1970s the BKKs/CJ also channeled government-subsidized loans, and BKKs/CJ with a high incidence of these loans showed high losses.

The losses, combined with corruption and mismanagement, resulted in closure or severely curtailed operations in one-third of the BKKs/CJ by the early 1980s (Riedinger 1994, p. 306).

In 1979 the U.S. Agency for International Development (USAID) began providing technical and financial assistance for the BKKs/CJ (the first time that any of Indonesia's BPRs had received external support). The USAID-supported Provincial Area Development Project helped rehabilitate the system, recapitalize bankrupt BKKs/CJ, and provide training in management and bookkeeping. The project also helped the BKK/CJ system upgrade from a project to a Badan Usaha Milik Daerah (BUMD), or provincial government–owned enterprise, in 1981.

The average outstanding loan at Central Java's BKKs (subdistrict credit organizations) was 8 percent of per capita GNP in 1997

Important lending principles of the BKKs/CJ—short-term working capital loans, interest rates that cover all costs and risks and enable a profit, character-based lending to individual borrowers, and incentives to management and staff—were adapted by BRI in 1983 when the unit desas' new KUPEDES lending program was designed (see chapter 12).

The BKK/CJ as a provincial government enterprise. In 1981 the BKK/CJ system began a period of growth. Larger BKKs/CJ opened village posts to increase their outreach. The village posts, which are open once a week and operate in village halls, disburse loans and collect savings and loan installments, but they do not have authority to make loan decisions. There were about 4,000 BKK/CJ village posts in 1999 (Steinwand 2001, p. 202).

In 1984 the ministry of finance granted the BKKs/CJ permission to collect savings from the public. But the BKKs/CJ were slow to mobilize savings because of the widespread view that the rural population could not or would not save in financial institutions (see chapter 13). By 1987, however, the success of the BRI unit desa voluntary savings mobilization program, especially its fully liquid SIMPEDES instrument, had become known in Central Java. That year the BKKs/CJ began offering a similar voluntary savings product called Tabungan Masyarakat Pedesaan, rural people's saving (TAMADES). But in sharp contrast to SIMPEDES, TAMADES grew slowly—even in the same villages where SIMPEDES grew rapidly. There were two reasons for the slow growth of TAMADES.

Unlike BRI's unit desas, the BKKs/CJ required compulsory savings from borrowers. Mandatory savings typically discourage borrowers from placing voluntary savings in the same financial institution (see chapter 7). It is no coincidence that early results showed that 75 percent of TAMEDES savers were not BKK/CJ borrowers—although the savers fit the profile of potential BKK/CJ clients (Patten and Rosengard 1991, p. 39).

The second reason for the slow growth of TAMADES was that there was little incentive for the BKKs/CJ to market savings aggressively—because of the government's large directed credit program (KUK) that began in 1990. To fulfill its KUK obligations to provide 20 percent of its loan portfolio to small businesses, the state-owned Bank Ekspor-Impor Indonesia provided the BKKs/CJ with $34 million, far more than the system could safely absorb at the time.[28] As a result the BKKs became overly liquid and deposited more than 60 per-

cent of their funds at the Central Java Provincial Development Bank (BPD; see Gonzalez-Vega and Chaves 1993 and Steinwand 2001).

Over time, however, the BKKs/CJ invested a large part of these funds by increasing their loan portfolios. And the BKKs/CJ became more active in savings mobilization. Steinwand (2001, p. 204) shows that by September 1998 an average BKK/CJ with a BPR license had $50,828 in outstanding loans and $34,653 in savings and deposits (80 percent in savings[29] and 20 percent in fixed deposits). Thus 68 percent of the average loan portfolio was covered by savings and deposits; other sources of funds were retained earnings and bank loans. At the end of 1998 there were 512 BKKs/CJ, of which 204 had BPR licenses and were supervised by Bank Indonesia. The other 308 had applied for licenses and continued to be supervised by the BPD.

BKK loans are financed by savings, retained earnings, and bank loans

As of 1997, the BKKs/CJ—both those that were licensed BPRs and those that were not—provided small loans and collected small deposits (with larger fixed deposit accounts raising the average account size). As percentages of 1997 per capita GNP ($1,110), the average outstanding loan at the BKKs/CJ was 8 percent, while the average savings balance was just 3 percent. The average time deposit balance was 78 percent (see table 9.5).

Nonperforming loans were 13 percent in 1997. The BKKs, like other BPRs, do not provision sufficiently for loan losses. Therefore, as discussed above, profitability is difficult to ascertain.[30] Based on unadjusted figures for 1997, the return on assets for the BKK/CJ system was 4 percent and the return on equity was 21 percent. According to Steinwand's (2001, p. 249) worst-case reserve-adjusted calculations, however, the 1997 return on assets would have been –3 percent.

But with 512 BKKs and about 4,000 village posts in 1999, and with average outstanding loans and savings balances below 10 percent of GNP per capita, the BKKs/CJ—one of the best BPR systems in Indonesia—provide financial services to many low-income people throughout Central Java.

Learning from the BKK/CJ. There is much to be learned from the BKK/CJ, which began in 1970, the same year as BRI's unit desa system. Over time, each learned from the other's successes and failures (and from its own). Not surprisingly, many of the lessons from the two systems are the same, as can be seen in the discussion of the unit desas in chapters 11–15, and many are complementary. In addition, many of these lessons reinforce the experiences of the private Bank Dagang Bali, which also began in 1970 (chapter 10). All underscore the fundamental principles of commercial microfinance discussed in volume 1. Basic lessons from the history of the BKKs/CJ include:

- Small, short-term individual loans to rural households can be provided by rural credit organizations owned by local governments at interest rates that cover costs and risks and enable profitability.
- Such organizations can be managed with low operating costs, and can be successful even if open only one day a week.
- Loans can be financed by retained earnings, savings, and commercial bank loans.

- Loans should have a range of maturities and repayment options suitable for the community.
- Providing subsidized loans to borrowers leads to losses and can eventually result in unit closure or severe retrenchment.
- Training and incentives for management and staff are essential.
- Large external injections of liquidity discourage voluntary savings mobilization.
- Small voluntary savings accounts can be cross-subsidized with larger time deposits.
- Emphasis should be placed on appropriate loan loss provisioning and bad debt writeoff, a remaining problem at the BKKs/CJ.
- Donors that support institutional capacity building for critical needs get maximum return on their investments.
- Links between microfinance institutions and local governments and banks can be advantageous for both in a variety of ways.

With 512 BKKs and about 4,000 village posts, many poor people throughout Central Java have easy access to credit and savings services

Adapting the BKK model to a different environment: the Badan Kredit Kecamatan of South Kalimantan (BKK/SK). The South Kalimantan BKK program, modeled on the one in Central Java, began in 1985 (Gonzalez-Vega and Chaves 1993; Chaves and Gonzalez-Vega 1996; Ravicz 1998; Steinwand 2001). The two institutions are unrelated, however. The BKK/SK is owned by the provincial government of South Kalimantan and supervised by South Kalimantan's Provincial Development Bank (BPD). The account below draws heavily on R. Marisol Ravicz's excellent paper, "Searching for Sustainable Microfinance: A Review of Five Indonesian Initiatives" (1998).

South Kalimantan, located northeast of Central Java, has an ethnically heterogeneous population of 2.9 million people, with only 79 people per square kilometer in 1995. Known as "the province of 1,000 rivers," much local transportation in South Kalimantan is by water; in many areas roads and other infrastructure are not well developed. South Kalimantan, with its estate agriculture and forest areas, produces such export commodities as timber, rubber, rattan, and palm oil.

Development of the BKK/SK. South Kalimantan's BKKs began in 1985 with modest facilities and capital endowment grants of about $5,000 each.[31] The first 16 BKKs/SK were financed by USAID; the South Kalimantan provincial government then financed 94 BKKs/SK. Although their loan portfolios are not subsidized, the BKKs/SK are provided with indirect and in-kind subsidies. The province provides training and supervision, and provincial and district governments often provide office equipment, motorcycles, and bicycles (Ravicz 1998, p. 32).

After the 1992 Banking Law was passed, the provincial government obtained BPR licenses for 20 of its 34 then-existing BKKs—which were exempt from the 1992 regulation that deposit-taking institutions opened after 1992 must either meet the minimum capital requirement or become cooperatives. But neither of these two alternatives for new BKKs was acceptable to the South

Table **9.6** **Estimated earnings adjusted for subsidies and bad debt for 34 original BKKs/SK and 3 LKPs of Nusa Tenggara Barat, 1995**
(percent)

Earnings measure	BKKs/SK	LKPs
Adjusted real return on assets	1 5	–5 2
Adjusted real return on equity	12 0	–2.8
Estimated subsidy dependence index[a]	0	24
Current annual interest rate	64[b]	160
Annual interest rate required to cover all costs (including obtaining a market return on equity)	64	198

Note BKK/SK stands for Badan Kredit Kecamatan (Subdistrict Credit Organization) of South Kalimantan
LKP stands for Lumbung Kredit Pedesaan (Rural Credit Organization) of Nusa Tenggara Barat
a The percentage increase in the interest rate required for the institution to operate without subsidies (including obtaining a market return on equity)
b "BKK interest rates vary by loan size and repayment frequency This interest rate is for one of BKK's most common loans—a four month loan with a 2 5 percent per month flat interest rate, payable in monthly installments, with a 5 percent forced savings requirement Five percent was selected for the savings requirement because some BKKs require a 10 percent savings component while others require none " (Ravicz 1998, p 37)
Source Ravicz 1998, pp 37, 48

Large external injections of liquidity discourage voluntary savings mobilization

Kalimantan BPD. Therefore the provincial government stopped creating BKKs and began instead to build Institutions for Small Enterprise Finance (Lembaga Pembiayaan Usaha Kecil, or LPUKs). The one difference between BKKs and LPUKs, an important one, is that the older BKKs are permitted to accept deposits (both voluntary and compulsory), while the newer LPUKs are not.

By 1995 there were 76 LPUKs in addition to the original 34 BKKs—one in each of the province's 109 subdistricts and one additional unit (table 9.6). Following Ravicz (1998), here the 110 BKKs and LPUKs are referred to collectively as BKKs/SK except when the two categories are compared. The BKK/SK system is supervised by the district branches of the South Kalimantan Provincial Development Bank (BPD).

The early 1990s were difficult for the BKKs/SJ. At the same time as the system was expanding with its new LPUKs, the BKKs/SJ faced political demands to lend in inappropriate ways. "It appears that political pressures on lending policy in 1992 (caused by the election in that year) led to unprecedented arrears in 1993" (Ravicz 1998, p. 36).

Loans in default at the 34 original BKKs, adjusted for defaulted loans not written off in previous years, were 23 percent of total loan volume in 1993; loans in arrears fewer than 90 days were 27 percent (Ravicz 1998, pp 35–36). But as discussed below, performance improved rapidly and the 34 original BKKs "did not require subsidies to operate profitably in 1994 and 1995, and could have paid equity holders a satisfactory return" (Ravicz 1998, p. 37). Information is not available about the defaults, profitability, or sustainability of the LPUKs.

The BKKs/SK are each staffed by three to six employees. Staff training is emphasized, and a performance-based incentive system has been developed under which managers and staff share 18.2 percent of their BKK/SK's nominal prof-

its. The incentive is provided in bonuses and through a welfare fund. In 1995 each employee at the average BKK/SK received 669,000 rupiah ($290), equivalent to 1.6–5.4 months of salary (Ravicz 1998, p. 34). BKK/SK managers are generally active, and the BPD provides regular supervision.

> In theory, the BPD makes all policy decisions for the BKKs...including the types of savings and lending products units can offer, the terms [of] those instruments, how they should provision for bad debt, when they should write off loans, what their underwriting and loan servicing procedures should be, whom they should hire, how they should train staff, etc. In practice, individual unit managers frequently assume at least minor levels of discretion with regard to many of these policies. The BPD has one full-time supervisor for every 8.5 BKK units. Supervisors visit units from one to four times per month.
>
> —Ravicz 1998, pp. 32–33

The first 16 South Kalimantan BKKs were financed by USAID, and the provincial government then financed 94 others – an exemplary use of donor funds

Interest rates for loans range from a low of 3.5 percent a month on a declining balance basis with no savings requirement (equivalent to 51 percent a year) to a high of 1 percent a week on the original loan balance with a 10 percent savings requirement (about 196 percent a year on a declining balance basis). The most frequently quoted rate is a 2.5 percent flat rate a month, with a 10 percent compulsory savings requirement at the 34 original BKKs/SK, but no mandatory savings at the newer LPUKs. For a four-month loan on these terms, the effective interest rate is about 3.9 percent a month, or 59 percent a year, assuming no compulsory savings requirement. For the original BKKs/SK that require compulsory savings, the effective interest rate is 4.5 percent a month, or 70 percent a year (Ravicz 1998, p. 33).

Loan maturities, which vary by unit, range from 10 weeks to 18 months; repayment schedules range from weekly to monthly. Until 1995 all loans were made to individuals. But that year a pilot project in lending to self-help groups was started in one BKK/SK as an effort to reduce transaction costs. This experiment in group lending was influenced by the Program to Link Banks and Self-Help Groups (Program Hubungan Bank dan Kelompok Swadaya Masyarakat, or PHBK, discussed later in this chapter). But before the initial pilot project was completed and evaluated, other BKKs/SK adopted the idea. Ravicz (1998) reports that 59 self-help groups received loans from BKKs/SK in 1995. The BKKs/SK provide loans to "'channeling groups that simply pass loan funds down to their members and pass up repayments. The groups do not attempt to act as financial intermediaries, and there are no NGOs involved in the process" (p. 33).

Loan sizes in the BKK/SK system range from $21–428, but the ranges are different in different BKKs/SK. In 1995 the BKK/SK system had $3.4 million outstanding in more than 34,500 loans (see table 9.5).[32] In 1995 the average loan was 10 percent of GDP per capita (Ravicz 1998, p. ix). Savings in the 34 original BKKs was $427,000 in 1995.

The amount of loans in arrears by more than 90 days was 26 percent of the value of outstanding loans in 1995. But since the units do not write off bad loans, Ravicz (1998, p. 35) recalculated the arrears rate to simulate arrears and default rates that would have been reported if the institution had written off 100 percent of its loans in default each year. Calculated in that way, and with all loans overdue more than 90 days considered to be in default, 5.9 percent of net outstanding loans were in arrears and 3.5 percent of loans were in default.

Ravicz (1998, pp. 36–37) also calculated the real return on average assets for the 34 original BKKs, adjusted for subsidies and bad debt. Although the adjusted return on assets was –20.9 for 1993, it was 0.5 percent for 1994 and 1.5 percent for 1995.

The subsidy dependence index (the percentage increase in the interest rate required for an institution to be fully self-supporting, including a market rate of return to equity holders) for the 34 BKKs was 118 in 1993. But the index for the 34 BKKs was 0 in both 1994 and 1995 (see table 9.6). Thus in aggregate the 34 BKKs were financially self-sufficient in both 1994 and 1995. Operating in a province with only 79 people per square kilometer (in 1995), the BKKs/SK face little competition. Their main competitors are BRI's unit desas and informal moneylenders.

> The only other major source of financing available to BKK clients is loans provided by cooperative leaders. These individuals use their position in the cooperatives to function as private moneylenders. The rate they charge (20 percent flat per month) is about three times as high as *the highest rate* BKK units charge.
>
> —Ravicz 1998, p. 42

"The higher the share of savings to total assets [in BPRs], the faster the growth, the higher the profitability, and the better the loan performance"

Learning from the BKK/SK. Only half as old as the BKK/CJ system, the BKK/SK has already demonstrated many of the same lessons as its Central Java counterpart. The first four lessons from the BKK/CJ, above, concern basic issues of commercial microfinance in rural areas. These fundamental principles are embedded in the BKK/SK as well. In addition, the importance of training and incentive systems in both BKK systems emerges clearly, as does the continuing need in both systems for appropriate loan loss provisioning and bad debt writeoff. For both BKK/CJ and BKK/SK, a donor (USAID in both cases) played an important early role in building capacity; for the BKK/SK this involved financing the first of the BKK units. But in both cases the provincial government has played the leading role in developing and supervising the BKKs.

Both systems went through difficult times, largely for political reasons, and through subsequent recovery periods. But in 1995 both BKK systems were at or close to financial self sufficiency, and both had widespread outreach in their provinces. In addition, both had average loan sizes that are very small relative to per capita GNP.

One specific lesson from the BKK/SK is how the South Kalimantan provincial government adapted a system developed under the very different con-

ditions of Central Java. Both systems have BKKs in nearly every subdistrict. But as noted, there are vast differences between South Kalimantan and Central Java in population density and infrastructure development, as well as in other aspects of their environments, that affect the provision of financial services to the rural population.[33]

Some differences between the two BKK systems that are likely related to their different environments are:

The challenge is in adapting the basic principles of commercial microfinance to different environments

- While the BKKs/CJ have developed a huge network of village posts, this approach has not been adopted for the BKKs/SK. Village posts would likely not be cost-effective for many sparsely populated areas of South Kalimantan.
- Unlike the BKKs/CJ, the BKKs/SK began lending to self-help groups in 1995, based on the PHBK model (although the PHBK program had not yet begun in South Kalimantan). But this form of lending had just begun at the BKKs/SK when Ravicz was there in 1995, and information on the performance of the group loans is not available. And the BKKs/SK did not wait until their pilot project was completed and evaluated before expanding their self-help group lending to multiple BKKs/SK. Elsewhere in the country, the PHBK program developed into a large, complicated, and high-cost program providing credit and training. The BKKs/SK, however, opted for a pared-down version of the PHBK model. If the BKKs/SK can extricate the lending methodology from the rest of the high-cost PHBK program—as was done on Java by the private BPR Bank Shinta Daya, discussed below—they might find the self-help group lending methodology useful in South Kalimantan's sparsely populated environment, where BKK/SK staff travel long distances on poor roads.
- Perhaps the most critical problem for most BKKs/SK (the newer LPUKs) is that they are not permitted to mobilize savings. Lending growth is slow because of lack of funds, and of course these BKKs/SK cannot meet the demand for savings services in their subdistricts. The BPD is aware that the BKK/SKs have few staff and limited supervision, serve large areas, and harbor substantial opportunities for theft and corruption. These factors may discourage the provincial government from changing the status of some LPUKs. But other provinces have moved toward solving the problem of savings in new institutions by establishing them as licensed BPRs or as what Ravicz calls "nominal cooperatives" (see the discussion below of the Lumbung Kredit Pedesaan of Nusa Tenggara Timur). Savings remains an unresolved problem for the LPUKs of South Kalimantan. Because data are not available on the performance of the LPUKs alone, it is not possible to assess the different levels of outreach and profitability of the 34 original BKKs and the 76 LPUKs. But Steinwand's (2001, p. 324) general comment about BPRs is likely to be relevant: "The long term performance of the BPR is closely linked to their capacity of savings mobilization. The higher the share of savings [to] total assets the faster the growth, the higher the profitability, and the better the loan performance."

Indonesia is a large country with many environments. What works at the local level in rural areas in Central Java may not work as well in South Kalimantan, and vice versa. Thus the central government left the detailed decisions about unlicensed BPRs to their respective BPDs. "The central government...left enough scope for the provincial governments to follow their own LDPK policy, as the different approaches of the BKK of South Kalimantan, LPD of Bali, and LKP [Lumbung Kredit Pedesaan] of NTB [Nusa Tenggara Barat] have proven" (Steinwand 2001, p. 217).

But there is no question that important lessons about commercial microfinance can be, and are, passed from one BPR to another. The challenge is in adapting the basic principles to different environments.

Some cooperative leaders are also private moneylenders, charging a flat monthly interest rate of 20 percent (an annual effective rate of 1,600 percent)

When basic principles are lacking: Lumbung Kredit Pedesaan (LKP) of Nusa Tenggara Barat. The Rural Credit Organizations (LKPs) of Nusa Tenggara Barat in eastern Indonesia are owned by the provincial government of Nusa Tenggara Barat and supervised by the Provincial Development Bank (BPD). Ravicz (1998, pp. 43–51) analyzes the 1995 performance of the four LKPs in Dompu District (see tables 9.5 and 9.6). Like the two BKK systems discussed above, these Rural Credit Organizations are public LDPKs.

Nusa Tengarra Barat is a poor province with an ethnically and religiously diverse population of 3.6 million; in 1995 it had 181 people per square kilometer. Nusa Tengarra Barat is generally dry (although there is variation in rainfall within the province) and has few commercially valuable natural resources and little industry. In some areas, especially Lombok, irrigated wet rice is cultivated. But much of the province's population relies on fishing or dryland subsistence agriculture (sorghum, millet, mungbeans, cassava, sweet potatoes, yams, and the like). Among Indonesia's provinces, Nusa Tengarra Barat has one of the highest percentages of population below the poverty line (18 percent in 1996).[34]

The Dompu District LKPs were subject to political pressures and were generally not well supervised. With one exception, they also appear not to have been well managed. Compared with the BKK systems of Central Java and South Kalimantan, Dompu District's LKPs had low transparency and higher defaults and arrears. Although they had higher interest rates on loans than the BKKs, the Dompu LKPs were much further from financial self-sufficiency than the other two systems. Ravicz (1998, p. 50) commented, "The units [LKPs] are heavily influenced by the expertise and honesty of their management. For example, one unit was driven to the brink of insolvency through corrupt management practices...Further...the units are owned by the NTB provincial government and controlled by the provincial development bank. It appears likely that both of these entities have objectives for the units beyond profitability, growth, and client service."

Development of Nusa Tenggara Barat's LKPs. Introduced in 1989, the LKPs are located in subdistrict capitals in a relatively poor province. In 1995 Dompu District's four LKPs covered 34 of the 45 villages in their subdistricts

(76 percent), but the two other subdistricts in the district were not served by LKPs.

Dompu's LKPs were all established before 1992 and so were exempt from the government's regulations on LKPs opened after that year. Nevertheless, in 1995 the BPD was planning to convert two of the four LKPs into licensed BPRs. For the other two, the BPD plan was "to comply with the letter of the law by nominally declaring the units to be cooperatives and redefining voluntary savings as 'required members savings'" (Ravicz 1998, p. 51). The BPD also planned to open two other LKPs as nominal cooperatives in the two unserved Dompu subdistricts.

The Rural Credit Organizations (LKPs) of a Nusa Tenggara Barat district were subject to political pressures, poorly supervised, and in some cases corrupt

Dompu's LKPs offer one loan product that is common to many BPR systems: a 12-week loan to individual borrowers repayable in 12 equal weekly installments. The first installment represents the interest due on the loan, the second is a compulsory savings payment, and the final 10 installments repay the capital. Assuming that the compulsory savings and the interest earned on the savings are paid to the borrower at the end of the loan period, as is supposed to happen, Ravicz (1998) calculated the monthly effective interest rate to be 8.3 percent and the annual effective rate to be 160 percent (compared with 59–70 percent at the BKKs/SK).

In 1995 loan sizes ranged from $21–214. One voluntary savings instrument is offered, a demand deposit with an unlimited number of withdrawals and a 10 percent annual interest rate. Compulsory savings, required to obtain loans, also pay 10 percent interest a year.

In 1995 the outstanding portfolio in the four LKPs was $313,000 in about 4,150 loans (see table 9.5). The largest LKP had 47 percent of the value of outstanding loans and the smallest had 4 percent. Savings (voluntary and compulsory) were $28,000 in 1995.

Ravicz (1998, p. 46) notes, however, that "income statements and balance sheets provided by the BPD contain some apparent errors, omissions, and inconsistencies." The problems were not only at the BPD. "The Dompu district branch of the BPD has one full-time supervisor to oversee the four LKPs in its district. Two of these units are within walking distance of the BPD branch. Despite the fact that the supervisor oversees only four units, one unit manager was able to effectively bankrupt his unit by making fraudulent loans and embezzling funds" (Ravicz 1998, p. 43).

The LKPs receive endowment grants and in-kind gifts and subsidies, including supervision by the BPD. Like the two LDKPs discussed, the LKPs do not provision adequately for loan losses and do not write off bad debt.

Adjusting for subsidies, bad debt, and inflation, Ravicz found that three of the LKPs had average arrears (payments overdue 30 days or more) of 20 percent of outstanding loans in 1995. The fourth LKP had had the highest adjusted arrears in 1993—78 percent. But although this LKP continued to operate, data on its performance in subsequent years could not be obtained. Excluding the fourth LKP, adjusted loans in default (in arrears 90 days or more) averaged 5.5 percent in 1995.

The adjusted real return on average assets for the three LKPs was –5.2 percent in 1995, and the adjusted real return on average equity was –2.8 percent (see table 9.6). These returns would have been lower had the LKP with the missing data been included. Based on the three LKPs, "in 1995, the program would have had to charge a 198 percent annual interest rate to completely eliminate all program subsidies and pay liability and equity holders a market return on their investments" (Ravicz 1998, p. 48; see table 9.6).

There were, however, substantial differences in performance among the LKPs. The best-performing LKP maintained consistently low default rates over the three years examined and in 1995 had an adjusted real return on assets of 4.9 percent, an adjusted real return on equity of 11.9 percent, and a subsidy dependence index of –4 percent. This LKP "could have provided an adjusted real return to equity holders of from 3 to 12 percent since 1993" (Ravicz 1998, p. 48).

The LKPs report almost no institutional competition for borrowers, but they compete with the BRI unit desas for savings. Like the BKKs/SK, LKPs report that "cooperative leaders use their position in the cooperative system to function as private moneylenders, charging a 20 percent flat monthly interest rate (equivalent to 1,600 percent per year on a declining balance basis)" (Ravicz 1998, p. 51).

Learning from the LKPs. Although the data cover only the four LKPs of one district, much can be learned:

Good management matters. Even in a politicized, corrupt environment, a good manager can generate good results

- Politicization is typically incompatible with accountable supervision and with profitable commercial microfinance institutions.
- When owners and managers lack expertise and honesty, the institutions they manage are likely to be unsound, and their clients poorly served.
- Lack of transparency occurs when owners, managers, and staff are not held accountable for their decisions and actions.
- High defaults and arrears put poor savers' money at risk.
- Inefficiency and corruption can lead to high interest rates on loans, unnecessarily penalizing borrowers.
- Appropriate products are necessary but insufficient for success in microlending (and in savings). The LKP loan product (except for its interest rate) is similar to loan products in BPRs all over Indonesia. Where it is implemented well, this product can serve as a basis for a sustainable loan program with wide outreach. But when the institution is not properly managed, a loan program using the same product can show unsatisfactory performance.
- Good management matters. Even in a poor region, and in a BPR system marked by politicization and corruption, a good manager can generate consistently good results in a particular unit.

A licensed private BPR: serving the poor profitably at Bank Shinta Daya in Java. Bank Shinta Daya is in D.I. Yogyakarta, a special region of Indonesia (D.I. stands for *Daerah Istimewa,* which means "Exceptional Region"). Bordering the province of Central Java toward the southeast, D.I. Yogyakarta holds a

special status as a sultanate in the Republic of Indonesia. Yogyakarta is small and densely populated (916 people per square kilometer in 1995); its area and its population are one-tenth those of Central Java. But Yogyakarta is a cultural and intellectual center and former capital of Indonesia. It is world renowned for its history, art, music, dance, ancient Hindu and Buddhist temples and statues, and its *kraton,* the palace compound of the sultans of Yogyakarta. Like Central Java, Yogyakarta has both wet rice and dryland cultivation and has well-developed irrigation and infrastructure.

Bank Shinta Daya was founded in Yogyakarta in 1970 as a limited liability company. A rural bank, it was established with private investment and funded its expansion from retained earnings. The account below is based on Seibel and Parhusip (1998) and Parhusip and Seibel (2000), unusual papers that analyze types of data rarely available for microfinance institutions.

At Bank Shinta Daya 71 percent of loans made to poor borrowers were through self-help groups. But 71 percent of poor savers were individuals

Development of Bank Shinta Daya as a private rural bank. For its first 20 years Bank Shinta Daya mobilized savings and lent to individual clients, poor and nonpoor. In 1989 the bank began to participate in Bank Indonesia's Program to Link Banks and Self-Help Groups (PHBK), and by the end of 1995 Bank Shinta Daya provided financial services through 310 groups with 7,750 members. At that point the bank had a total of more than 30,000 savers (with 43,000 accounts) and more than 12,500 borrowers (see table 9.5). It is important to note, especially in light of the costly PHBK program discussed below, that:

> After an expensive and ultimately abortive attempt of working through a local NGO as a financial intermediary, Bank Shinta Daya decided to seek out its own savings and credit groups which are ubiquitous in Indonesia. The bank has set up a special group lending department, hired its own field workers, some of them former NGO staff, and trains its own groups of the poor in group management, bookkeeping, savings mobilization and financial management.
>
> —Seibel and Parhusip 1998, p. 9

Bank Shinta Daya classifies most of its savers and borrowers as poor, but it has far more poor savers than poor borrowers. In 1995, 25,752 savers (85 percent of total savers) and 8,782 borrowers (69 percent of total borrowers) were poor. That poor savers outnumbered poor borrowers nearly three to one supports data from other Indonesian microfinance institutions (and from other parts of the world) that more poor people want to save than borrow at any given time (see chapters 10 and 13; see Rutherford 2000; and Wright 2001). Among the nonpoor this pattern is less pronounced: Bank Shinta Daya's 4,588 nonpoor savers do not greatly outnumber it 3,874 nonpoor borrowers.

An especially interesting finding is that among poor borrowers, 2,582 (29 percent) were individual borrowers and 6,200 (71 percent) were from self-help groups. But exactly the opposite pattern held for poor savers: 18,352 (71 percent) were individual savers and 7,400 (29 percent) were from self-help groups.

Table **9.7** **Viability indicators for Bank Shinta Daya and Mitra Karya, 1995**
(percent)

Indicator	Bank Shinta Daya	Mitra Karya
Average annual interest rate on deposits	15 2	10 0
Annual effective interest rate to borrowers	27 4	30 0
Average cost of outside funds	16.5	3.5
Financial self-sufficiency	96 0	39.0

Source Parhusip and Seibel 2000, p 171

Individual and group methodologies were both profitable at Bank Shinta Daya. But the individual methodology accounted for 94 percent of the profits

These data also suggest what has been shown elsewhere: savers value confidentiality and prefer to save as individuals rather than through groups (see chapter 7).

At Bank Shinta Daya the average annual effective interest rate charged to borrowers in 1995 was 27.4 percent—a long way from the 160 percent charged at the Nusa Tenggara Barat LPKs that year (and the 198 percent the LPKs would have had to charge to become profitable). Bank Shinta Daya's default rate was 2 percent. The average annual interest rate paid to depositors was 15.2 percent. Savings of $2.2 million represented 105 percent of the $2.1 million in outstanding loans in 1995. The bank's net worth at the end of 1995 was $215,000, with 36 percent in capital and 64 percent in retained earnings. Net profit was $27,426. Seibel and Parhusip (1998, p. 16) calculate that the bank was 96 percent financially self-sufficient (table 9.7).

As noted, Seibel and Parhusip provide information rarely available for microfinance institutions. This includes a comparison of the outreach and profitability of Bank Shinta Daya's individual and group methodologies. Their findings show that group loans and group savings were of only minor importance in 1995: 97 percent of the value of the bank's deposits came from individual clients, and 89 percent of the value of outstanding loans was in loans to individual borrowers. Although Siebel and Parhusip found that the individual and group methodologies were both profitable to the bank in 1995, the individual methodology accounted for 94 percent of profits.

> The group technology is thus found by Bank Shinta Daya to be viable as such, but adds little to the bank's overall viability. Why then does the bank engage in business with small groups? The bank's management explains this with future expectations. By providing financial services to group members with microenterprise activities, it contributes to their growth. As the members' microenterprises grow, so will their business with the bank.
>
> —Seibel and Parhusip 1998, pp. 16–17

Learning from Bank Shinta Daya. In addition to the basic principles for commercial microfinance mentioned above for other institutions, Bank Shinta Daya's performance offers important lessons:

- Licensed private BPRs can reach the poor sustainably (as can public BPRs of all types).
- Savers, both poor and nonpoor, will save in licensed private BPRs if the BPRs demonstrate that they are trustworthy.
- The poor are far more likely to use the bank's savings facilities than its credit services. The nonpoor are somewhat more likely than the poor to be borrowers.
- Although most savers are poor (89 percent), most of the value of the savings is from the nonpoor (thus raising the average account size and making it possible for the bank to collect savings profitably while also serving the poor).
- Bank Shinta Daya, which operates its own group lending department, provides both loans and voluntary savings services to self-help groups profitably (in contrast to the high-cost PHBK program discussed below).
- Self-help groups can deepen credit markets, increasing poor people's access to commercial loans.
- Both individual and group methodologies are profitable at Bank Shinta Daya. But 94 percent of the bank's profit is from its individual methodology.
- Bank Shinta Daya provides support for the view that BPRs that serve as financial intermediaries are more profitable and achieve higher outreach than those that do not mobilize voluntary savings from the public.

Mitra Karya, a Grameen replicator in East Java, had an average cost of funds of 3.5 percent and was 39 percent financially self-sufficient. Its outreach was low

Missing the point: Mitra Karya of East Java, a Grameen Bank replicator. The information on Mitra Karya here is drawn from Seibel and Parhusip (1998) and Parhusip and Seibel (2000). The Mitra Karya Grameen replication project is in East Java—the largest in area of the provinces on Java. In 1995 the population of East Java was 33.8 million, with 706 people per square kilometer. East Java is well known as the home of early Javanese kingdoms, culminating in the Majapahit kingom—a Hindu court culture in the 14th century with an empire that stretched from parts of mainland Southeast Asia in the west to settlements on Irian Jaya in the east (covering a larger area than present-day Indonesia). Today East Java combines well-developed infrastructure and highly intensified agriculture (irrigated rice with two or three harvests a year, as well as many other crops) with major industrial and commercial businesses centered around Surabaya, Indonesia's second largest city after Jakarta.

Development of Mitra Karya. Mitra Karya was established as a replication project in 1993 with funding from the Grameen Trust Fund and the state-owned Bank Negara Indonesia. The project is implemented by the Research Center of Brawijaya University in East Java. Mitra Karya began with 105 participants in 21 small groups in 1993; in 1995 it had 225 groups with 1,125 members, all of them women.

Mitra Karya follows closely the relatively costly Grameen small group delivery system, adhering to a group size of five—which is small by the standards of Javanese self-help groups. Mitra Karya serves only poor borrowers and requires compulsory savings from all members. The institution's aim is to reach what it considers an optimum size of 2,000 members in 400 groups. As Seibel and Parhusip (1998, p, 9) point out, however, Mitra Karya may run into difficulty because it is unlikely to meet the regulations for BPR status when it ends its transition period and must register as a formal rural bank (BPR).

In 1995 Mitra Karya had about $32,000 in outstanding loans and $5,300 in compulsory savings (see table 9.5). Its ontime repayment rate was 98 percent and its default rate was 1 percent. However, Mitra Karya's highly subsidized average cost of outside funds was just 3.5 percent, and it had reached only 39 percent financial self-sufficiency (see table 9.7).

Mitra Karya "has not been able to demonstrate...that replication of the Grameen approach in Indonesia may...improve the poor's access to financial services"

> Grameen replicator [Mitra Karya] reports liabilities in the form of soft loans received (outstanding as of 12/1995) to the amount of US$46,507 (about half from government-owned BNI [Bank Negara Indonesia] and half from Grameen Trust Fund) compared to assets in the form of loans outstanding amounting to a mere US$32,104. With an interest rate of 10 per cent on savings deposits and 3.5 per cent on soft loans, a lending interest rate of 30 per cent and an on-time repayment rate of 98 per cent, its spread should be more than sufficient to cover its costs...However, given its dependency on donor funds, its degree of full financial self-sufficiency is only 39 per cent...With total assets amounting to Rp 127 million ($55,098), loans outstanding of Rp 74 million ($32,104) and a deposit base of Rp 12.3 million ($5,336) and virtually no equity base, [Mitra Karya] would have to come a long way to grow into a formal village bank, a BPR, which would require a minimum paid-in equity capital of Rp 50 million ($21,692).
>
> So far [Mitra Karya] has not been able to demonstrate convincingly that the replication of the Grameen Bank approach in Indonesia may substantially improve the poor's access to financial services.
>
> —Parhusip and Seibel 2000, p. 169

Learning from Mitra Karya. Mitra Karya seeks to replicate the Grameen Bank microcredit methodology in East Java. Will doing so benefit East Java or Indonesia? It seems unlikely for several reasons.

First, Mitra Karya sees itself essentially as a clone. Accordingly, it has not adapted its products and services to the Indonesian context.

Second, Mitra Karya promulgates the Grameen microcredit focus. But Indonesia's generic BPRs, operating on a model three-quarters of a century older than Grameen's, have generally succeeded with a commercial financial intermediation model. Even with its many variations, Indonesia's BPR model has four basic characteristics: it operates according to commercial principles; it typically provides financial intermediation, cross-subsidizing services to the poor with services to the nonpoor; it experiments and makes changes as needed; and it allows failing institutions to die. In contrast, Mitra Karya offers a rigid, targeted microcredit program—instead of a flexible microfinance system—to a province that already has hundreds of BPRs suited to East Java's conditions and sensibilities.

"In general the higher the number of financial intermediaries between the originating institutions and the end user, the higher the interest rate paid"

Third, Mitra Karya raises some important issues for governments and donors. With its dependence on donor funds at an annual interest rate of 3.5 percent, Mitra Karya's degree of financial self-sufficiency was just 39 percent in 1995. Moreover, Mitra Karya has a small deposit base and almost no equity. Indonesia's microfinance models are far more appropriate for the country's more than 200 million people. In this context, and considering the thrust of the 1992 Banking Law, why should an Indonesian state bank use its scarce resources to provide subsidies for an unsustainable credit-driven project aimed at reaching 2,000 people? Donors to Indonesia and the Indonesian government can make better use of their resources for microfinance.

Combining large program subsidies with high borrower interest rates: the Program to Link Banks and Self-Help Groups. The Program to Link Banks and Self-Help Groups (Program Hubungan Bank dan Kelompak Swadaya Masyarakat, or PHBK) is a credit and training program sponsored by Bank Indonesia and the German government's Agency for Technical Cooperation (Gesellschaft für Technische Zusammenarbeit, or GTZ). The heavily subsidized program began in 1989 and by 1996 was operating in 16 provinces. The PHBK provides technical assistance to banks, NGOs, and the self-help borrower groups to which the banks and NGOs lend. This account relies heavily on Ravicz (1998) and McGuire, Conroy and Thapa (1998); see also Gonzalez-Vega and Chaves (1993) and Chaves and Gonzalez-Vega (1996).

Development of the PHBK. In the provinces where it operates, the PHBK is managed from Bank Indonesia's branch offices. There are three PHBK lending models. In the first, savings and credit groups (Kelompok Simpan Pinjam, or KSP) serve as financial intermediaries, receiving group loans directly from banks and onlending the funds to their members. NGOs, compensated by the program, train the groups in record keeping and financial skills, providing support to the groups for up to nine months. The program also trains the participating banks, but does not compensate them. The second model is similar except that the NGOs borrow from banks and onlend to borrower groups. In the third model, banks lend to channeling groups (Kelompok Pengusaha Mikro, or KPM), with each member usually receiving an equal portion of the loan. NGOs are not involved (this was the model informally adapted by the BKKs/SK before the PHBK began

in South Kalimantan). After 1992 the PHBK did not provide liquidity support for loans made under any of the models.

In areas with a high concentration of banking facilities, the first model was being phased out by the mid-1990s because it required considerable investment in training and support. The second model did not work well, primarily because of NGOs' poor performance as financial intermediaries, and is generally discouraged except on some of the Outer Islands. Thus in Java, Bali, and other areas with developed banking facilities, the program focuses on the third model (which, however, can have higher costs for banks than the other models). But in 1996, in more sparsely populated areas with a low density of rural financial organizations, the first and second models continued.

By September 1996, 410 banks and bank branches, 183 NGOs, and 6,800 self-help groups were participating in the PHBK (McGuire, Conroy, and Thapa 1998, p. 156). Most of the participating banks were private rural banks (BPRs), followed by state-owned commercial banks. Some private commercial banks and Regional Development Banks (BPDs) also participated. The banks and NGOs were supervised by Bank Indonesia staff and consultants. Groups that function as financial intermediaries are supervised by NGOs (the first model), while groups that simply channel credits to members are supervised by banks (the third model). Ravicz (1998, p. 54) comments, "This supervision is very expensive for the more complicated lending models and in remote areas."

PHBK, a large and heavily subsidized credit and training program, charged end borrowers annual interest rates ranging from 46 percent to 450 percent

The three types of intermediaries set their own interest rates and loan terms, which vary considerably. Loan terms range from 10 weeks with daily repayments to 12 months with monthly repayments. "In general, the larger the number of financial intermediaries between the originating institutions and the end user, the higher the interest rate paid by the end user" (Ravicz 1998, p. 54). Rates also tend to be higher in remote areas and for loans with daily repayments.

> In Sumbawa, most banks were lending at 2.5 to 3.0 flat rate per month; NGOs that onlent to groups were lending at 5.0 to 5.5 percent flat rate per month; and credit groups were lending to members at a flat rate of 5.5 to 7.5 percent per month (including a 1.5 percent flat rate required savings component). On a declining balance basis, and including fees and forced savings requirements, rates generally ranged from about 3 to 15 percent per month or 100 to 450 percent per year for end users. However in less remote locations, banks lending to channeling groups may charge rates as low as 1.9 percent per month on a declining balance basis. This rate, including fees and forced savings requirements, can translate into interest rates as low as about 46 percent per year for end users.
>
> —Ravicz 1998, p. 54

All the participating groups offer members voluntary savings accounts, with a range of interest rates. In 1995 demand deposit accounts paid 12–16 percent

a year, while the interest on time deposits ranged from about 16–22 percent for a one-year deposit.

Total loan volume for fiscal 1995/96 was $5.5 million; 2,931 group loans were issued that year. Arrears were higher in the program's earlier years but by 31 March 1996, the end of the fiscal year, 5.7 percent of the volume of outstanding loans was one day or more in arrears. The program's default rate for that year was estimated at less than 4 percent. Compulsory savings were $900,000 as of the same date, and equaled 19 percent of outstanding loans (see table 9.5). Data for voluntary savings were not available (Ravicz 1998, pp. 57–61).

In fiscal 1995/96 PHBK costs were 95 percent of annual loan volume. But PHBK "cannot be considered to be primarily reaching the low-income population"

The costs of the PHBK are very high, equal to 95 percent of annual loan volume for fiscal 1995/96 (down from 357 percent in 1990/91). The cost per credit group was $1,785 that year (down from $11,654 in 1992/93). These costs do not include the costs that banks incur in making PHBK-related loans. "The [PHBK] costs...effectively translate into very large subsidies for borrowers" (Ravicz 1998, p. 59).

What is being achieved for these high costs? Is the PHBK effectively assisting large numbers of the poor? There is not enough evidence for a definitive answer. But a 1993 impact study found that less than 20 percent of respondents had monthly household spending below the poverty line and 40 percent had household spending more than twice the poverty line. Ravicz (1998, p. 61) concludes: "If these findings are representative of borrowers under the program today, then this program cannot be considered to be primarily reaching the low-income population, although some low-income households are being served."

Calculating the subsidy dependence index for the PHBK, Ravicz found that in fiscal 1995/96 the participating banks would have had to increase their annual lending interest rate by 158 percent to pay for the full cost of the program (down from 628 percent in fiscal 1990/91); see table 9.8. Estimating the current lower-bound average annual interest rate at 107 percent, Ravicz calculated that in fiscal 1995/96 annual interest rates on PHBK loans would have had to be 277 percent to fund full program costs (Ravicz 1998, p. 60).

However, the PHBK cites unfair competition from the even more highly subsidized KUKESRA group lending program, which is implemented by the Family Planning Coordinating Board, and from the P4K program, which is administered by BRI's branches (see chapter 14) and provides loans at about one-fifth the effective rate charged by banks participating in the PHBK (Ravicz 1998, p. 63).

Learning from the PHBK. The PHBK is a large, expensive, and unnecessarily complicated program. But to its credit, the PHBK spread widely in Indonesia the idea that providing financial services to self-help groups can be a useful approach to microfinance. One result is exemplified by Bank Shinta Daya: the bank learned how to modify the PHBK approach to develop a much less expensive model.

Steinwand (2001, pp. 77–78) points out that the PHBK repeated mistakes made in Indonesia nearly a century earlier.

Table **9.8** **Estimated subsidy dependence index and required interest rates to cover the program costs of the PHBK program, fiscal 1991–96** (percent)

Indicator	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96
Lower-bound estimate for SDI						
with full program costs	628	515	574	471	298	158
Lower-bound estimate for SDI						
with direct program costs only	163	145	163	140	98	48
Lower-bound estimated average						
annual current interest rate[a]	107	107	107	107	107	107
Estimated average annual						
interest rate required to						
fund full program costs	781	659	723	613	427	277
Estimated average annual						
interest rate required to						
fund direct program costs	282	263	282	257	212	159

Note The subsidy dependence index (SDI) is the percentage increase in the interest rate required for the program to operate without subsidies PHBK stands for Program Hubungan dan Kelompok Swadaya Masyarakat (Program to Link Bank and Self-help Groups)
a Calculated on a declining balance basis, including all fees and forced savings requirements An estimated average of the rates commonly charged by rural banks and commercial banks to channeling groups
Source Ravicz 1998, p 60

> DeWolff von Westerrode and his successor, Carpentier Alting, propagated the idea of group-lending among the district banks already in the 1900s...These early joint liability groups had up to 10 members and a group manager...who worked as an intermediary between the group members and the bank...After some initial success, banks soon dropped the group-lending scheme [because of] embezzlement problems...Some 90 years after these first experiments, BPR started again with group-lending on a larger scale under Bank Indonesia's Linking Banks and Self-Help Groups (PHBK) project but still faced the very same problems...However, after 5 years of unsatisfying results, this strategy was replaced by a more pragmatic approach of promoting linkages between BPR and groups of micro-entrepreneurs.

Three main lessons emerge from PHBK. The first two are that large, complex microfinance programs with layers of intermediaries:

- *Are very expensive.* Although the PHBK had been in operation since 1989, the annual cost of the program in 1995/96 was 95 percent of annual loan volume (not including bank costs). Annual interest rates on PHBK loans that

year would have had to be 277 percent to fund full program costs. The PHBK developed as an unnecessarily complicated and inefficient program that may not have reached many poor people. Governments and donors can use their resources in far more efficient and effective ways to support the growth of microfinance (see chapter 22).

- *Lead to high interest rates for borrowers.* The more layers of financial intermediaries involved, the more expensive the program—and the more expensive the loan interest rate for borrowers. Ravicz (1998, p. 60) estimates the lower-bound average annual interest rate at 107 percent for 1995/96. But on some of the poorer Outer Islands borrowers were paying much higher annual rates—up to 450 percent on Sumbawa (Ravicz 1998, p. 54).

Donors and the government provide massive unsustainable credit programs. But for poor borrowers, loans are often cheaper and easier to access at commercial institutions

The third lesson from the PHBK is that the simplest model in which banks channel funds to self-help groups works best, although the model needs modification to work cost-effectively. Bank Shinta Daya modified the PHBK approach, setting up its own group lending department to identify and train self-help groups and to provide them with commercial financial services. In 1995 the bank's annual effective interest rate for such loans was 27.4 percent.

Rural Financial Institutions in Indonesia in 2000: What Have We Learned?

Some of the lessons on rural finance in Indonesia were known a century ago. Others have been learned only in the past few years as the country, hit by a devastating financial, economic, and political crisis, learned the extraordinary stability of commercial rural financial institutions. But as old lessons are reinforced and new ones learned, the basic principles endure and the basic problems persist. Of the five lessons below, the first four are drawn from the recurrent themes discussed at the beginning of this chapter; the fifth is drawn from the crisis.

Policies and politics

Since the late 19th century Indonesia has been developing commercial institutions that serve as intermediaries, providing savings and credit services to local populations, including large numbers of low-income people. Large-scale subsidized rural credit programs were also developed in Indonesia in the early 1970s; politicians and rural elites quickly found ways to obtain and use these rationed, below-market funds. Today these two strategies coexist in the same villages—the former works well while the latter is politically expedient. Thus the BPRs, both licensed and generic, and BRI's unit desas continue their commercial focus, many of them providing microfinance profitably. Most of these institutions are publicly owned.

But the central government also provides widespread, poorly designed, and highly subsidized credit through programs such as KUKESRA and Inpres

Desa Tertinggal, while Bank Indonesia provides subsidized liquidity credits to village cooperatives (KUDs) and to farmers through a Ministry of Agriculture program (KUT). These programs did not reach the poor any better in the 1990s than subsidized credit programs did in the 1970s. Meanwhile, donors and the government cooperate in bringing to Indonesia massive, complex, high-cost programs such as the PHBK that are unsuitable, unsustainable, and often result in poor borrowers paying far higher interest rates for loans than are charged in the country's commercial BPRs and BRI's unit desas.

Messy (and wasteful) as this coexistence is, it seems unlikely to change any time soon. Between the BPRs and the unit desas, commercially oriented institutions continue to provide savings and credit services to about half the country's households. But other political forces in Indonesia are too powerful to be ignored. The de facto solution has been to support all kinds of microfinance programs, from the sublime to the ridiculous. This is the political solution. But the economic reality has been that sustainable financial institutions—large and small; public and private; commercial banks, licensed BPRs, and generic BPRs—have gained a large and growing share of the rural finance market.

Microfinance in Indonesia runs from the sublime to the ridiculous. But it is the commercial institutions that have consistently gained market share

Financial intermediation

Many BPRs are commercial financial intermediaries, as are BRI's unit desas. BPR loans are generally financed from savings and equity, and in some cases with commercial bank loans. Unit desa loans are financed from savings from both poor and nonpoor people. The larger savings accounts and time deposits of the nonpoor raise the average account size, making it possible for the institutions to accept large numbers of small savings accounts from poor people and still remain profitable.

Long evidence (even back to 16th century Europe) indicates that financial intermediaries are more stable, profitable, and sustainable than credit-focused organizations. And as discussed in this volume and in Steinwand (2001), this finding has been well documented for Indonesia. But the role of savings is not always understood or valued. Large external injections of liquidity, such as KUK funds, discourage voluntary savings mobilization. And there are credit-driven programs that ignore poor people's extensive demand for voluntary savings facilities. As Seibel and Parhusip (1998, p. 21, emphasis added) comment:

> In sum, given the need of the poor for savings deposit facilities, it is all the more surprising that projects focusing exclusively on the poor as in the various Grameen Bank replications (including Mitra Karya) and small farmer development projects (including P4K [chapter 14]) continue to be credit-driven and offer little in terms of innovative savings products with attractive returns and convenient collection services, with regular compulsory savings as promoted by these projects tending to restrict savings to the required minimum. Unless this is reversed, we may conclude that *such projects may ultimately provide more of a disservice*

to the poor than a service, promoting indebtedness more than a healthy self-financing capacity.

As with the debates on subsidies, however, the financially sound approach is the one that gains market share. The future of rural finance (and microfinance generally) is with commercial financial intermediaries (chapter 21). With its long history of sustainable microfinance, Indonesia has all the robust home-grown models it needs to provide large-scale sustainable microfinance to its economically active poor.

Indonesia has all the robust home-grown models it needs to provide large-scale sustainable microfinance to its economically active poor

Rural financial institutions: public and private

Most of Indonesia's commercial financial institutions that serve low-income people are public enterprises. As noted, this provides a sharp contrast to much international experience and to the prevailing international view that potentially self-sufficient rural financial institutions should be located in the private sector. There is little disagreement about the potential of the private sector for providing commercial finance to low-income people, even though in many countries private sector interest has been slow in developing. But governments around the world that are saddled with failing state-owned banks and other publicly owned rural financial institutions should consider carefully whether Indonesia's experiences with public commercial financial institutions—the unit desas, the LDKPs, the BKDs, the licensed BPRs—might be adapted to the conditions of their countries. Commercial microfinance can succeed in both public and private institutions. There is no a priori reason to ignore either approach.

Learning from experience

Rural financial institutions in Indonesia have a long history of learning from experience. Colonial administrators moved from the idea of a cooperative rural banking system to one of profitable local banks with external funding. BRI's unit desas were transformed from loss-making subsidized credit delivery systems to sustainable commercial financial intermediaries. The BKKs of Central Java did not initially mobilize savings effectively because of the large influx of KUK funds that made them overly liquid in the early 1990s. But they learned to invest the KUK funds in expanded loan portfolios; they also learned to mobilize voluntary savings from the public. The BKK systems of Central Java and South Kalimantan learned how to overcome political pressure to make inappropriate loans, at least to the extent required to operate sustainably (a lesson not yet learned by most of the LKPs of Dompu District, Nusa Tenggara Barat). Bank Shinta Daya learned how to add group financial services to the savings and credit facilities already provided to individual clients. Bank Shinta Daya also learned to build and operate its own group lending department in order to finance self-help groups profitably (which had not been possible under the high-cost PHBK model that it used at first). Licensed private BPRs are learning how to build BPR networks and links with commercial banks. There are, of course, many lessons still to be learned. But more low-income

people are provided with financial intermediation services in Indonesia than in any other country in the world.

Stability

The recent Indonesian crisis had remarkably little effect on many BPRs, BRI unit desas, and Bank Dagang Bali. Low-income people (whose enterprises are mostly in the domestic economy) continued to save in the institutions they trusted. Savers left faltering banks and moved to the financial institutions they believed were sound (public and private). Borrowers repaid their loans because, especially in time of crisis, they valued greatly their options to reborrow. They also repaid loans because they knew that their financial institutions were not lacking liquidity; thus the clients' ability to obtain new loans depended on their repayment performance, not on whether the financial institution would have sufficient loanable funds. As discussed in chapter 15, established commercial microfinance institutions stayed profitable throughout a crisis so severe that the country's financial system collapsed.

This is perhaps the most important lesson of all. Commercial microfinance (implemented in different kinds of institutions) can provide not only large-scale outreach and institutional profitability, but long-term stability under seriously adverse conditions.

Commercial microfinance can provide wide outreach and institutional profitability. It can also provide stability under seriously adverse conditions

Notes

1. This area is known, in this context, as the Celebesian Transition; Celebes is the former name of Sulawesi.

2. Swidden agriculture refers to agriculture that is characterized by a lengthy cycle of field rotation and by burning as a method of land cultivation. The field is burned and the crops are cultivated in the ashes; after a period of time the field is abandoned for a number of years, while other fields are cultivated in rotation.

3. In 1996 Indonesia had more than 2 million fishing households.

4. A quintal is a unit of mass equal to 100 kilograms.

5. Geertz's (1963) concept of agricultural involution assumes that "poverty sharing" in the Javanese rural economy is a reaction to population pressure on the land. Geertz's view of the income-sharing activities of what he assumes to be relatively homogeneous rural communities on Java has been criticized for its lack of fit with the realities of rural Javanese income distribution and social stratification (Alexander and Alexander 1982). See White (1983) for an extensive survey of the literature criticizing Geertz's views. See Geertz (1984) for his reply to these criticisms, and Koentjaraningrat (1985) for extensive commentary on the issues.

6. A considerable body of literature attests to the agricultural improvements, increased employment opportunities available to rural households, and generally improving living standards in rural areas of Indonesia that began in the mid-1970s. See Timmer (1975); Booth and Sundrum (1981); Bose (1981); Collier, Soentoro, Wiradi, and others (1982); DPIS (1983); Kasryno (1983); Wiradi and Manning (1984); Booth (1985, 1988); Glassburner (1985); Hugo (1985); Keyfitz (1985); Mazumdar and Sawit (1986); Rietveld (1986); Manning (1987, 1988); Jayasuriya and Manning (1988); and Hetler (1989).

7. Colt is the brand name of Mitsubishi's minivan, which is very popular in rural areas.

8. The studies of these two villages were carried out at different periods by authors who consulted for the Harvard Institute for International Development (HIID) and the Center for Policy and Implementation Studies (CPIS) during the 1980s, and both studies are based on excellent data. The Fox study is of Mojosari village, a pseudonym for village G, discussed in chapter 11.

9. See Hill (1989) for discussion of regional and local disparities in income distribution and employment opportunities.

10. Provinces with more than than 15 percent of the rural population below the poverty line were all located outside Java, Bali, Sumatra, and Sulawesi.

11. Much of the discussion in this chapter of the early Indonesian people's banks and their European antecedents, as well as the later development of the BPRs, is drawn from Steinwand (2001). Important sources for Indonesia's rural financial institutions outside BRI and the BKDs (for which references are provided in later chapters) are Fruin (1994 [1935], 1999 [1933]); Gonzalez-Vega (1982b); Gadway, Gadway, and Sardi (1991); Patten and Rosengard (1991); Bouman and Moll (1992); Gonzalez-Vega and Chaves (1993); Martokoesoemo (1993); Pearson and Garland (1993); Hanna (1994); Mosley (1996); Riedinger (1994); Chaves and Gonzalez-Vega (1996); Holloh (1998); Meyer (1998); Lapenu (1998); McGuire, Conroy, and Thapa (1998); Ravicz (1998); Seibel and Parhusip (1998); Timberg (2000); and Parhusip and Seibel (2000).

12. The Irish loan funds gradually declined after 1840 and ceased operation in about 1940. There is no clear evidence that the Dutch knew about the Irish loan funds when they introduced rural financial institutions to Indonesia, but as Steinwand (2001, p. 53) points out, these funds have a striking similarity to Indonesia's Lembaga Dana dan Kredit Pedesaan (LDKPs, or rural fund and credit institutions, discussed later in this chapter).

13. A third group of cooperatives was begun in 1883 by Wilhelm Haas, in part to get around the problems between the two other groups. The Haas cooperatives became the largest group in Germany in the early 19th century, but the Raiffeisen model of cooperative banks became the most popular in Europe (see Steinwand 2001, p. 56).

14. The name Rabobank comes from *Rai*ffeisen, as these banks were known in the Protestant north of the Netherlands, and from *Bo*erenleenbanken, as they were called in the Catholic south.

15. During the world depression, however, nonperforming loans at the district banks rose rapidly, peaking at 56 percent in 1933 and gradually declining to 14 percent in 1937.

16. There were also bank desas on the Outer Islands, especially popular in West Sumatra, but most had to be liquidated because of high defaults (related, in many cases, to managerial and supervision problems).

17. See also DPIS (1983); Sutoro and Haryanto (1990); and the reports from the 1970s and the 1980s of the Agro-Economic Survey, Bogor. For views about the survey, see Sayogyo (1982 [1973]), Collier, Soentoro, Wiradi, and others (1982); and Strout (1985).

18. As noted by Professor Ali Wardhana in the introduction to this book, these programs had high arrears and resulted in high losses to the implementing bank and the government.

19. Based on the findings of DPIS/CPIS/BRI research teams, 1979–90, this represents the normal range of interest rates charged to low-income borrowers by informal commercial lenders in Indonesian villages, but lower and higher rates were also reported. See also Alexander (1986); Mai and Buchholt (1987); Sutoro and Haryanto (1990); and Germidis, Kessler, and Meghir (1991).

20. This is not always the case, however. If the loans are tied to interlinked transactions so that the creditor/commodity wholesaler, for example, buys from the bor-

rower/producer at below-market prices, then small loans can be part of profitable transactions for the lender.

21. See McGuire, Conroy, and Thapa (1998, pp. 153–54) for discussion. Under the Microcredit Project, partly funded with a loan from the Asian Development Bank, Bank Indonesia provides loanable funds to the Bank Pembangunan Daerah (Regional Development Banks, or BPDs) and the BPRs. The BPRs lend directly to microentrepreneurs, while the BPDs lend to small financial institutions. Nongovernmental organizations (NGOs) help organize self-help groups of borrowers. Funds are lent to borrowers at a 2–3 percent flat rate per month. The Linking Banks with Self Help Groups Program (Program Hubungan Bank dan KSM, or PHBK) is discussed later in this chapter.

22. Because of rounding in Steinwand's calculations, the percentages of commercial banks' assets sums to 101 percent.

23. Table 9.1 (for 1985) compares rural loans and total loans in the financial system; table 9.2 (for 1995) shows loans in microfinance institutions as a share of loans in the total financial system. However, there is substantial overlap between the rural and microfinance institutions shown in these tables.

24. Bank Indonesia lists 1,807 Lembaga Dana dan Kredit Pedesaan (LDKPs), rural fund and credit institutions owned by local governments, for 1998. But this is likely an underestimate because Bank Indonesia has updated figures only from some provinces. Steinwand (2001, p. 230) estimates 2,317 LDKPs in 1998, including the LDKPs that had become licensed BPRs. He points out that while Bank Indonesia statistics show 264 LPDs in Bali in 1998, there were actually 910 (p. 172).

25. These data are from September 1998, when Indonesia was in deep crisis. The exchange rate that month was 10,700 rupiah to the U.S. dollar (compared with 2,450 in June 1997, just before the crisis).

26. Steinwand (2001, p. 241) raises the valid point that some private licensed BPRs have time deposits from only a few large depositors who are often connected to the owners, and that this can be dangerous

27. Provincial Development Banks are also known as Regional Development Banks.

28. The bank transferred the KUK funds to the BPD, which provided each BKK/CJ with a deposit at the BPD. Since the interest rate for the deposit was set to be the same as the rate that the BKKs/CJ paid for the KUK loan, the interest rates offset each other.

29. Savings include both compulsory and voluntary savings, but Steinwand (2001) suggests that mandatory savings may now be a negligible share of total savings.

30. Profitable BKKs/CJ allocate shares of their profits to stakeholders. In the early stages of their development, the BKKs/CJ retained 70 percent of their profits, but in the 1990s this was reduced to 50 percent. Thirty percent of the profits were paid in dividends to the provincial government, five percent each went to two local funds (a development fund and a social fund), and ten percent was used for performance-based incentives for BKK/CJ management and staff. (Steinwand 2001, pp. 133–34). The distribution of profits has changed somewhat over time (and also shows some variation among BKKs/CJ).

31. The capital endowment grant was actually a low-interest loan. But because BKKs/SK are required to pay only the interest on the loan and because the interest is used for partial coverage of the costs of supervising units and training staff, the loan essentially functions as a capital grant (Ravicz 1998, p. 32).

32. It is unclear whether the loans to self-help groups are included in this figure.

33. The South Kalimantan BPD reported that some BKKs/SK serve villages up to 70 kilometers away. Ravicz (1998, pp. 39–40) interviewed a BKK/SK manager who reported serving clients 25 kilometers away—where the trip by motorcycle took two

hours each way because of difficult road conditions. At that BKK only 15 of the subdistrict's 27 villages were provided services because of the area's limited infrastructure.

34. Nusa Tengarra Barat was surpassed in percentage of population below the poverty line in 1996 only by its neighbors in eastern Indonesia, Timor Timur (no longer part of Indonesia as of 1999) and Nusa Tenggara Timur, and by West Kalimantan. In both Central Java and South Kalimantan 14 percent of the population was below the poverty line in 1996, higher than the national average of 11 percent (Government of Indonesia 1996, p. 572).

10 Where the Microfinance Revolution Began: Bank Dagang Bali

Bank Dagang Bali (BDB) was not the first financial institution to provide microcredit profitably, nor was it the first institution to collect savings from the poor. In an important sense, however, BDB was where the microfinance revolution began. Today it is the longest-serving formal sector financial institution providing commercial microfinance (both savings services and loans) on a substantial scale in a developing country, having done so continuously and profitably since 1970—and without ever having received a subsidy.[1]

BDB was founded in Bali, Indonesia, by I Gusti Made Oka and Sri Adnyani Oka, a husband and wife who started out poor, built up a little capital by working in the informal sector, became informal commercial moneylenders, opened a small secondary bank, and then—with full knowledge of

the microfinance market—opened BDB, a private bank specializing in delivering financial services profitably to the low-income public.

It is no accident that the first bank to emphasize microfinance was started by former moneylenders. The Okas knew the market from the inside, and they were experts in the methods and operations of moneylenders. Further, they understood the aspirations, fears, and financial strategies of microfinance clients, how such clients could benefit from bank services, and how a bank could serve them profitably. In hindsight, it is hard to imagine how the first bank with a microfinance focus could have been founded in any other way.

This chapter first explores the early history of the Okas' interest and activities in commercial microfinance, then discusses the history of BDB. The bank's performance from 1970–96 is reviewed, and the focus then shifts to BDB's clients. BDB's performance from 1997–2000 is discussed in chapter 15.

In 1968 the Okas opened a tiny secondary market bank with $300 in capital. The bank was located in a 2- by 4-meter room in Denpasar, the capital of the province of Bali. The little bank quickly became profitable because the Okas knew that there would be large demand for small loans, that they could finance these loans with savings, and that they could undercut moneylenders by a wide margin—benefiting both their customers and the bank. By 1970 the small market bank had made about $40,000 in profit, and in September of that year the Okas decided to open BDB, the second licensed private bank in Bali. The bank provided small loans and mobilized savings, and it grew rapidly. By the end of 1970 BDB had assets of about $156,000; by the end of 1971 it had assets of about $573,500 and had made a profit of about $8,000 that year.

Over time BDB came to emphasize savings over lending, but it has always offered both. The bank is best known for its knowledge of microfinance clients and for its savings services—which are state of the art in microfinance. BDB is now a full-service bank providing finance to commercial and corporate clients as well as to microfinance customers.

By the end of 1996 BDB had $113 million in deposits, $94 million in outstanding loans, and $136 million in assets. The bank has

Bank Dagang Bali was not the first financial institution to provide microcredit profitably, nor was it the first to collect savings from the poor. But it was where the microfinance revolution began

been profitable every year since it began. In 1990–96 annual pretax profits ranged from about $1.0 million to $1.6 million. As discussed in chapter 15, the bank continued to serve low-income customers and to operate profitably during 1997–2000 despite the crisis.

Bank Rakyat Indonesia (BRI) and every other bank in Indonesia that provides commercial microfinance is in some way indebted to BDB, and the bank's influence has spread to other countries as well. BDB is known for teaching the poor not to be afraid of banks. As noted in the preface, one of its clients told me, "BDB taught us something important that we never knew before. BDB taught us that the bank is not a king, the bank is a servant."

BDB, now a full-service bank providing finance to commercial and corporate clients as well as to microfinance customers, began with an idea—that the demand for financial services among the economically active poor could be met by institutions providing commercial microfinance profitably, and that these services could promote social and economic development. This was a new idea in 1970, when BDB opened its doors. As might be expected from a bank founded by former moneylenders, BDB, without any subsidy, has been profitable every year since it began.

The story of BDB is crucial for understanding the history, psychology, and financial principles of institutional commercial microfinance. But BDB cannot be understood without a knowledge of I Gusti Made Oka and Sri Adnyani Oka, its founders. Mr. Oka is frequently invited to lecture at finance courses where he speaks openly about BDB's products, strategies, and operations, about how to serve microfinance clients profitably, and about the lessons BDB has learned.

At one such lecture at Indonesia's Ministry of Finance, he was asked by a manager of another bank, "Why do you tell us your bank secrets? Do you not know that we will copy them?" Mr. Oka replied, "That is the reason I tell you. BDB has been successful. Therefore, we must give back to the wider community, and what we can give best is our knowledge. There are many poor people whose banking needs are still unmet. If you can serve them, it will help them and it will help the country. If you learn from BDB's experience, we are happy."

As might be expected from a bank founded by former moneylenders, BDB, without any subsidy, has been profitable every year since it began

Bank Dagang Bali: Formative Elements

To understand today's BDB, it is important to first understand the history of the Oka family, the Okas' experience as informal moneylenders, and the formation of Bank Pasar Umum, the precursor to BDB.

Oka family history

I Gusti Made Oka was born in a village near Gianjar, Bali, in 1932. His father died when he was three years old; three years later his mother remarried and moved away. Oka was then adopted as a grandson of the elderly woman for whom his father had worked as a servant. He grew up in her home, working in the house and on her fields. His adopted grandmother sometimes allowed him to go to school, but she was unable to pay his school fees. However, the teacher permitted him to follow the lessons informally. Although he could attend school only sporadically, the young Oka did well and was later admitted without fee.

When Oka was eight years old, he went to the local Hindu priest and volunteered to clean the temple in the mornings before school. The priest said, "That is a good idea. The Gods will bless you." Oka replied, "That would be wonderful, but could I also have some coconuts and flowers from the temple trees?" The priest agreed, and Oka sold these for pocket money and school supplies. Oka graduated from primary school, but he could not afford further study. Instead he learned to sew and became a tailor in his village.

After a few years Oka moved to Gianjar, the nearby market town, and became an apprentice to a tailor there. In 1951 he moved to Denpasar, the capital of Bali, where he began to work in a tailoring shop. A year after arriving in Denpasar, Oka rented a room and opened his own tailoring shop, which doubled as his living quarters. Because he did not have a sewing machine, he sewed by hand. His skill increased, and he received an order from the Secretary to the governor of Bali. That, in turn, led to a larger order to make the drivers' uniforms for the Balinese government. He was then able, in 1952, to approach the BRI branch in Denpasar to ask for an $11 loan to buy a sewing machine.[2] The sewing machine cost $30; he had saved $19 and BRI lent him the $11 he requested. With the machine, Oka's profits increased and he was able to repay the loan and to employ a few assistants. Oka deposited savings regularly in BRI—which, since he had a BRI loan, he considered his bank.

Mrs. Oka began to lend their savings to friends, and Mr. Oka kept the accounts. Soon there was more demand for loans than the Okas' savings could meet

Soon after moving to Denpasar, Oka had begun attending night school, where he studied accounting and English, and where he met his future wife. Sri Adnyani Oka was born in 1936 in a village in Bali. After graduating from the neighborhood primary school, she began volunteer work at the local hospital, delivering medicine to patients. She attended a school that prepared students for secondary studies, and she wanted to continue her education. However, her parents did not believe in further education for girls and would not give their permission for her to attend secondary school. In 1951 she hitched a ride at night on a truck headed for Denpasar—not a common action for a young woman in provincial Bali in 1951. She stayed with a childhood friend who was working in Denpasar, and she found a job as a typist in the Health Department. She then joined night school, where she met Mr. Oka; they were married in 1955. They began raising a family and eventually had 10 children, of whom 8 survived. By 2000 the Okas had more than 20 grandchildren.

The Okas as informal commercial lenders

Shortly after their marriage in 1955, Mrs. Oka perceived that her husband was deeply concerned about their financial security. As she says, "he was worried about our poverty, and I wanted to do what I could to make him happier." She asked him how much annual interest they were receiving on their BRI savings account—5 percent. She said, "I can earn more than that by lending our money to friends. People want short-term loans, and I can lend out the same money many times during one year."

Mrs. Oka began to lend their savings to friends, and Mr. Oka kept the accounts. Soon there was more demand for loans than the Okas' savings could meet. By then, however, the Okas were well known and trusted in the community. Thus when they had a request for a loan from someone they knew and trusted, they were able to serve as an intermediary between the potential borrower and one of a number of people who had excess liquidity and who trusted the Okas' judgment.

To protect the lender, Mrs. Oka required the borrower to provide gold as collateral; she held the collateral in case the borrower defaulted. To comply with Indonesian law, Mrs. Oka purchased the gold. The sales slip recorded the weight and karat of the gold, and stated: "This gold was sold by Person A to S.A. Oka for X

amount. Person A can purchase this gold within one month from S.A. Oka for Y amount [X plus the interest charges]. After one month, S.A. Oka has the right to sell the gold in the market." There was large demand for this service, and the profits were split evenly between the Okas and the person who provided the capital. Mrs. Oka also accepted deposits on which she paid interest, and which she lent out.

In 1956 Mr. Oka borrowed $222 from Bank Perniagaan Umum, the first private bank in Bali. At that time the bank required that borrowers become shareholders. Accordingly, Mr. Oka had to pay 10 percent of the loan to become a shareholder of the bank. His first shareholders' meeting was an experience that had a crucial effect on his thinking and on his life. As he put it, "My wife and I already knew that when a person we trusted needed to borrow money, we could go to someone who had money and arrange the transaction. At the bank shareholders' meeting, I was surprised to learn that is exactly what banks do. I knew then that we could run a bank, that it could be profitable, and that it would help many people who were afraid of banks. From that time on, I was determined to obtain a bank license."

"I knew that we could run a bank, that it could be profitable, and that it would help many people who were afraid of banks. I was determined to obtain a bank license"

The Okas maintained very low operating costs in their informal financial activities. Mrs. Oka rode a bicycle to visit those who wanted to borrow and those who had excess funds to lend, and Mr. Oka did the accounting. She also worked as a typist, while he continued his tailoring business and graduated from night school.

Bank Pasar Umum

The Okas did well in the informal financial market, and in 1968 they opened a small secondary market bank (bank pasar), Bank Pasar Umum (BPU).[3] BPU, with $300 in capital, was located in a tiny room in a Denpasar market. The Okas hired three employees, and the bank began operations.

Inflation was high at that time, and interest on deposits was normally stated as a monthly rate. Government banks offered 6 percent a month interest on savings, while private banks offered 7 percent a month. The Okas took a full-page advertisement in a local newspaper stating that "If you deposit Rp 100,000 now, you will have Rp 204,000 next year. Your profit will be more than your principal. However, if you want interest every month, BPU will pay you 8 percent a month. Do not move from your house. Just call us at this telephone number. We will come to your house."

The ad brought BPU many customers. BPU provided loans with one-month terms, with interest of 8 percent a month and a 3 percent fee for each loan. The Okas collected loan repayments in daily installments and immediately relent the capital. Because the BPU office was tiny and probably would not have inspired confidence on the part of their clients, the Okas and their three employees normally went to the customers, rather than having the customers come to the bank.

BPU quickly became profitable. The bank succeeded because the Okas combined intimate knowledge of the local financial market, well-honed entrepreneurial abilities, and a sense of kinship with their low-income clients. The Okas knew how few options there were for microenterprises and for poor people who wanted loans and savings accounts.

By 1970, two years later, BPU had made $39,700 in profits, and the Okas decided to open a private bank as well. They borrowed $13,200 from Bank Pembangunan Daerah, which is owned by the provincial government of Bali, and with initial capital of nearly $53,000 they opened BDB. The Okas' experience in moneylending and in building a local market bank had given them extensive knowledge of the microfinance market—which they would now serve through a licensed, full-service bank.

Bank Dagang Bali: Development and Performance, 1970–96

Creative financing, professional and transparent accounting, and a knowledge of the market have consistently marked BDB's development

BDB opened in September 1970 with 30 staff members in a rented office in the center of Denpasar. Aware that they knew a lot about the local informal financial market but little about bank management, the Okas hired three retired BRI employees. One was appointed chairman, one the head of the credit section, and one the head of operations. Mr. Oka became BDB's president-director. Mrs. Oka continued to work with clients, emphasizing savings mobilization and customer relations.

BDB grew rapidly. In 1972 the bank purchased an office building in downtown Denpasar; it also obtained a technical consultant from the U.S. International Executive Corps Service who helped the bank improve its management. In 1974 BDB was selected by the Indonesian government to be the first private bank to channel credit to small borrowers under the supervision of Bank Dagang Negara, a state-owned bank. Subsequently BDB continued acting as a channeling agent for government credit to small borrowers, but was permitted to do so without state bank supervision.

Creative financing, professional and transparent accounting, and a knowledge of the market have consistently marked BDB's development. For example, until PAKTO 88 deregulated the opening of bank branches, government regulation prohibited BDB from opening branches. But knowing that there was considerable demand for BDB services in other parts of Bali, the Okas bought a large used car from Bank Indonesia, the central bank. This car became, de facto, a BDB mobile bank. Announcements were made that at a particular time on a particular day, the car would be at a certain location. Clients went to that location and transactions were carried out there. This approach worked well during the 1980s because there was large demand for small loans and savings services, and because BDB was known and trusted throughout Bali. BDB carried out profitable financial intermediation from its mobile bank until 1988.

Immediately after PAKTO 88, BDB opened branches that rapidly became profitable because they already had a large client base in the mobile bank customers. In 1987 BDB was the largest corporate taxpayer in Bali, and in 1988 it was the second largest corporate taxpayer in the Eastern Indonesia Region. Since then BDB has remained one of the top taxpayers in the province. In 1990 the bank opened branches off Bali in Indonesia's two largest cities, Jakarta and Surabaya.

Table **10.1** **Bank Dagang Bali profit and loss statement, 1970–96**
(millions of rupiah)

Indicator	1970	1975	1980	1985	1990	1995	1996
Income	4	136	826	5,786	36,702	44,173	52,777
Operating income	4	136	826	5,731	31,214	43,497	52,676
Interest, commissions, and fees	3	132	801	5,636	30,336	41,437	50,571
Other	1	4	25	95	878	2,060	2,105
Nonoperating income[a]	0	0	0	55	5,488	676	101
Expenses	4	130	774	4,887	33,629	41,411	49,439
Operating expenses	4	130	774	4,832	28,100	40,907	49,429
Interest	2	92	525	3,232	19,346	30,910	37,459
Overhead	2	38	249	1,600	8,754	9,997	11,970
Salaries	—	11	93	449	2,086	3,855	4,148
Other overhead	2	27	156	1,151	6,668	6,142	7,822
Nonoperating expenses[a]	—	—	—	55	5,529	504	10
Net profits	0	6	52	628	2,003	1,937	2,345
Pretax profits	0	6	52	900	3,073	2,762	3,338
Taxes	0	0	0	272	1,070	825	993

— Not available
Note The year-end rupiah exchange rate for one U S dollar was 378 in 1970, 415 in 1975, 627 in 1980, 1,125 in 1985, 1,901 in 1990, 2,308 in 1995, and 2,383 in 1996 See table 2 1 for more complete data on exchange rates, inflation rates, and the consumer price index for 1970–99
a Refers to income and expenses from nonbanking activities (such as the rental and sale of buildings)
Source Bank Dagang Bali data

As noted, BDB has been profitable every year since it opened (tables 10.1 and 10.2). Pretax profits were about $8,000 in 1971, about $83,000 in 1980, and about $1.6 million in 1990.[4] Profits fell in 1991 ($1.2 million) and 1992 ($1.06 million), primarily because the central government imposed a tight money policy that affected all banks in Indonesia. When the policy was changed, BDB's pretax profits reverted to $1.2 million a year in 1993–95 and to $1.4 million in 1996. BDB's assets grew substantially as well, from about $156,000 in 1970 to $10.7 million in 1980 to $135.5 million in 1996, excluding assets held in the names of the owners. (The bank remained profitable during 1997–2000; see chapter 15.)

The amounts of BDB's outstanding loans and savings and the number of loans and savings accounts grew substantially (tables 10.3 and 10.4). By 1996 BDB had $113 million in savings and $94 million in outstanding loans. That same year, though, there were 23 times as many savings accounts (363,859) as loans (15,645), reflecting both state-of-the-art local-savings mobilization methods and a relatively conservative loan policy.[5]

Repayment was consistently high during 1970–96, and the occasional writeoffs were small. In 1996, noncurrent loans accounted for 1.2 percent of the portfolio; doubtful loans, 0.7 percent; and bad loans, 0.2 percent.

Table **10.2** **Bank Dagang Bali balance sheet, 1970–96**
(millions of rupiah)

Indicator	1970	1975	1980	1985	1990	1995	1996
Assets	59	819	6,681	31,330	168,385	268,363	323,005
Current assets	46	767	6,525	29,689	158,941	231,305	267,969
Cash	6	57	506	627	2,693	4,765	3,960
Bank Indonesia	5	80	988	1,104	2,276	2,841	9,113
Other banks	5	36	4	9,446	39,174	42,381	33,831
Outstanding loans	30	594	5,027	18,512	114,798	183,285	223,393
Reserve for bad debt	0	0	0	0	0	–1,967	–2,328
Fixed assets[a]	11	50	106	902	3,892	9,811	10,086
Other assets[b]	2	2	50	739	5,552	27,247	44,950
Liabilities	39	752	6,345	29,318	153,060	247,005	298,106
Demand deposits	17	106	393	2,545	14,714	16,536	14,937
Savings deposits	1	293	3,912	13,409	41,704	52,685	59,084
Time deposits	21	257	1,258	10,977	67,952	155,772	195,762
Bank Indonesia[c]	0	76	639	603	19,072	1,985	1,614
Other loans	0	0	0	0	6,990	14,794	20,325
Other liabilities	0	20	143	1784	2628	5233	6384
Equity	20	67	336	2,012	15,325	21,358	24,899
Capital (incl. retained earnings)	20	61	284	1,384	13,322	19,421	22,554
Net profits	0	6	52	628	2,003	1,937	2,345
Total liabilities and equity	59	819	6,681	31,330	168,385	268,363	323,005

Note See table 10 1 for exchange rates
a Includes land, buildings, vehicles, and office furniture but excludes fixed assets held in the names of the bank's owners
b Includes marketable securities and investments
c Long-term liabilities
Source Bank Dagang Bali data

Table **10.3** **Bank Dagang Bali outstanding loans, 1970–96**

Indicator	1970	1975	1980	1985	1990	1995	1996
Value (millions of U.S. dollars)	0 08	1.43	8 02	16 46	60 37	79 40	93 80
Number	29	597	4,639	5,344	8,285	12,814	15,645

Note Excludes U S. dollar loans, which were started in 1992
Source Bank Dagang Bali data

In 1996, 72 percent of BDB's savings were in time deposits in just 2 percent of the bank's accounts. Nearly 98 percent of the accounts were in passbook savings, which accounted for 23 percent of the value of deposits. The number of giro checking ac-

Table **10.4** **Bank Dagang Bali savings, 1970–96**

Indicator	1970	1975	1980	1985	1990	1995	1996
Time deposits							
Amount (millions of U.S dollars)	0 06	0.62	2 01	9 76	35 74	67 49	82.14
Share of total (percent)	54	39	23	41	53	70	72
Number of accounts	25	435	492	2,494	10,624	7,593	8,015
Share of total (percent)	14	4	0	0	4	2	2
Passbook savings							
Amount (millions of U S dollars)	0	0.71	6 24	11 92	21.93	22 83	24 79
Share of total (percent)	3	45	70	50	34	23	23
Number of accounts	62	10,515	55,341	152,837	277,776	345,240	354,888
Share of total (percent)	35	94	99	98	96	98	98
Giro accounts							
Amount (millions of U S dollars)	0 05	0 26	0 63	2 26	7 74	7 16	6 27
Share of total (percent)	44	16	7	9	13	7	5
Number of accounts	90	211	311	683	1,225	1,005	956
Share of total (percent)	51	2	1	0	0	0	0
Total							
Amount (millions of U S dollars)	0 11	1 58	8 88	23 94	65 41	97 48	113 2
Number of accounts	177	11,161	56,144	156,014	289,625	353,838	363,859

Source Bank Dagang Bali data

counts (current accounts with checking facilities) was less than 1 percent of accounts and only 5 percent of the value of BDB's savings and deposits (see table 10.4).

Between 1975 and 1985 BDB's savings were worth more than its time deposits, but over the next decade, time deposits pulled far ahead of savings. Between 1975 and 1996, however, the number of time deposit accounts never surpassed 4 percent of the total number of savings and deposit accounts (see table 10.4). The rise in the value of time deposits after 1985 reflects primarily the product choices of a relatively few large savers, many of whom were previously small savers but remained loyal to BDB.

In 1996, 18 percent of the number of BDB's outstanding loans were for amounts up to $420, and 61 percent were for amounts up to $2,098 (table 10.5). However, 10 percent of borrowers accounted for 66 percent of the value of outstanding loans. For time deposits, 44 percent of the number of accounts and 81 percent of the value of the deposits were in accounts above $2,098. For pass-

BDB has been profitable every year since it opened in September 1970, without ever receiving a subsidy

Table **10.5** **Size distribution of Bank Dagang Bali loans and savings, 1996**

Indicator	Amount (millions of U.S. dollars)	Share of total (percent)	Number of loans or savings accounts	Share of total (percent)
Loans[a]	93.8	100	15,645	100
"$125	0.1	0	156	1
$126–420	0 9	1	2,660	17
$421–2,098	6 5	7	6,727	43
$2,099–10,491	24 4	26	4,537	29
>$10,491	61 9	66	1,565	10
Time deposits	82 1	100	8,015	100
"$2,098	15 6	19	4,448	56
>$2,098	66.5	81	3,527	44
Passbook savings accounts	24 8	100	354,888	100
"$420	8 2	33	333,595	94
>$420	16 6	67	21,293	6

Note The size distribution for giro accounts is not available
a Excludes U S dollar loans
Source Bank Dagang Bali data

book savings, in contrast, 94 percent of the number of accounts and 33 percent of the value of the deposits were in accounts below $420.

Unlike BRI, BDB does not separate its microbanking activities from its services to larger commercial and corporate clients. Thus its average loan balance—$5,990 in 1996—is not a useful measure of its microbanking activities. Still, because most of the bank's microsavings activities are in passbook savings accounts, some sense of the those activities can be gained from the average balance for each savings instrument. In 1996 the average time deposit account was $10,248 and the average giro account was $6,559. In contrast, the average passbook savings account was $70.

Thus BDB serves a large number of small clients. But most of the value of its loans and savings comes from its larger clients, many of them long-term BDB customers. In essence, the larger clients make possible financially viable service to large numbers of low-income clients.

Bank competition in Indonesia increased rapidly after the PAKTO 88 deregulation. BDB's competition grew particularly fast, especially in Bali, because many banks there copied and adapted the Okas' ideas and the bank's practices. The results for BDB have been mixed. In 1996 BDB was overly liquid (see tables 10.2–10.4), which was also true of many other Indonesian banks at that time. Moreover, many BDB clients started to use several banks. Typically they do not leave BDB; they add other banks. But they continue to recommend BDB to their family and friends, citing its record of friendliness and service to all clients

regardless of the size of their accounts. So, despite increased competition, both clients and staff have continued to be exceptionally loyal to BDB.

Although BDB has come to emphasize savings over lending, it has always offered both. The bank is best known for its knowledge of microfinance clients and for its savings services. BDB benefited not only from Indonesia's growth and development during 1970–96, but also from Bali's thriving economy—to which the bank contributed. The province experienced high export growth, substantial tourism, and rapid rural employment and income growth from agriculture, fishing, and garment and handicraft production. But BDB's growth has also derived from an approach that allowed a family-owned institution with a thin management structure to serve as many low-income clients as possible while also serving some larger customers and remaining profitable.

In an effort to give back to the community, BDB provides university scholarships each year to poor Balinese students. More than a thousand students have received these scholarships. In addition, the bank contributes rice and other food to orphanages. Finally, BDB provides funds for the education of needy primary school students in the village where Mr. Oka was born.

In 1994 Mrs. Oka received Indonesia's Kartini award, a national honor given to women for lifetime achievement

Customer Relations, Organization, Products, and Services

BDB has been built on a personal approach to customers, and the Okas know well their customers and their markets. Mr. Oka's example and his teachings have spread widely. Similarly, Mrs. Oka's knowledge of microfinance clients—and BDB's example in treating low-income clients with the same respect and attention accorded its wealthier clients—have become renowned. In 1994 Mrs. Oka received Indonesia's Kartini award, a national honor given to women for lifetime achievement.

Sustainable financial institutions that provide services to microenterprises and other low-income people frequently develop and articulate an institutional philosophy. There is considerable overlap in the cultures of such institutions; these include components of trust, service, high-quality financial management, accountability, loyalty, institutional reputation, and contribution to social and economic development. Nevertheless, each institutional philosophy has its own emphasis: BDB's emphasizes balance.

BDB believes that to achieve harmony, loyalty, and profitability, five components must be balanced: investors, staff, customers, the government, and the community. As Mr. Oka put it:

> Business means serving. We must serve the investor and respect the capital that is invested. We must also serve the employees; we do this in a number of ways, for example by establishing pension funds and retirement savings accounts. Customers must be given the best service possible. We serve the government by paying taxes promptly; BDB is one of the largest taxpayers in

this region of Indonesia. BDB contributes to the community by providing scholarships to poor students and food to orphanages.

BDB culture also incorporates the idea that if the bank encourages savings and provides loans for the important things in life—a house, education, health, and retirement—then, as the Okas say, "All members of the family will be happy with BDB and will stay with us." BDB expects to serve its clients not only for their lifetimes, but for generations. Its instruments and services have been developed, and its staff trained, accordingly.

BDB expects to serve its clients not only for their lifetimes, but for generations. Its instruments and services have been developed accordingly

Organization and management

BDB's head office, constructed in 1993, is in Denpasar. In addition, BDB has 8 branches, 18 sub-branches, and 4 deposit collection points. All but two of the branches are in Bali; as noted, those in Jakarta and Surabaya began in 1990. In that year also BDB was approved as a private national foreign exchange bank, and it began a joint venture with the Internationale Nederlanden Bank (ING) in Jakarta (now ING Barings).[6]

BDB's board of directors has three members, including Mr. Oka, the president-director. The bank has six divisions: credit and marketing, operations and planning, treasury, human resources, general and legal, and internal audit. At the end of 1996 BDB had 717 employees, about evenly split between women and men.

As noted, the bank's management structure is thin. BDB compensates for this by concentrating on savings mobilization—an activity at which it is expert and that it can manage relatively easily. Loans are made to the extent that management resources enable high portfolio quality.

This approach permits the bank to serve both low-income people and larger clients, but it limits potential profitability. Within its organizational constraints, however, BDB has done well: it reaches many microfinance clients, it has always been profitable, and it has retained a sound rating throughout. When the Okas retire, BDB could go public, with the family retaining a majority of the shares.

Considerable attention is paid to BDB staff, and staff retention is high. BDB encourages long-term staff loyalty and emphasizes membership in the BDB "family." Staff are taught about local markets and about serving clients. All staff—even the cleaning staff—are encouraged to visit their extended families, neighbors, and friends to inform them about BDB services, and in this way to locate new customers. Staff receive a bonus for every client introduced to BDB; for borrowers, the bonus is paid after the loan is repaid. BDB staff are treated with respect and thoughtfulness by their employers, and are taught to treat their customers, both rich and poor, in the same way.

Many clients with different backgrounds and incomes speak highly of BDB staff. The trust that has developed between customers and staff, reinforced by recognition of good staff performance by BDB management, has helped to build the kind of job satisfaction that enables the bank to retain its staff.

Loan products

BDB provides loans to individuals ranging from less than $100 to more than $100,000; there are no group loans. Many of today's large borrowers began as small savers and borrowers in the 1970s. Although BDB emphasizes microfinance, it considers itself a bank for the general public. The bank's philosophy is to provide continued financial services to good customers whether their enterprises remain small or grow large. Borrowers range from proprietors of tiny fruit stands and barbershops to gold merchants and supermarket owners. Three types of loans are provided:

- Retail commercial loans (52.5 percent of the value of the 1996 portfolio).
- Consumer loans, classified as motor vehicle, housing, and personal loans (9.8 percent).
- Loans to larger private or corporate clients, some of whom have lines of credit (37.7 percent).

BDB staff are treated with respect and thoughtfulness by their employers, and are taught to treat their customers, both rich and poor, in the same way

In 1996 BDB's annual effective interest rates on loans varied from 20 percent (for prime customers) to 36 percent, with the interest on most loans set at about 30 percent. For large loans collateral of 150–200 percent of the loan amount is normally required, but for small loans many forms of security are accepted, and some small loans are provided without collateral.

Most BDB loan terms are for less than one year, but loans can be rolled over. Housing loans are primarily for land purchase and generally have terms ranging from one to five years. Five years is the maximum term for any loan. Loan appraisal, decisionmaking, and the release of funds are generally accomplished within three to five days for new borrowers. Loans for previous clients with good repayment records can be processed in a day.

The government requires Indonesian banks to provide 20 percent of their loan funds for Kredit Usaha Kecil (KUK), or Small Business Credit, defined in 1996 as loans up to 200 million rupiah ($84,000 in 1996; see chapter 9). In addition to meeting its quota, BDB acts as a channeling agent for other banks that prefer not to serve this market directly; there are many more requests for this service than BDB can accept. Under the KUK channeling arrangement, BDB locates creditworthy borrowers and recommends them to the lending bank. BDB bears no risk and receives a fee of 1.5–2.0 percent of the loan. In 1996 BDB channeled about $9 million to small and medium-size borrowers in this way.

Savings products

Microsavings is BDB's specialty. The design and implementation of voluntary savings instruments and services for low-income people are highly developed. Services to savers include maintaining daily routes on which staff collect deposits and pay out withdrawals at the customer's home or place of work, advising savers on account types appropriate for their specific needs, and providing quarterly lotteries for which free tickets are given to savers according to the minimum monthly balance in their accounts.

As indicated, savings instruments are of three general types: time deposits, giro accounts (current accounts that provide checking services), and different types of passbook savings accounts. In 1996 the annual interest rate on rupiah time deposits was 16.0 percent for 1- to 3-month deposits and 16.5 percent for 6- to 12-month deposits. Interest on U.S. dollar time deposits was 7.5 to 8.0 percent. The annual interest rate for giro accounts ranged from 6 to 9 percent, in most cases paid on the minimum monthly balance.

In 1996 general passbook savings, which are fully liquid, paid 12 percent annual interest on the minimum monthly balance. Another passbook savings product for larger accounts paid from 13 to 15 percent a year on the minimum daily balance on accounts ranging from $420 to $4,196. There are also long-term passbook savings accounts for retirement (which can be withdrawn at age 55), for education (which can be withdrawn at age 19), for housing, and for ceremonies. The annual interest on these accounts was 15 percent in 1996. In 1996 the cost of loanable funds was 15.2 percent; of this, 11.3 percent was financial costs and 3.9 percent was administrative costs.

BDB's lotteries are well known throughout Bali. In the early years the most valuable annual prize was a motorcycle; later BDB offered a car, and then a house

Lotteries

BDB holds lottery drawings four times a year for all holders of passbook savings and giro accounts. The lotteries, which have been held since 1971, were inspired by the Okas' knowledge of the psychology of smaller savers. They perceived that many poor people in Bali, as in other places, are attracted to lotteries because they view gambling as the only possible means of escape from poverty. The Okas sought to transform this widespread interest in gambling by removing the lottery risk for the participants, while simultaneously encouraging them to save in BDB.

Every month savers receive free of charge one lottery number for each $4 (in 1996) of their minimum monthly balance. The lotteries are extremely popular and well known throughout Bali. In the early years the most valuable annual prize was a motorcycle; later BDB offered a car, and then a house. Smaller prizes are also given at each lottery drawing.

BDB uses the lottery drawings as an opportunity to provide information about the bank's instruments and services, and more generally about the role of banking in social and economic development. Large prizes are delivered to the recipient's village, where the occasion is used to promote BDB and to educate local people about banking.

Many other Indonesian banks, including BRI's unit *desas,* have adapted the BDB lottery for their savings instruments. In addition, when Bolivia's BancoSol began mobilizing voluntary savings in 1993, lotteries adapted from BRI—which had adapted them from BDB—were included in the product design. Financial institutions in other developing countries have also expressed interest in adapting the BDB lotteries for their microsavings mobilization efforts.

Mobile savings teams

BDB has three types of mobile savings teams that serve clients whose workplaces or homes are located along three roughly concentric circles around each

branch.[7] One savings team travels by foot, covering the areas nearest the branch. A second team travels by motorcycle and covers more distant clients. A third team travels by car and serves the branch's most distant savers.[8] Each team consists of two uniformed staff members, either two women or two men.

In each of the mobile savings teams, one member carries the money while the other is responsible for the account books. To discourage collusion and fraud, one member of each team is rotated every six months. The teams cover a specified route every day; their primary purpose is to collect savings from BDB depositors, but they also provide withdrawals and other banking services as needed. Although loans are handled at the branch office, the savings teams acts as a liaison between the branch and the client in arranging for loan information to be provided; when requested by clients, a savings team can deduct borrowers' loan payments from their savings accounts.

The daily routes are arranged to accommodate customer demand. Many customers make daily deposits; some save on specific days several times a week. Others save weekly, biweekly, or monthly. Customers often have several BDB savings accounts that are either held in the names of different family members or maintained by a single individual for different purposes.

Depending on the route and the type of transport, a team can cover 50 to 100 customers a day. In a single stop at a home or workplace, a team sometimes collects deposits from up to 10 savers. Savers who are not located in a fixed place every day often ask their family, neighbors, and friends to hold their passbooks and money, and to make deposits for them when the team visits. This approach is helpful for the savers and efficient for the bank. The arrangements among the savers are private; BDB bears no risk from this practice.

BDB savings teams also serve many employees in private enterprises and public institutions. The team goes to the place of employment on payday and collects deposits from the employees. When BDB opened its branch in Jakarta, the mobile savings teams used the techniques developed in Bali; BDB collects savings from the employees of many institutions in Jakarta, including the Ministry of Finance and Bank Indonesia. As with the lotteries, many Indonesian banks have copied or adapted BDB's mobile savings teams.

BDB collects savings from the employees of many institutions in Jakarta, including the Ministry of Finance and Bank Indonesia

Public relations

BDB excels at public relations. The Okas, who know many of their clients personally, are active in community events and often have opportunities to reinforce old ties and make new acquaintances. Clients are given courteous personal attention and provided with helpful and clear information. BDB gives gifts to its clients on religious holidays (keeping careful track of who belongs to which religion) and for major family events. As a result of its customer service program, BDB's reputation as a bank that provides good service to low-income borrowers has spread widely by word of mouth.

In addition, Mrs. Oka visits clients frequently, and Mr. Oka is a regular guest at events held by the provincial and local governments and by other organizations. At such occasions he provides information to the organizations' employees

generally about how banking services can help their families, and in particular about savings instruments suitable for the education of their children and for the employees' retirement funds. Lottery drawings are used to provide information and publicity about the bank's services. BDB also receives considerable publicity from journalists who find that reporting on its services to low-income clients makes good newscopy.

Bank Dagang Bali's Savers

BDB gives gifts to its clients on religious holidays (keeping careful track of who belongs to which religion)

BDB's customers come from a wide variety of backgrounds and are engaged in many types of economic activities. Most have been poor at some time in their lives. Because of Bali's substantial tourist revenues, export growth, and relatively high income growth, many of BDB's long-term clients have experienced considerable upward mobility since the bank opened in 1970. They frequently attribute their economic development, in part, to the financial services and information obtained from BDB.

BDB customers include producers of many types of goods (food, garments, jewelry, handicrafts, paintings, leather goods), owners and employees in shops of all sizes selling these and other products (building supplies, hardware, vehicles, electronics, tape cassettes), farmers, owners and employees in service enterprises (restaurants, hotels, tailors, barbershops, garages), government servants, and pensioners.

This section is based primarily on a study of BDB savers that I conducted in 1994.[9] At that time a number of microcredit institutions in other parts of the world were becoming interested in collecting voluntary savings; the main purpose of the study was to provide lessons on savings mobilization from a small private bank that at that time had been in operation for nearly 25 years. As part of this study, I accompanied BDB mobile savings teams on their daily routes from six branches on Bali, and interviewed savers of many types and income levels.

As is characteristic of Java and Bali generally, the households of most of the people I interviewed had multiple income sources. Many households also had multiple passbook savings accounts; these were usually for different family members or for different purposes. In addition, some households had time deposit accounts, giro accounts, or both, and some had long-term passbook savings accounts for retirement or children's education. Some were also BDB borrowers, most of whom chose to have their payments deducted from their savings accounts. Finally, some households were also clients of other banks.

Many of the larger customers interviewed were long-term BDB clients. Near Denpasar this usually meant that they had used BDB for more than 20 years; a few were originally customers of Bank Pasar Umum. Elsewhere long-term clients were those who came to BDB when it opened branches in 1988, though a few of those interviewed had been clients of the early mobile bank. One of the customers interviewed had won a house in the BDB lottery; another had won a motorcycle.

Many of BDB's savers are salaried employees, working in government or private offices. In one government school that I visited, all 15 teachers saved a small amount monthly in passbook savings accounts; 2 also had long-term BDB retirement savings accounts. The BDB team visits the school monthly, collecting the teachers' savings from the school treasurer, who deducts the amounts to be saved from the teachers' salaries. Similarly, BDB teams make monthly visits to a local office of the Department of Health; when I visited the office, savings were collected from 49 employees.

Savings are also mobilized from employees in private businesses. In some cases BDB collects deposits from owners and employees at the same workplace. In other cases the BBD savings teams visit the homes of the employees.

BDB savers range from the lower levels of the economically active poor to the affluent

BDB savers range from the lower levels of the economically active poor to the affluent; examples are provided below. Although the emphasis here is on savers, it should be remembered that, as in microfinance generally, clients often use savings and loans together. RT and BT, the husband and wife discussed in chapter 3, are good examples. They started out in 1980 as a young low-income couple, a driver and a waitress. During 1980–94, they used their BDB savings to purchase assets that were then used as collateral for BDB loans. The loans were used to build additional businesses, from which they generated increased savings. By 1994 the couple owned 10 substantial enterprises.

Low-income savers

Among BDB's low-income savers are many who operate microenterprises; such clients often sell cooked food, bottled drinks, snacks, and garments. Some are producers—of food, garments, handicrafts, furniture, and the like. But some are employees or work for daily wages. Average net daily income from the main household enterprise ranges from about $2 to $6 but can reach $15 on a particularly good day; some households have other income sources as well. Typically these customers save regularly in BDB—often daily—in amounts ranging from $1 to $3 per deposit. Some of these savers also have small BDB loans.

These savers reserve some cash from each day's revenue for the next day's expenses. In most cases the amount saved is the amount taken in that is not expected to be needed for the next day's household and enterprise expenses. Usually there is a one-day lag in depositing savings. Because the mobile savings teams visit clients in the mornings, the money not needed on the previous day for the present day is usually deposited with the BDB team.

One customer I interviewed in 1994, MK,[10] had migrated from Java in 1973; in Bali he became an itinerant peddler selling ice cream. By 1975 he had been able to obtain a fixed place in the market where he had worked ever since, selling ice cream from his pushcart. His average net daily income in 1994 was about $4. His wife, who sold indigenous cosmetics and medicines as an itinerant peddler in the same market, earned about the same amount. MK had been a regular BDB saver for five years, and he usually made deposits daily. He also had a savings account in a second bank. MK's household used its savings for its chil-

dren's education (one child was in primary school, one in junior high, and one in high school), for medical expenses, and for ceremonial occasions. In addition to his savings account at BDB, MK was responsible for the savings of an association of itinerant ice cream peddlers who are members of his extended family. These savings were deposited monthly in the association's BDB account.

Two other men interviewed, both pushcart vendors, each deposited $2 to $3 a day in their passbook accounts. PV, who sells soft drinks and cigarettes, had a balance of $63 at the time of my 1994 visit. CS, who sells snacks and soft drinks, had a balance of $293.

Three women—LR, who sells fruits and vegetables; FB, who sells meats; and BL, who sells small ceremonial goods for religious offerings[11]—all operated their businesses in tiny fixed stalls in a large market. All saved daily in BDB in amounts ranging from about $1 to $4. Like MK, they normally withdrew only for school fees, ceremonies, and medical expenses.

FB, who had saved at BDB since 1988, had five passbook accounts for different members of her family, with balances ranging from $22 to $373

LR had been a BDB saver since 1973. In 1994 she saved about $2 a day. At the time of a 1996 visit she had about $530 in her passbook account. She also had an account in another bank with $113. On the day of the visit she had held two BDB passbooks for friends who wanted to make deposits of $2 and $3 into their accounts.

FB, who had saved at BDB since 1988, had five passbook accounts for different members of her family, with balances ranging from $22 to $373. She typically saved about $3 a day, although on a good day she could sometimes save $6 to $10. BL was a relatively new customer, saving in BDB since 1992. Her business varies depending on the dates of particular ceremonies. When I visited her, it was close to a major festival and her enterprise was doing well. She saved $9 that day; on a typical day, she said, she saved about $3. Her balance was about $132.

Lower-middle- and middle-income savers

BDB also has many clients who are owner-operators of small and medium-size enterprises. These clients are involved in a wide range of economic activities in trade, production, and services. A few examples can serve as illustration.

RW, who owns a small clothing shop, made daily deposits into five BDB bank accounts for different members of his family. He also had a BDB time deposit account and a BDB savings account for retirement. In addition, he had deposit accounts in several other banks. Another customer, JI, the owner of a small general store, had been saving in BDB for 20 years, making daily deposits. Her balance at the time of the 1994 visit was $3,339. Several of her customers leave savings with her to deposit for them in their passbook accounts when BDB staff visit her shop. A third client, ST, raises chickens and supplies chicken parts to hotels and shops. He had a BDB loan and made daily deposits into his passbook savings account, from which his monthly loan installments were paid.

DP and HP, husband and wife, had been BDB customers since 1987. DP is an artist and his wife, HP, runs a general store. They had had a series of BDB loans, and they also maintained savings and deposit accounts. They saved daily in a BDB passbook account from which their loan installments were paid. They

had also saved for several years in a time deposit account in order to renovate their house and build a family temple; construction on both projects had recently been completed at the time they were interviewed.

High-income savers

BDB also has wealthy customers. Some clients regularly deposit more than $100 a day in BDB savings accounts; many also hold BDB fixed deposits, giro accounts, or both. Some hold lines of credit or other loans over $100,000. Many of these are long-time customers who started small and later became wealthy. Examples include AN, who owns a large, well-known woodcarving enterprise; SA, who owns a gold shop; and NE and KE, a husband and wife who own a big supermarket. These customers all have both loans and deposit accounts at BDB, and at other banks as well.

To its clients, BDB is known as a secure bank with conveniently located branches, and as one that helps low-income clients develop their economic activities and earn income on their savings. It is known as a bank that serves everybody: multiple generations in the same family, employers and employees in businesses, peddlers and supermarkets.

Internationally, BDB is known as the first bank that understood that the demand for microfinance can be met through nonsubsidized, commercial financial intermediation—and then implemented these ideas sustainably and with substantial outreach.

The rest of this volume concerns the development of BRI's unit desas, the largest system of sustainable microfinance in the world. In the early 1980s, when Indonesia's Ministry of Finance was considering whether to close down the unit desa system or to transform it into a system of commercial financial intermediation serving low-income people, there was no known example of regulated, nonsubsidized, self-sufficient institutional microbanking anywhere in the world—except at BDB.

As an adviser to the ministry, I made frequent informal visits to BDB at that time to learn the basics of commercial microfinance. When the decision was made to turn the unit desas into commercial units, I asked the Okas whether I could have their permission to discuss with BRI their insights into the microfinance market—and more specifically, BDB's products and services. Their response was characteristic: the only requirement, they said, was that poor people should benefit.

I asked the Okas whether I could discuss with BRI BDB's products and services. The only requirement, they said, was that poor people should benefit

Notes

1. It is possible that another developing country institution has carried out the same activities, continuously serving the low-income public for a longer period. But to the best of my knowledge and that of many microfinance experts I have consulted, BDB

is the only regulated, formal financial institution in a developing country to have engaged in continuous, nonsubsidized, profitable large-scale financial intermediation among low-income clients for more than 30 years.

2. This was long before the unit desa system was begun, but BRI's branches were active in the towns.

3. Bank Pasar Umum means Market Bank for the Public. The initials BPU were made the same as those of Bank Perniagaan Umum—the first, and much larger, private bank in Bali.

4. The year 1985 was the first that BDB was required to pay taxes on its profits. In 1990 BDB paid $0.5 million in taxes; its after-tax profit was $1.1 million.

5. Recognizing this disparity, in 1996 BDB made a concerted attempt to increase small lending. This effort caused the number of loans to increase from 12,814 in 1995 to 15,645 in 1996—a 34 percent jump. The value of outstanding loan balances grew from $79.3 million on December 31, 1995 to $93.6 million on December 31, 1996, an 18 percent increase.

6. ING needed such a relationship to enter the Indonesian market. BDB wanted a transfer of knowledge about international banking and increased international links. Both wanted a joint venture with a bank operating in a different market segment.

7. Mobile teams typically work well in secure regions but are generally not suitable for high-risk areas. However, BDB has operated these successfully not only in Bali, which is considered relatively safe, but also in Jakarta and Surabaya (where the teams travel with guards).

8. Not all branches have all three types, but all have the walking teams.

9 See Robinson (1995d). Most of the information in this chapter is based on the more than 25 visits I made to BDB and its savings teams between 1982 and 1998. However, this section is based primarily on interviews conducted in 1994. At that time the transactions of 217 BDB clients were observed as I accompanied BDB savings teams on their normal routes; brief discussions were held with each of the savers that the teams visited. In addition, information was obtained from these clients about 142 of their employees in instances when the employees were also BDB customers Ten percent of the clients visited were then interviewed in more depth; while not a scientifically drawn sample, the savers interviewed represented both genders and a variety of socioeconomic groupings, occupations, and ages.

10. These are all real customers, but their names are not provided in order to protect their privacy and bank confidentiality.

11. Unlike Indonesia generally, which is largely Muslim, Bali is predominantly Hindu.

11 How to Fail in Financing the Poor: Bank Rakyat Indonesia's Unit Desa System, 1970–83

This chapter analyzes the problems of subsidized credit programs in Indonesia. In 1970 Bank Rakyat Indonesia's (BRI's) unit *desa* system was created to implement BIMAS, a massive government-subsidized agricultural credit program for rice cultivation; later many other, smaller subsidized credit programs were added as well. The term *unit desa* refers to the 3,600 bank outlets that BRI established at the subdistrict level to channel BIMAS credit to rice farmers. In general, BIMAS produced negative outcomes for rice farmers, BRI, and the government. In part the discussion here serves as background for the rest of the analysis in volume 2, because the transformation of the unit desa system in 1984 occurred only after basic lessons about agricultural finance had been learned the hard way. But the unit desas are also

shown here in their original context because the same mistakes made by BRI in the 1970s—but to a great extent corrected in the 1980s and 1990s—are being repeated today in many ministries of finance, planning, and agriculture around the world, with similar results.

Indonesia's experience may help other countries and financial institutions understand why subsidized agricultural credit programs like BIMAS, aimed at increasing production and raising the incomes of poor farmers on a large scale, cannot achieve these goals. Such programs cannot be significantly repaired or renovated midstream; their failures are caused by intrinsic structural deficiencies. New financial programs based on fundamentally different assumptions are needed to achieve those aims.

The transformation of the unit desa system in 1984 occurred only after basic lessons had been learned the hard way

During 1970–83 BRI's unit desa system was a classic example of the fourth subsidized credit model discussed in chapter 7: it failed at both lending and savings. Analysis of BIMAS shows the complexities of the program as it was implemented in Indonesia's varied environments and highlights the many ways the program did not—and could not—work as planned. The focus here is on the interactions among subsidized credit, agricultural production, and rural development.

Multiple, interlinked reasons explain the failure of BIMAS:

- The program's goals were incompatible.
- Subsidized interest rates prevented institutional viability.
- BRI was not allowed to select its borrowers.
- Credit was tied to predetermined types and amounts of inputs that were often inappropriate for local environmental conditions and sometimes destructive to the rice crop.
- In many areas credit subsidies went to wealthier villagers.
- In some areas borrowers were selected for the program by government officials who needed to meet targets—even though the borrowers' lands were unsuitable for the inputs provided.
- In some years farmers could not repay their loans because of massive rice crop failures, a direct result of the resurgence-causing insecticides distributed in BIMAS credit packets.
- Government policy for loan rescheduling was badly planned and often corruptly implemented.
- BRI's organizational structure was inadequate for effective supervision of the unit desas, and unit staff were poorly trained,

underpaid, unmotivated, and typically treated as pariahs by the rest of BRI.

- In addition to failing at lending, the unit desas failed at mobilizing savings, mainly because of the negative interest rate spread required by the government.

The BIMAS program's goals were incompatible

Despite the massive deficiencies of its credit component, Indonesia's rice intensification program was a success—one made possible by a strong national commitment to attaining rice self-sufficiency and by the government's ability to learn from its mistakes and to adjust policies and implementation strategies to the realities of the country's environmental conditions and human resources. When official channels of input distribution or output marketing proved inadequate, alternate channels were opened. When particular seed types or insecticides were found to be unsuitable or dangerous, they were removed from the system. Similarly, when the credit program proved ineffective, it was replaced. BIMAS failed in its mission. But it gave birth to the unit desa system—which survived and ultimately developed into the internationally renowned commercial microbanking system discussed in the rest of volume 2.

The problems of subsidized agricultural credit are well known. The subsidies encourage corruption and often reach rural elites rather than low-income farmers. The programs tend to have high arrears and high losses. And the low (or negative) spread on interest rates for savings and loans makes it impossible to achieve institutional sustainability—so most of the demand for microfinance remains unmet (see chapter 4).[1]

Bank Dagang Bali (BDB), a private bank, began offering microfinance at commercial interest rates in 1970 (chapter 10). But that same year the Indonesian government moved in the opposite direction—toward large-scale subsidized credit programs. BRI, a government bank, was required to lend at a 12 percent annual effective interest rate and to pay 15 percent on most deposits.

BRI's unit desa system was created in 1970 to implement BIMAS,[2] a massive subsidized credit program for rice cultivation; later the system was extended to provide loans through other, smaller subsidized credit programs. The unit desas' current commercial orientation is a direct response to, and outgrowth of, that experience. To understand the transformation, this chapter examines the unit desas in their original context.

The same mistakes made by BRI in the 1970s are being repeated today in numerous countries around the world, with similar results

BRI opened 3,600 bank outlets at the subdistrict (*kecamatan*) level in the early 1970s; the units serve the villages of the subdistrict (the literal meaning of unit desa is village unit). Since urban units (unit *kota*) were added in 1989, the terms unit desa and unit bank have come to be used as general terms for all BRI's local units, rural and urban.

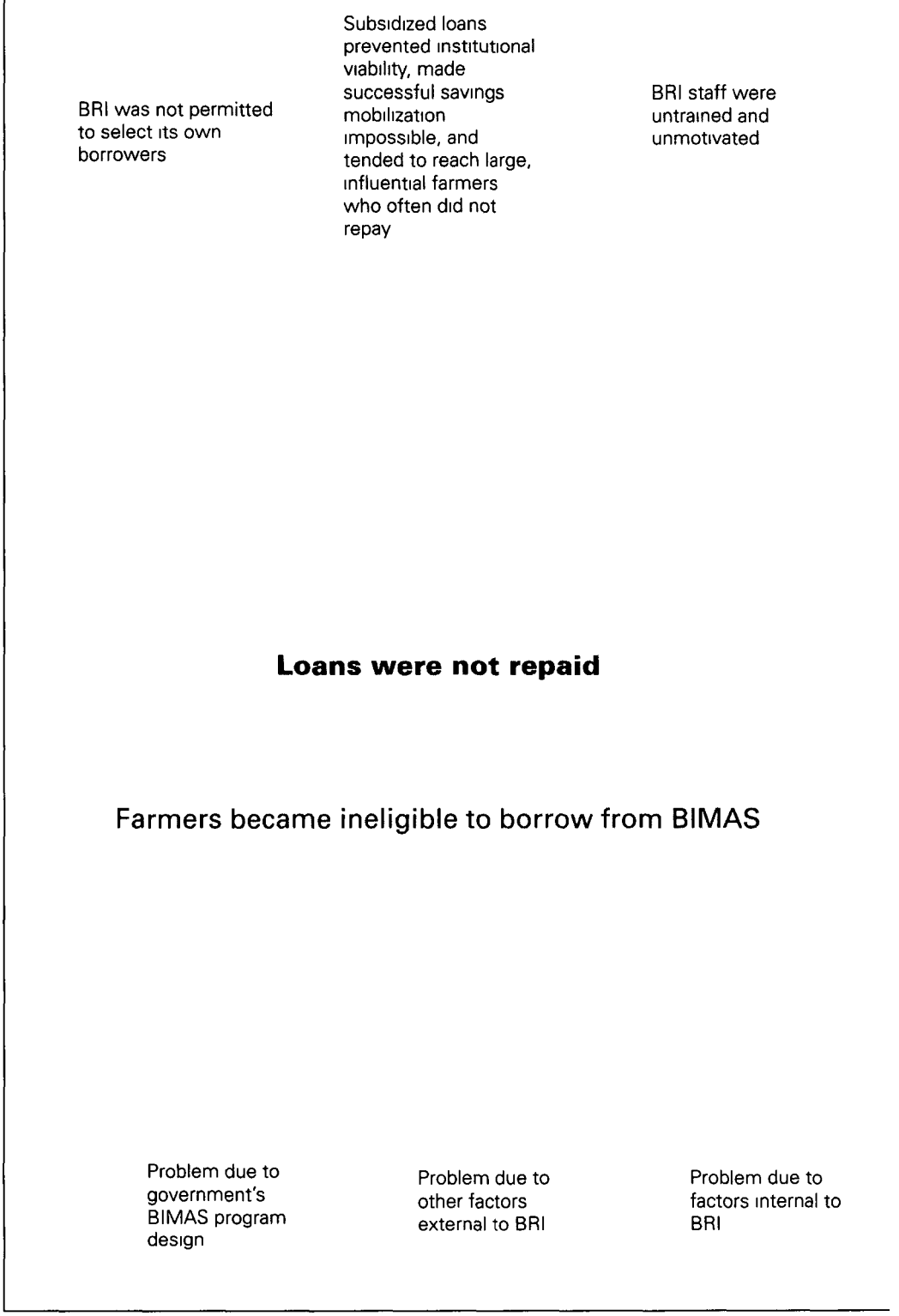
The results of the BIMAS program were negative for most rice farmers, BRI, and the government. Analysis indicates the complexities of the program as it was implemented in Indonesia's varied environments and highlights the many ways that it did not—and could not—work as planned.

The focus here is on the interactions among subsidized credit, agricultural production, and rural development. In one sense this discussion serves as background for the analysis in the rest of volume 2, because the metamorphosis of the unit desas to a commercial microbanking system occurred only after basic lessons about agricultural finance had been learned the hard way. The reasons BIMAS failed are shown in figure 11.1 and discussed throughout this chapter.

In addition to its importance as background for the unit desas' subsequent development, BRI's BIMAS era is of direct relevance to many ministries of finance, planning, and agriculture today. The same mistakes made by BRI in the 1970s are being repeated in numerous countries around the world, with similar results. The problems of subsidized agricultural credit programs are widely known—yet many governments continue to provide these programs and millions of people still participate in them.

Upon learning the history of the unit desa system and seeing it in operation now, many international visitors to BRI have said, in effect, "Our country is still trapped in the old paradigm. How was it possible to change the system in Indonesia? Who made the decisions? Tell us how the change was made; this will help us at home." It is hoped that the rest of volume 2 will help to answer such questions.

Figure **11.1** **Main reasons for the failure of the BIMAS credit program for rice farmers**



BIMAS input packets were inappropriate for many village environments

Insecticides in BIMAS packets caused brown planthopper attack, which caused severe rice crop failures in many areas

Presidential decree for BIMAS debt relief in cases of crop destruction was implemented by BRI in ways that often benefited wealthier borrowers, bypassed poorer borrowers, and encouraged corruption

Loans were repaid, but with difficulty, after crop loss

Farmers did not want to borrow from BIMAS

BIMAS participation declined

BIMAS ended

Large-scale subsidized agricultural credit programs like BIMAS cannot both increase production and raise the incomes of poor farmers on a large scale. Using the Indonesian example, this chapter shows why. The failure of the BIMAS program in four very different kinds of villages in widely separated areas of the country is examined in detail to illustrate the general reasons for such failures. The focus here is on large-scale subsidized agricultural credit programs; donor-subsidized, usually smaller-scale, multipurpose subsidized credit programs are considered in volume 3.

Bank Rakyat Indonesia's History, 1895–1970

BRI, Indonesia's oldest bank—the outgrowth of a series of banks dating from 1895—is regarded as the beginning of Indonesian rural banking

BRI, Indonesia's oldest bank, celebrated its 100th birthday on 16 December 1995.[3] The modern BRI is the outgrowth of a series of banks dating from the Priyayi Bank of Purwokerto (Support and Savings Bank for Domestic Civil Servants, or Hulp-en Spaar Bank der Indlandsche Bestuurs Ambtenaren), which opened in Java in 1895 and is regarded as the beginning of Indonesian rural banking. *Priyayi* means aristocracy or gentry; the bank was founded by Raden Wiriamaadya, a Javanese government official from a priyayi family who "wanted to help his friends out of debt." Wiriamaadya "had noticed that during a *selamatan* [ceremonial feast] his host had taken a massive loan from a Chinese moneylender in order to meet his social obligations. Wiriamaadya was so distressed by this incident that he decided to contribute to the festivities from his own pocket and proposed setting up a saving fund for prominent Indonesian citizens"[4] (Schmit 1994 p.1; see also BRI 1985, 1995). Sieburgh, the Dutch colonial administrator in charge of Purwokerto District, supported Wiriamaadya in this effort.

In 1897 De Wolff van Westerrode, Sieburgh's replacement and an admirer of the Raiffeisen cooperative banks founded in Germany in the 1850s by Friedrich W. Raiffeisen, began to reorganize the bank into a cooperative organization. The following year van Westerrode was appointed director of the bank, which was renamed Poerwokertosche Hulp, Spaar, en Landbouwcrediet Bank. The cooperative approach, gaining favor under the "New Ethical Policy" of Queen Wilhelmina of the Netherlands oriented toward the welfare of colonial subjects, was generally modeled on the credit union movement that had begun in Europe in the 1850s (see chapter 9).[5]

Van Westerrode's aim was to create a central institution, a popular credit bank, for the village credit cooperatives in Purwokerto. Although his intention was to build a cooperative bank, the bank also provided services to nonmembers and did not strictly maintain cooperative principles (Steinwand 2001). As Schmit (1991) has pointed out, the moneylending practices of the Chinese in Indonesia, and to a lesser degree of the Arabs, were an important concern of the Dutch colonial administration because usury was identified as the primary cause of deteriorating rural society in the colonies and, therefore, of the instability of colonial society.

> Who actually deserves the title as "the father" of [BRI] has always been a point of controversy. According to Cramer (1929:17) it is De Wolff van Westerrode, according to De Wolff himself it is his predecessor as head of district, Sieburgh (Schmit 1991: 41), and according to Suharto (1996:13) it is R. Aria Wirjaatmadja [an alternative spelling for Wiriamaadya]. Others say the unique Indonesian financial system is large enough that it can easily live with several fathers. However, more important than the question of fatherhood is that the process of establishing decentralized commercial viable institutions started ... over 100 years ago, giving ample scope for experiments, institutional learning and adjustments.
>
> —Steinwand 2001, p. 67

The process of establishing commercial viable institutions started more than 100 years ago

Other People's Credit Banks began to emerge on Java; increasingly they received government subsidy, thereby starting the process under which the popular banks came under local government control (Schmit 1994). These became known as Volksbank (People's Bank) and over time as Bank Perkreditan Rakyat (People's Credit Bank).

In 1912 an autonomous welfare service, the Volkscredietwezen (Popular Credit System), was established in Indonesia. A Central Fund (Centrale Kas) was also established, with working capital of 5 million guilders. The Popular Credit System and the Central Fund were intended to control, support, and supervise the 75 popular credit banks, 12,424 *lumbung padi* (village rice banks), and 1,336 village banks that had emerged (Schmit 1994, p. 7). It was assumed that "the rural population has a 'chronic credit thirst' and is too poor to save" (Steinwand 2001, p. 46). But by 1926 domestic deposits accounted for 66 percent of the total deposits of the district banks of Java and Madura (Steinwand 2001, p. 82).

The Volkscredietwezen was heavily influenced by J.H. Boeke, a specialist in colonial economics from the University of Leiden who had been strongly influenced by views developing in Germany—especially those of the economist Sombart—about pre-capitalist societies. Pre-capitalist communities were thought to be divided into two strictly separate classes: the ruling class and the masses. The latter, the producers, were believed to have limited economic needs (see Fruin 1994 [1935]).

Applying the ideas of pre-capitalist society to the colonial economy, Boeke developed what became known as his theory of economic dualism (see chapter 21).[6] He believed that indigenous Indonesians were not market-oriented and that, therefore, the aim of the Popular Credit System should not be to provide people with commercial banking services but rather to satisfy social needs (see Schmit 1994). Boeke advocated that the government adopt a protective role, and that the Popular Credit System be instituted as "a separate system based on cooperative principles for the native population" (Schmit 1994, p. 9). At the same time, it was thought that by centralizing the system and providing subsidized funds, the government could increase its control over the popular credit banks (Schmit 1994, p. 7).

Thomas A. Fruin, like Boeke a graduate of Leiden University, joined the Volkscredietwezen at Boeke's request. But Fruin, who had a legal background, disagreed with Boeke about some of the fundamental principles of the Popular Credit System. His aim was not to "protect" the indigenous population but to provide banking services to the emerging middle class. Thus Fruin emphasized developing banks as institutions, focusing on the importance of new auditing regulations, supervision, control, and institutional reorganization. On hearing that Fruin had agreed to join Volkscredietwezen, Boeke wrote to him in 1920: "Banks may indeed be commercial institutions, but in such cases their social principles transcend their immediate financial interests. It would besmirch their good name to act in any other way" (quoted in Schmit 1994, p. 13).

In 1921 profits of the village banks were 4.2 percent of the amount disbursed

The Volkscredietwezen and the Central Fund were reorganized, and by 1925 nearly all the popular banks had agreed to centralized control. But Boeke and the administrators of the popular credit banks did not share a common view of the role of these banks. At a meeting in 1925 Boeke likened the collaboration of the banks and the Volkscredietwezen to the "strain of an unhappy marriage." One of the bank administrators stood up and asked for "a divorce" (Schmit 1994, p. 16).

In 1929, 5,986 village banks made 3.3 million loans worth 45 million guilders.[7] In addition, 5,268 village rice banks lent 1 million quintals (100 kilograms) of rice to 1.1 million borrowers in the same year. According to the 1930 census, the population of Java and Madura was 25 million; there were 13,266 villages. Thus these banks reached a large portion of villages and rural households. Fruin (1999 [1933], p. 5) comments, "The operational costs of the village banks in the period 1925–1930 were 3.8 percent of the amount disbursed and those of the rice banks in 1930 were 11 kilograms plus 52 cents per quintal of rice lent. The fact that these institutions were profitable (for example, 4.2 percent of the amount disbursed in 1921) and that they kept large deposits in the popular credit banks (10 million guilders in 1931 in Java and Madura alone) makes it even more interesting."

By the late 1920s Boeke's work with Volkscredietwezen had ended, and Fruin had become its director. In 1930 Fruin proposed the creation of the Algemeene Volkscredietbank (AVB) as a bank that, combining financial and social expertise, would be a socially responsible credit institution. The AVB was founded by royal decree in 1934, and Fruin was appointed president.

Even Fruin believed that an indigenous Indonesian villager was not "an economically active person. He may be thankful to fate for bringing him greater prosperity but it is not part of his nature to take fate into his own hands and work towards such prosperity himself through rational consideration and the appropriate continuous effort" (Fruin 1994, p. 99 [1935]). Despite their differences, however, Boeke and Fruin agreed that the popular banks were established to complement commercial institutions, and that the banks served segments of the population not otherwise reached by the formal commercial sector.

As noted, Fruin wrote an extraordinary treatise on Indonesian rural credit, the *Provisional Manual for the Credit Business of the General Popular Bank,* published by the AVB in 1935.[8] As in an earlier article, "History, Present Situation,

and Problems of the Village Credit System (1897–1932)" (1999 [1933]), Fruin demonstrates a deep understanding of the economic activities, income flows, interlinked transactions, consumption patterns, and credit practices of Indonesian microentrepreneurs, farmers, tenants, sharecroppers, salaried officials, and pensioners, and others—that is, of nearly all rural inhabitants.[9] The ways that farmers used credit were reviewed by type of crop, type of land, and number of harvests per year. The demand for financial services by occupation and type of consumer was also analyzed, as was the flow of informal credit (box 11.1).

Fruin outlined various financial instruments that he believed to be both suitable for the bank and appropriate for local demand. In doing so he made use of his extensive knowledge of local markets—knowledge largely derived from the work he and Boeke carried out for their many contributions to the monthly periodical *Volkscredietwezen,* which was a model of transparency in information.

The popular banks served segments of the population not otherwise reached by the formal commercial sector

> [Volkscredietwezen] provides a wealth of information about the institutional history of the popular credit system. It included reports, announcements, guidelines and policy proposals, journal entries submitted by bank staff, travel sketches, quarterly reviews of the branch and village banks, articles on the funding of various kinds of agricultural, production, industry and services, market updates and analyses, case studies of village and branch banks, client analyses, prescribed literature for service examinations, and details of promotions, dismissals, transfers, anniversaries and courses for bank staff. It rallied its readers to protest against or support reorganization plans, publicised the minutes of meetings with bank directors, and reviewed the parliamentary debates of these subjects.
>
> —Schmit 1994, p. 20

In 1946, shortly after Indonesia's independence, Bank Perkreditan Rakyat became BRI.[10] BRI then merged with the AVB in 1950, forming a state-owned commercial bank.[11]

Indonesia's five state-owned commercial banks each has special responsibilities: BRI's mandate is to provide banking services to rural areas, with an emphasis on agriculture and rural enterprises. In the years that followed the 1950 merger, BRI became Indonesia's largest bank in terms of numbers of branches and customers, and one of its largest in terms of assets.

The Development of the Unit Desa System, 1970–83

The origins of the unit desa system can be understood only in the context of Indonesia's long struggle for self-sufficiency in rice, the country's main staple food. When the nation's revolution for independence ended successfully in 1949, domestic rice production had fallen below 6 million tons. On Java, the coun-

The times at which loans are extended do not matter, providing one loan does not follow quickly on the heels of a previous one

Box **11.1** **Agricultural loans in Java in the 1920s and 1930s: Excerpts from Thomas A. Fruin's *The Provisional Manual for the Credit Business of the General Popular Bank***

Classification of types of farming [on Java] from the point of view of the extension of credit.

1 Farms with one harvest per year, which serves for purposes of subsistence but part of which may also serve as a cash crop

These will be primarily in regions where a relatively large amount of land is owned and there is a rice surplus and where a significant part of the annual paddy harvest is sold If other income is of little importance loans to be repaid as a lump sum after the paddy harvest will be the appropriate form of credit for farmers As the paddy surplus is often removed by the middlemen buying it up immediately after it is harvested, the repayment date set by the bank for most farmers must be set precisely with the harvest in mind Individual farmers who are known to retain their paddy with an eye to price increases may either be given more time to pay from the beginning or granted an extension of the credit

The situation is different in the purely paddy-farming areas, where the harvested paddy serves primarily for subsistence and local sale and where rice may even be imported from outside Except by a few large-scale farmers, the paddy in these areas is not sold immediately after harvest as a cash crop but kept and at most disposed of in part very gradually In such areas it would be difficult to repay a loan immediately after the harvest from paddy revenue This is why in the Bandung [West Java] high plains (which are such an area) seasonal loans only have to be repaid 12 months after they are taken out, or several months later if the repayment date should fall during *patjeklik* [time of scarcity in the pre-harvest season]

2. Farms with two harvests per year, one of subsistence crops and the other of cash crops

Tobacco and maize are grown alternately, for instance, in the hills of Central Java, likewise tobacco and *sawahpadi* [irrigated rice] in Bondowoso [East Java] In such cases repayments must be required immediately after the harvest of the cash crops, attempts to have repayments made in two instalments from both . harvests, were not successful The times at which loans are extended do not matter, providing one loan does not follow quickly on the heels of a previous one This should not indeed be necessary if care is taken to keep the sums loaned small so that after repayments have been made, taxes paid and other monetary expenditure completed, sufficient funds remain from the harvest of the cash crop to cover the next planting of paddy

3 Farms with two paddy harvests per year

Attention should be paid to whether one of the harvests is especially intended to yield a cash crop, and if so which one, or whether both or neither is so intended . [In areas where most farmers have only small plots of land] almost no paddy is sold In such areas only larger landowners with paddy surpluses intended for sale are eligible for harvest loans Others must make do with monthly loans, providing they have sufficient additional income If one of the paddy harvests is especially intended for sale as well as subsistence, loans and repayments can be restructured as for type 2

4 Two paddy harvests a year yielding sufficient monetary income

Two types of loans are possible (a) repayment in two instalments, one after each harvest (the instalments do not need to be equal); or (b) repayment in one instalment after the first harvest Type a loans may be larger than type b loans [which will] in practice easily result in two loans being extended per year . . The amount loaned should be kept very small in the case of type b loans

Box **11.1** **(continued)**

5 Farms with one paddy harvest and various second crops

In Pasuruan [East Java, in] a sawah area with two consecutive *polowidjos* [secondary crops] and all kinds of mixed cultivation, the popular credit bank there . . . prefers to extend only monthly loans in the *sawah* area (seasonal loans being extended in the main only for vegetables, coffee, and tobacco cultivation in the hills), with the result that there are few farmers with loans in the region . De Vries established that farmers in the region could usually get by for the whole year because the working of the *sawah* land is paid for from the revenue of the *polowidjo,* while the *polowidjo* cultivation is financed from the revenue from the paddy which is sold. . . . Should a need for seasonal loans arise, it would be obvious to require payments to be made in the monsoon season, where possible in two or more instalments, or otherwise in a single instalment at the time the most profitable *polowidjo* crop is sold Repayments should in any event not be required from the subsistence crops and only one seasonal loan per year should be extended

6 [Mixed farms]

It can be particularly difficult to determine when harvest loans should be required if there is no clear distinction between the seasons and if crops at various stages of maturity are in the fields at the same time or there are three paddy harvests in two years, as in the hilly regions of West Java and southern Central Java The same difficulties can arise if a mixed farm is operating on both *sawahs* and *tegalans* (higher-situated, non-terraced, non-irrigated farmland).

[An example of these difficulties is] cassava, which is sometimes a subsistence crop and sometimes a cash crop Where it is processed to make *gaplek* [dried cassava, tapioca], as in parts of Central and East Java, the period from July to September can be deemed to be a period of cash crop harvesting, where it is processed to produce flour (as is usually done in West Java) there are no pronounced fluctuations between seasons In general it is to be recommended that the bank should not be too quick to permit a loan to be repaid only after a year and that repayments should never be required during *patjeklik* but at times when farmers have the most money to spare.

The fundamental principle is that in its own interests and those of the farmers, the AVB Bank should structure repayments of seasonal loans so that they fall during a period when the *tani* [farmer] is receiving more monetary income than at other times and can meet repayments from that income without too much trouble, i e. usually after the harvest of his most lucrative (in terms of gross monetary revenue) cash crops A cash crop is preferable even where part of the principal paddy harvest also serves for trading purposes, because expenses for ritual feasts are associated with the traditional, sacred paddy harvest which do not arise in respect of harvests of cash crops, which were introduced at a later date

Source Fruin 1994 [1935], pp 132–40

The fundamental principle is to structure repayments of seasonal loans to fall when the farmer receives more monetary income than at other times

try's main rice-producing region, it was not until the cropping year 1954/55 that production recovered to the 1940/41 prewar level; total domestic rice production in 1954/55 was about 8 million tons (Mears 1981, pp. 20–21, 489).

Thus a high priority was placed on increasing rice production during the 1950s, and considerable growth in rice output was achieved during that decade:

about 30 percent on Java and 60 percent off Java, with the national average at just over 40 percent. On Java these increases resulted from higher yields, as the beginnings of new high-yielding rice technology reached farmers there. Off Java the growth in rice production was attributable to a rapid increase in the area cultivated, as a growing population opened up new lands (Mears 1981, p. 20). Overall, however, the substantial increase in production was insufficient to reduce import dependency because of the country's rapidly increasing rice consumption.

With rice imports at about 1 million tons a year in the late 1950s and the balance of payments worsening, President Sukarno announced a three-year plan (1959–62) to make Indonesia self-sufficient in rice. For a variety of reasons, including poor program design, logistical and technical problems, and poor repayment, the program failed.[12] Rice production did not rise during this period, and rice imports increased.

Mounting economic problems led to rapidly increasing debt, soaring inflation, and decreasing exports. Rice intensification programs could not succeed under these conditions

By 1965 mounting economic problems had led to rapidly increasing debt, soaring inflation, and decreasing exports. Net foreign exchange reserves were negative, and inflation rose above 600 percent. Although a number of rice intensification programs were established, they could not succeed under these conditions.[13] It became very difficult to obtain inputs for rice cultivation. There was little capacity to produce fertilizer and insecticide domestically, while foreign exchange to pay for imports was almost nonexistent. Rapidly deteriorating rural conditions resulted in sharp declines in yields, and the food supply decreased drastically. Rice accounted for 21 percent of imports, but the country could import little of anything. The situation led to anti-Sukarno demonstrations and contributed to the fall of Sukarno and the installation of the New Order government under President Soeharto.

In 1967 the new government admitted the failure of the country's mass extension program and instituted a number of new rice intensification programs.[14] Input supplies continued to be a severe problem, however. As a result BIMAS Gotong Royong (BIMAS Cooperation) was begun in 1968–69; under this program, multimillion-dollar contracts were signed with foreign companies, each of which agreed to provide inputs for a particular region of Indonesia. Credit to purchase inputs was extended to farmer groups that were expected to lend to participating farmers. Each farmer with a plot within a specified block of land was required to cultivate the land with rice according to government specifications.

Informally known as Block BIMAS or Group BIMAS, this program was widely considered a failure. Farmers objected to what many considered coercion by government officials about how their lands were to be cultivated. Yields were well below expectations. Corruption scandals erupted involving some of the contractors. And by 1969–70 loan repayment rate was only 53 percent. By this time Indonesia had become the world's largest rice importer. In April 1970, after an incognito visit to paddy-growing areas, President Soeharto ordered a change in the country's approach to rice intensification.

In May 1970 the government announced that it would stop contracting parts of the program to foreign companies, and would instead assume direct responsibility for the planning and implementation of the rice intensification

program. It was under this new program that the unit desas were created.

BRI's unit desa system began in Yogyakarta in 1969, as part of a pilot project for the BIMAS credit program. The pilot project was strongly influenced by Fruin's ideas and the AVB approach, and key people involved in the pilot project, including the manager of BRI's Yogyakarta branch, had known the AVB well. Klaas Kuiper, posted in Yogyakarta in 1968 as project leader of a Food and Agriculture Organization (FAO) project, participated as a member of a small team in the design of the pilot project. He wrote:

> Basically our view was that where the AVB/Village Banks could be profitable before the war with many small, usually short-term loans, it might be useful to try to copy at least some of these AVB characteristics into the policies and procedures of the first village units [VUs] in the pilot project. . . . the VUs were NOT created only to improve the BIMAS program. We wanted an alternative . . . fully in independent BRI hands. Our overall aim was to create, or rather re-create, a rural financial infrastructure, providing all bank services in rural areas, using pre-war data and systems as an example . . .
>
> Although the experiment in Yogyakarta had only some preliminary, promising results, an expansion took place outside [the] province in the 1970 wet season . . . Considerable pressure was exerted on BRI to expand with about 500 new VUs per year . . . This far exceeded BRI's capacity. BRI simply did not have enough trained staff to embark on such a vast expansion, neither was the internal administrative system sufficient to cope with this. Internal audit furthermore was very weak at that time. The independent position which BRI had created for itself in Yogyakarta thereby got lost and it became again a tool in the hands of centralized government and presidential directives.[15]
>
> —Kuiper 1998

The core of the new BIMAS approach was a delivery program of agricultural extension, credit, input supply, and output marketing services

The new program, called Improved National BIMAS, began in the 1970/71 wet season.[16] BIMAS expanded rapidly, becoming a national program in 1973 through Presidential Instruction 4/1973. BIMAS started as a credit program for rice farmers but was later extended to other forms of agriculture such as secondary crops (*palawija*) and poultry. However, the program for rice intensification was by far the largest of the BIMAS programs, and is the only one discussed here.

The core of the new BIMAS approach was a four-part service delivery program composed of agricultural extension, credit, input supply, and output marketing services. Complementing this service delivery system were both a new price support system for rice and accelerated investment in irrigation. BIMAS was given high priority by the government because it was seen as the key to

increasing domestic rice production, which would raise rural incomes, improve nutritional standards, help maintain political stability, and eliminate dependence on rice imports.

The new program was to be implemented in blocks, each consisting of two to seven villages and 600 to 1,000 hectares of irrigated riceland (*sawah*). Each block was to have four basic facilities:

- An agricultural extension worker.
- A retail store, run either by government-sponsored village-level cooperatives (Koperasi Unit Desas, or KUDs) or by private traders, to supply fertilizer and other inputs.
- An agency to manage the procurement, storage, and processing of rice; it was assumed that this would be carried out by the village cooperatives but these were not given a monopoly.
- A new kind of village bank, the BRI unit desa, that would provide subsidized credit to farmers directly.

Subsidized government lending programs proliferated at BRI until there were more than 350

In aggregate, these features represented a fresh approach to the longstanding problem of raising the country's rice production.

By 1983 BRI had established a network of 3,626 unit banks at the subdistrict level in rural areas throughout the country. The unit desas, which operated as branch windows, provided services to an average of 18 villages, though there was a wide range.[17] Staffed by four employees each (a unit head, a credit officer, a bookkeeper, and a teller), the units were supervised by BRI's network of branches located at the district level in most areas of the country. Liquidity credits were made available to BRI for the unit desa system by Bank Indonesia, the central bank, at 3 percent per year. BRI bore 25 percent of the default risk, while the Ministry of Finance assumed 50 percent and Bank Indonesia the remaining 25 percent. The government also subsidized the administrative costs of the unit desas.

Until 1984 the unit desas functioned primarily as channeling agents for subsidized government lending programs. These programs proliferated at BRI until more than 350 subsidized credit programs—for food, cattle, poultry, fisheries, tree crops, and the like—were provided according to government instruction. But the BIMAS rice credit program remained the units' main activity until 1984. The 12 percent annual effective interest rate for all unit desa loans remained unchanged from 1970–83. In most years this was a negative interest rate in real terms (see table 2.1), and it was below the 15 percent a year that the government required be paid on most unit desa savings accounts. Throughout this period the government determined the unit desas' interest rates, credit ceilings, and criteria for borrowers.

BIMAS loans to rice farmers

The BIMAS credit component of the rice intensification program provided subsidized loans for inputs of fixed types and amounts, supplied mostly in kind (seeds,

fertilizer, insecticide) by the village cooperatives (KUDs). Borrowers, however, were required to repay their loans in cash to the unit desas. Although BRI was responsible for collecting BIMAS loans, it had little control over the selection of borrowers. That task was carried out primarily by officials of the Department of Agriculture and various local government officers and committees charged with meeting government targets for BIMAS loans.

Loan amounts were predetermined in accordance with the amount of land to be cultivated. BIMAS loans were supposed to be disbursed to each participating farmer just before the planting season. In fact, the loans often reached borrowers late; in such cases farmers had to plant without fertilizer and other inputs, or purchase these—with funds from other income sources, savings, or informal loans—before the BIMAS loans were received. Then—like the many farmers who cultivated fields for which the BIMAS inputs were not suitable in kind, amount, or both—they had to use, sell, trade, or store the BIMAS inputs received.

From 1976–84 on-time repayment for BIMAS loans averaged only 57 percent. Program participants were primarily wealthier farmers

Loans for paddy cultivation were provided separately for the wet and dry seasons; for most of the BIMAS period the loans were due just after the harvest of the crop for which the inputs were used. Thus farmers who paid their loans from rice sales had to sell their crop when the rice price was at its lowest.

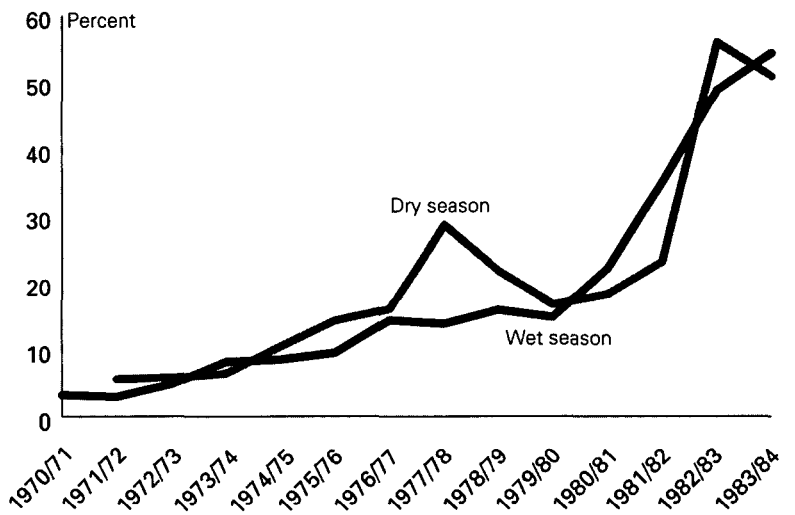
In its early years BIMAS helped farmers learn new high-yielding methods of rice cultivation. Loan repayment during 1970–75 was better than that of most of the country's subsidized agricultural credit programs (figure 11.2). In terms of the value of outstanding credit, the program peaked in the 1975/76 wet season, with about 55 billion rupiah ($133 million) provided to more than 2.5 million borrowers (figures 11.3 and 11.4). About 2.2 million hectares were covered under the BIMAS program that season (figure 11.5).

Soon afterward, however, widespread crop failures—combined with deficiencies in program design, input packets inappropriate for the land of many farmers, and misguided implementation strategies—resulted in higher defaults (loans with payments 90 days or more overdue; see figure 11.2) and in declining program participation (see figure 11.4).

In the 1983/84 wet season the value of BIMAS credit outstanding reached only about a quarter of the 1975/76 total (see figure 11.3), while the number of borrowers was down to about 15 percent of the 1975/76 total (see figure 11.4). Hectarage covered by the program fell as well, to about 12 percent of the earlier total (see figure 11.5). The wet season is a much more important rice-growing season than the dry season, but it is worth noting that in general the dry seasons followed the same general patterns as the wet seasons.

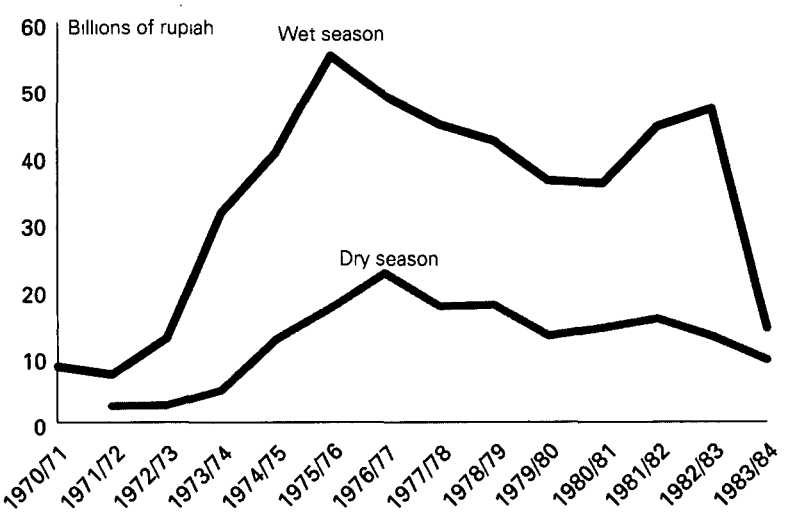
According to BRI's head office, from 1976–84 on-time repayment for BIMAS loans averaged only 57 percent. During those years program participants were primarily wealthier farmers: the average BIMAS loan was for about 1 hectare of irrigated land. Only a small segment of rice farmers owned 1 hectare or more of irrigated riceland. On Java a poor farming household that owned irrigated land (many did not) would typically own less than 0.25 hectare.[18]

Figure **11.2** **Default rates for BIMAS rice cultivation loans, 1970–84**



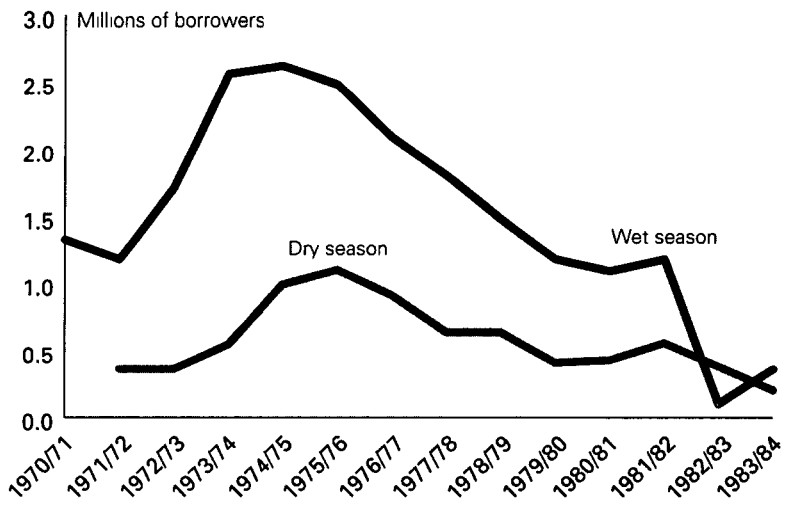
Note Wet seasons span two calendar years (1970/71, 1971/72, and so on) Dry seasons occur within a calendar year (1971, 1972, and so on) Thus the 1971/72 entry shows both the dry season data for 1971 and the wet season data for 1971/72 BIMAS loans continued to be collected after the program ended, and by 1990, 83 5 percent of the amounts due had been collected Loans in default refer to loans with payments more than 90 days overdue
Source BRI data, Patten and Rosengard 1991, p 63

Figure **11.3** **Amount of outstanding BIMAS rice cultivation loans, 1970–84**



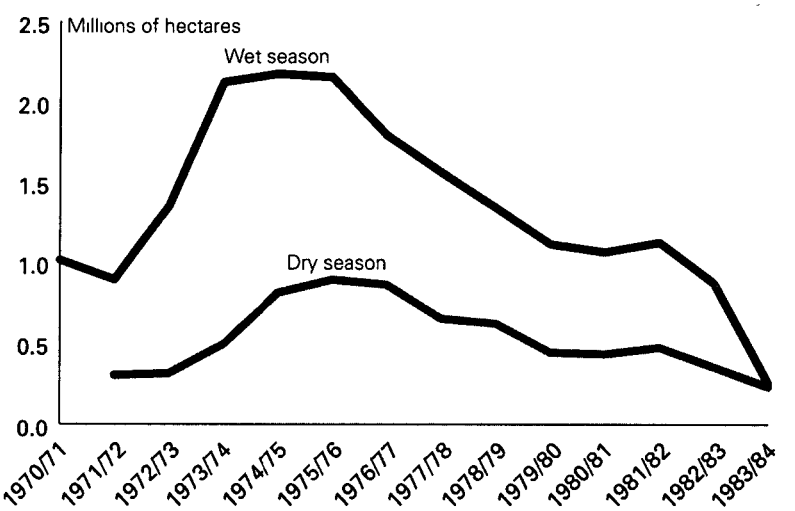
Note Wet seasons span two calendar years (1970/71, 1971/72, and so on) Dry seasons occur within a calendar year (1971, 1972, and so on) Thus the 1971/72 entry shows both the dry season data for 1971 and the wet season data for 1971/72
Source BRI data

Figure **11.4** **Number of outstanding BIMAS rice cultivation loans, 1970–84**



Note Wet seasons span two calendar years (1970/71, 1971/72, and so on) Dry seasons occur within a calendar year (1971, 1972, and so on) Thus the 1971/72 entry shows both the dry season data for 1971 and the wet season data for 1971/72
Source BRI data

Figure **11.5** **Area covered under BIMAS rice cultivation loans, 1970–84**



Note Wet seasons span two calendar years (1970/71, 1971/72, and so on) Dry seasons occur within a calendar year (1971, 1972, and so on) Thus the 1971/72 entry shows both the dry season data for 1971 and the wet season data for 1971/72
Source BRI data.

In 1981 the government began a special drive, Gerakan Serentak (GERTAK), to collect overdue BIMAS loans. Using a quasi-military style of collection, GERTAK succeeded in collecting a significant portion of the overdue BIMAS rice loans. By 1990, 83.5 percent of the loan amounts that had come due during the life of the program (1970–85) had been repaid. However, GERTAK had its costs: after 1981 people increasingly refused to participate in BIMAS. In the 1982/83 rainy season BIMAS achieved only 35 percent of its rupiah loan target and 36 percent of its hectare target; in the 1983/84 rainy season the figures were 12 percent of the rupiah target and 14 percent of the area target. When KUPEDES began in 1984, BIMAS was phased out, officially ending in 1985.

BIMAS was unable to achieve its goals: it neither reached poor farmers effectively nor contributed significantly to the rice intensification effort

Overall the BIMAS rice intensification program extended $566 million (in 1985 dollars), covering 25.8 million hectares in 28.8 million loans. This represented 44 percent of its rupiah target and 61 percent of its hectare target. Low repayment rates were a continual problem after 1976; as noted, however, loans continued to be collected even after the program ended. But BIMAS was unable to achieve its goals: it neither reached poor farmers effectively nor contributed significantly to the rice intensification effort.

The reasons BIMAS could not achieve its aims are analyzed later in this chapter. But the general failure of the program did not seriously hamper the success of the rice intensification program (which succeeded despite its credit component). Although agricultural inputs were distributed to farmers through BIMAS, there was also a parallel distribution system under which farmers could pay cash for inputs from private traders. Indonesian rice production doubled between 1970 and 1985, the year that the country first became self-sufficient in rice—and the year that BIMAS ended.

Indonesia's "rice seed–fertilizer revolution" resulted from a complex array of policies, implementation strategies, and interactions among government agencies and the private sector. The rapid adoption of high-yielding rice technology was made possible by an appropriate and effectively implemented pricing policy; available and affordable inputs; rapid learning among rice farmers; improvements in infrastructure, especially irrigation and roads; the continuing development of new high-yielding, early-maturing rice varieties at the International Rice Research Institute (IRRI) in Los Banos, the Philippines, and provision of these seeds to Indonesia as the varieties cultivated there became susceptible to rapidly evolving pests; and later, the development of a national integrated pest management program.[19] Conspicuously absent from the list of components responsible for the success of the rice intensification program, however, was its credit program.

Kredit Mini and Kredit Midi loans

Two of the many subsidized credit programs offered at the unit desas—Kredit Mini and Kredit Midi—are of special interest. For these programs, which were directed at rural inhabitants engaged in nonfarm activities, BRI was permitted to design the products and to set the terms and conditions, except for the

12 percent annual effective interest rate set by the government. Beginning in 1974, Kredit Mini offered loans up to 200,000 rupiah ($201 at the time the program ended in 1983).[20] Kredit Midi, begun in 1981 and intended primarily for Kredit Mini "graduates," provided loans up to 500,000 rupiah ($503 in 1983 dollars); Kredit Midi also ended in 1983.[21]

There were two crucial differences between the program designs of Kredit Mini and BIMAS. First, Kredit Mini provided loans in cash rather than in input packets, as in BIMAS. Second, BRI selected the loan recipients for Kredit Mini, whereas BIMAS borrowers were selected by government officials. These were the primary reasons for the third main difference between the two programs: by the 1983/84 wet season the default rate for BIMAS was 54.5 percent, while for Kredit Mini it was 2.3 percent in 1983 (table 11.1).[22]

The default rate for BIMAS was 54.5 percent, while for Kredit Mini it was 2.3 percent

Kredit Mini and Kredit Midi were much in demand because borrowers wanted cash loans so that they could make their own decisions about how they would use the credit. They repaid their loans primarily because they wanted to retain the option of reborrowing. In addition, because BRI was able to select Kred-

Table **11.1** **Features of BIMAS and Kredit Mini**

Feature	BIMAS	Kredit Mini
Years of operation	1970–85	1974–83
Target group	Farmers, especially rice farmers	People engaged in rural nonfarm activities
Who selected borrowers?	Committees of government officials	BRI
How were loans disbursed?	In kind (fertilizer, seeds, insecticides), with a small cash component	In cash
Nominal annual interest rate (percent)	12	12
Loan size	Predetermined by amount of land to be cultivated	Up to 200,000 rupiah ($201 in 1983)
Loans more than 90 days overdue at end of program (percent)	55	2

Source DPIS 1983, BRI data

it Mini and Kredit Midi borrowers without outside interference, it was able to develop effective criteria for establishing borrower creditworthiness and to maintain a high repayment rate in both programs. But the loans, which were subsidized and therefore rationed, tended to reach better-off villagers, not the poor. Even though these loans were relatively small, they were attractive to wealthier rural borrowers because of their below-market interest rates and because they were provided in cash.

At their peak in 1983, Kredit Mini had about $6.4 million and Kredit Midi about $4.7 million in outstanding loans. Between the two programs there were about 700,000 borrowers.

The unit desas had an abysmal record in mobilizing deposits during the pre-1984 period

Kredit Mini and Kredit Midi proved that there was widespread demand in villages for small cash loans for working capital, and demonstrated that if BRI staff could select their borrowers, they could administer programs effectively and maintain high repayment rates. The main drawback to the two programs was the government-imposed subsidy that de facto limited the funds available for lending and ensured that the loans reached primarily wealthier borrowers. BRI, however, incorporated its positive experience with Kredit Mini and Kredit Midi in planning the KUPEDES credit instrument, which was not similarly hampered by government subsidies and regulations.

Deposit mobilization in the unit desa system, 1970–83

The unit desas had an abysmal record in mobilizing deposits during the pre-1984 period. In June 1983, at the time of the first major financial deregulation, there was only about $18 million in deposits in BRI's entire unit banking system—after a decade of offering deposit services nationwide. Low deposits in the unit desas resulted from multiple disincentives.

First, BRI had no incentive to mobilize savings in the unit desas because government regulation required a negative interest rate spread. The lending interest rate was 12 percent, while the rate paid on most deposits was 15 percent. Since every deposit represented a loss to the bank, BRI made little effort to attract savers. As one depositor complained to me in 1983: "BRI gives beautiful calendars to its customers every year, but only to borrowers. As a saver, why should I not receive a calendar? Am I not also a customer?"

Second, the unit desas had a special disincentive to collect savings. The units were required to deposit in the branches, without interest, the savings they collected. But the units had to pay the interest due to depositors.

Third was the significant perception gap between the views about rural savings held by many government and bank officials on the one hand, and by a large number of Indonesian villagers on the other. Officials tended to assume that most rural people had little or no savings and, in any case, distrusted banks. Among villagers, however, there was a high but largely unmet demand for appropriate deposit instruments. But government assumptions about low savings propensity in rural areas continued, despite growing evidence to the contrary.[23] Because bank officials assumed that there was little potential for the mobilization of rural savings, there was little incentive to make the attempt.

Fourth, Bank Indonesia's national savings program (Tabungan Nasional, or TABANAS), the only savings instrument then available in the unit desas, was disliked by most villagers because it limited the number of withdrawals to two a month. The problem was not that they necessarily wanted to withdraw more than twice a month, but that their overriding concern was being able to access their savings at all times when the bank was open. The withdrawal limit was widely considered to represent an unacceptable level of risk.

Finally, Bank Indonesia provided low-interest liquidity credits for the loans channeled through the unit desas. Thus there was no incentive for the units to undertake the effort required for successful savings mobilization.

In 1982 I accompanied Bank Dagang Bali (BDB) mobile savings teams on their rounds to learn which of their methods could be adapted for BRI. I was quite surprised when the BDB team entered a BRI unit desa. The BDB staff explained that it was payday for the unit desa employees, and that the BDB mobile team came regularly on such days to collect BRI staff savings. I asked the unit desa staff why they saved in BDB (at 12 percent annual interest) instead of in BRI (at 15 percent). The unit desa manager replied, "Well, over there we can withdraw our money whenever we want. And BDB has better service!"

The unit desa system would either have to be closed or fundamentally restructured

Losses in the unit desa system, 1970–83

By 1983 the financial performance of the unit desas had become alarming. With large fixed costs and rapidly declining BIMAS participation, the operational losses of the units more than quadrupled from about $3 million in 1976 to about $14 million in 1983. The annual administrative subsidy increased by six times, from about $4 million in 1976 to about $24 million in 1983. Cumulative losses were high, since between 1970 and 1983 the unit desa system reported a net loss every year except 1977.[24] At the time of the financial deregulation in June 1983, it was clear that the unit desa system would either have to be closed or fundamentally restructured. Arrears were high and losses for 1984 were projected at more than $30 million. At that time the government was (correctly) anticipating a decline in the real value of oil revenues, and it was not prepared to continue indefinitely its highly subsidized, failing rural banking system.

Why Did BIMAS Fail?

Many reasons explain the failure of the BIMAS credit program for rice intensification, and these were interrelated in complex ways.[25] The program, badly designed and poorly implemented, was based on insufficient knowledge of agriculture, village social structure, and rural markets. The extensive experience available from 75 years of BRI's banking predecessors, Fruin's handbook, and even the advice of the 1969 Yogyakarta BIMAS pilot project were all ignored in the rush to fulfill government targets for credit to rice farmers. Such was the effect of supply-leading finance theory when combined with an urgent need to increase agricultural production. BRI's organizational structure was inade-

quate for effective supervision of the units, lines of responsibility in BIMAS were confused and the program became politicized, accountability was lacking, and the subsidies engendered staff corruption. The specific problems discussed below represent the Indonesian variants of the widespread problems that have been associated with subsidized agricultural credit programs in many developing countries worldwide (see chapter 4).

The program's goals were incompatible

The BIMAS rice intensification program had two main goals. The first was to play a crucial role in the wider rice intensification program's goal of rapid increase in rice production. Accordingly, the BIMAS program emphasized loans for the cultivation of high-yielding rice varieties on well-irrigated lands. The input packets typically available through the credit program were those thought to be suitable for such lands—which are valuable and so normally cultivated by wealthier villagers.

Most rice farmers received BIMAS inputs suitable for well-irrigated lands, but most rice farmers cultivated lands that were not well irrigated

The second BIMAS goal was to raise the incomes of poor rice farmers. It was assumed that without credit, such farmers would be unable to afford the inputs required for the new rice technology that made possible substantially higher yields. The plan was that poor rice farmers would take BIMAS loans and cultivate high-yielding rice, increasing the country's rice stocks and improving the farmers' incomes. But the seeds and fertilizers provided under BIMAS tended to suit the high-quality ricelands to which poorer farmers typically did not have access.

BIMAS credit was tied to input packets

In the early 1970s BIMAS input packets helped introduce high-yielding seeds and synthetic fertilizers to Indonesian rice farmers. But the program was designed primarily for rice cultivation on irrigated lands, while nearly half the country's ricelands are located in other environments, such as rainfed lowlands, nonirrigated uplands, and swamplands. Aspects of the national program often proved unsuitable for these environments. Even irrigated ricelands have different micro-environments, so an input packet appropriate for some irrigated rice fields may not suit others.

In theory, BIMAS recognized environmental diversity by providing a range of input packets suitable for different land conditions. In practice, however, only one or two BIMAS packets were available in most subdistricts, and these were usually the packets suitable for well-irrigated ricelands.

After a few years of experimentation with BIMAS packets, farmers usually learned which seed types, fertilizer amounts, and cultivation practices worked best on their lands. These often differed significantly from the packets and instructions provided to them.[26] However, the owners of most of the best-quality ricelands (wealthier farmers) made use of the new rice technology, at least partly through BIMAS.

Overall, most rice farmers received seeds and fertilizer packets suitable for well-irrigated lands, but most rice farmers cultivated lands that were not well irrigated.

Other agencies selected BIMAS borrowers, but BRI had to collect the loans

The Ministry of Agriculture set national and regional targets for the numbers of farmers and hectares to be included in BIMAS during each cropping season. Potential borrowers were identified by officers of the Department of Agriculture and other local officials. In general, this became a politicized process in which many rural elites were identified as BIMAS participants and, as such, captured much of the subsidies. In theory BRI could reject a particular borrower, but in practice this proved difficult, often impossible.

In some areas, however, BIMAS targets were set too high for the rice-growing potential of the area. In these instances the pressure on government officials to achieve the targets tended to result in borrowers being signed up for BIMAS regardless of whether they were creditworthy or their lands suitable for rice cultivation.

BIMAS did not reach many poor rice farmers

BIMAS was capriciously implemented. In some areas, poor rice farmers cultivating nonirrigated land were not allowed BIMAS credit. In other areas poor farmers whose lands were unsuitable, or who did not even cultivate rice, were instructed to participate in the credit program so that local BIMAS targets might be met. Such farmers often felt little need to repay unwanted loans. But as loan delinquents, they were ineligible for future credit subsidies. Thus their only opportunity to build a good credit rating in the formal sector was lost.

The government assumed that the subsidized loans would cover the first two or three years' purchases of fertilizer and other inputs, and that afterward farmers would not need to borrow further because they could then buy inputs with the extra income generated by their improved yields. According to government planning, such farmers would then become "graduates" of BIMAS.

Following Gonzalez-Vega's "iron law of interest rate restriction" (see chapter 4), however, most BIMAS credit went to larger farmers. Wealthier villagers quickly perceived subsidized credits as desirable financing. Those who repaid tended to continue their participation in BIMAS—as did others who did not repay their loans but who were locally influential and so permitted to reborrow without repaying their outstanding loans. Extensive field work by the Development Program Implementation Studies (DPIS), Center for Policy and Implementation Studies (CPIS), and BRI from 1979 until the program ended in 1985 uncovered virtually no BIMAS graduates (Robinson and Snodgrass 1987). As one better-off Javanese farmer commented:

> Every year I borrow from BIMAS. BIMAS is very helpful in raising rice production and in supporting the household—for every one kilogram of fertilizer I get from BIMAS, I use half of it for my *sawah* [irrigated riceland]. The other half I sell and use the money for my daily expenses.
>
> —DPIS 1983, p. 181

Following Gonzalez-Vega's "iron law of interest rate restriction," most BIMAS credit went to larger farmers

By 1983 the channeling of expensive government subsidies to wealthier villagers had become so apparent that the government banned from the program farmers who cultivated more than 1 hectare of irrigated riceland. But by that time nearly all BIMAS loans were in the hands of rural elites, so the government ban resulted in a program with few participants. The program had been depleted not by its graduates but by its dropouts (who found the inputs unsuitable for their lands) and by its rejects (who did not repay their loans—in many cases, as discussed later in this chapter, because of crop destruction caused by inputs in their BIMAS packets).

Many unit staff collected bribes, curried favors from elite customers, and treated poorer borrowers with disdain. They rarely met a saver

Policies for loan forgiveness and rescheduling during crop failures were badly planned and encouraged corruption

In cases of crop failure, Presidential Decree 2/1976 made provision for BIMAS loans to be rescheduled or forgiven, depending on the amount of loss. But since an official declaration of the loss suffered was required for each rice field, there was considerable scope for corruption. As discussed below, massive destruction of rice crops occurred, but the loan forgiveness and rescheduling provisions for BIMAS loans were poorly implemented.

Some local governments and BRI branches instituted various regulations that *de facto* allowed better-off farmers to receive loan forgiveness while preventing poor farmers from accessing the provisions of the presidential decree; some of these are discussed later in this chapter. In addition, widespread farmer complaints indicated that in many cases affidavits certifying crop destruction were given to those who paid bribes to the inspecting officials. Meanwhile poorer farmers who had lost their crops and were unable to pay bribes were expected to pay their loans. As one farmer said, "The rich pay bribes, the poor pay loans."

BRI did not have the organization, human resources, or motivation to manage unit desas effectively

BRI unit staff were untrained, unmotivated, poorly supervised, and generally demoralized. As discussed in chapter 14, they were poorly paid, treated as inferior by the rest of BRI, and blamed for the losses of the unit desas—which were largely outside their control. In turn, many unit staff collected bribes from borrowers for the below-market loans they controlled, curried favors from elite customers, and treated poorer borrowers with disdain. They rarely met a saver.

With the loan interest rate at 12 percent and the interest rate for most savings at 15 percent, with staff responsible for collecting BIMAS loans in cash from borrowers they had not been allowed to select and who had borrowed mostly in kind, and with the unit desa system treated within BRI as a pariah, there was no institutional framework within which the unit staff could work effectively. Subsidies—for both the BIMAS portfolio and the program's administrative expenses—diminished the already low motivation of unit staff to locate and make loans to creditworthy borrowers, and to collect these loans.

Typically, neither unit nor branch staff knew the areas in which they worked or understood the local markets they served. Some branches and units instituted and implemented local policies that contradicted and undermined the intent of national policy; examples are provided later in this chapter.

The institutional reorganization of the unit desa system and the upgrading of its staff that began in 1984 are discussed in chapter 14. These changes were essential for the development of the unit desas into a sustainable microfinance system.

Successful agricultural credit programs require successful agriculture—but insecticides supplied in the BIMAS input packet caused severe crop destruction

Typically, neither unit nor branch staff knew the areas in which they worked or understood the local markets they served

Analysts sometimes evaluate agricultural credit programs as though the causes of the successes or failures are all in the financial design. These are, of course, important. But agricultural issues also play a crucial role in the success or failure of agricultural loan programs; these are often insufficiently understood by those designing and implementing the credit programs. Continued, large-scale crop failures will invariably affect the performance of agricultural credit programs. As will be demonstrated here, many of BIMAS's repayment problems were caused by preventable agricultural failures that were linked to the inputs provided in BIMAS packets.

Farmers whose crops are wholly or mostly destroyed usually cannot repay the full amount of their credit on time. If this situation is not adequately provided for (as it was not in Indonesia in the mid-1970s), and if crop destruction occurs frequently (as it did in Indonesia then), credit programs structured around particular crops are certain to have low repayment.

The example provided below was selected in part because it was so serious for Indonesia at the time. Although the problem of insecticide-induced crop destruction has largely been overcome there, this example was also chosen because it is still widely relevant to agricultural credit programs in other countries today. It should go without saying that agricultural credit programs that supply inputs that destroy borrowers' crops are unlikely to succeed. But this has not been said enough.

A series of rice crop failures in Indonesia's primary rice-growing areas—where the immediate cause was destruction by the brown planthopper (*Nilaparvata lugens Stal*)—provide a striking example of the many factors that underlie successes and failures in agriculture, and in agricultural credit programs. A brief summary of rice seed and insecticide use at that time is provided so that the strongly negative effect of certain types of insecticides on the BIMAS credit program can be fully understood.

Insecticide-induced crop destruction. High-yielding rice seeds developed in the Philippines by the International Rice Research Institute (IRRI) were first released to Indonesian farmers in 1967. These were followed shortly afterward by a number of other IRRI rice seeds. But the high yields obtained from these

rice varieties in the first few years could not be maintained. Because of the new cultivation methods that accompanied the introduction of high-yielding rice seeds, especially the use of certain insecticides, the new rice types rapidly became sensitive to pests and diseases previously controlled by traditional cultivation methods no longer practiced.

Scientists from a number of countries had found that the use of some types of insecticides results in the rapid emergence of new biotypes of insecticide-resistant brown planthopper, as well as in the death of the natural enemies of the brown planthopper (such as certain spiders, beetles, and dragonflies).[27] This research demonstrated that a rapid increase in brown planthopper populations, known as resurgence, is caused by the nonselective use of such insecticides.

The brown planthopper outbreaks that disrupted Indonesia's rice intensification program were induced by insecticides provided by BIMAS

> In effect, insecticides actually cleared the way for the brown planthopper by destroying its natural enemies, allowing it enormous scope to burst forth, expand, and multiply. Sublethal doses of insecticide appeared to stimulate female reproduction . . . *Retrospective interpretation of the evidence from the 1970s, based on IRRI research findings, indicates quite clearly that the brown planthopper outbreaks that disrupted Indonesia's rice intensification program from 1974 to 1979 were insecticide-induced.*
>
> —Fox 1991, p. 75, emphasis added[28]

It is estimated that in each of the 1974/75 and 1975/76 cropping years, about 400,000 hectares of new and traditional rice varieties were destroyed by the brown planthopper on Java. In 1976/77 the number increased to more than 450,000 hectares (Fox 1991, pp. 68–69). To put these figures in perspective, in 1974/75 and 1975/76 the number of hectares on Java destroyed by the brown planthopper each year represented about 13 percent of the area covered under BIMAS throughout all of Indonesia in both rainy and dry seasons. In 1976/77 the figure was about 18 percent. Brown planthopper attacks on rice occurred outside Java as well. The figures for hectares of rice destroyed would, of course, be higher if all of Indonesia were included.

The brown planthopper, however, presents another danger, as it carries a virus that causes a disease known as "grassy stunt." Rice plants with grassy stunt do not form grains, and there is no harvest. (Indonesian farmers call this "family planning rice.") Grassy stunt often appears in the rice crop following one that has been heavily attacked by the brown planthopper. "Cumulatively for the period 1974 to 1977, it is estimated that rice yield losses due to brown planthopper and grassy stunt disease in Indonesia exceeded 3 million tons of paddy worth more than $500 million" (Fox 1991, p. 69).

Intensive research on rice breeding at IRRI during the late 1970s and early 1980s resulted in the development of new rice varieties (IR-36 and others that were genetically similar) which were resistant to the brown planthopper biotypes of that period. During 1979–85 Indonesia's production increased 49 percent, from 17.8 million tons of milled rice to 26.5 tons. But the use of resurgence-causing

insecticides continued. The more the outbreaks of brown planthopper infestation increased, the more farmers were inclined to use these insecticides—especially since the cost to farmers was low because the resurgence-causing insecticides were supplied in the input packets of the heavily subsidized BIMAS program.

Populations of a new brown planthopper biotype that was resistant to the insecticides began to develop in the mid-1980s; this biotype induced large rice crop losses in Indonesia in 1986, especially on Java and Sumatra. As each new biotype of the brown planthopper developed, only the fewer and fewer rice varieties that were resistant to that biotype could be planted.

The need to protect against crop devastation by planting seed varieties resistant to specific pests resulted in massive erosion of Indonesia's rice gene pool.[29] The rapid loss of genetic diversity was not only an Indonesian problem, but one that occurred throughout tropical Asia as the IRRI high-yielding rice varieties displaced traditional rice types during the 1970s (Hargrove and others 1979; Fox 1991). By the 1979/80 rainy season 67 percent of Indonesia's irrigated riceland was planted in IRRI varieties that were closely related genetically (Fox 1991, p. 66). This percentage increased in the 1980s because of the continued cross-breeding among a relatively few, closely related rice varieties.

The need to protect against crop devastation by planting seed varieties resistant to specific pests resulted in massive erosion of Indonesia's rice gene pool

The combination of increasing genetic uniformity and continued use of resurgence-causing insecticides brought Indonesia to a critical threshold in the mid-1980s. The role of these insecticides in the crop destruction of the brown planthopper and in the precipitous genetic decline of rice varieties had been known since the mid-1970s by Indonesian and international agricultural experts. But powerful international insecticide companies—and some Indonesian officials—had strong interests in maintaining the status quo, so BIMAS packets continued to contain resurgence-causing insecticides. It took time for the information about the role of these insecticides in inducing rice crop destruction to reach President Soeharto. When it did, he acted immediately.

A new national pest management strategy. Faced in 1986 with a much larger potential outbreak than had previously been possible, the government responded with a major new pest management policy, announced in Presidential Decree 3/1986. The decree:

- Banned the use on rice of 57 varieties of insecticides and began a national policy of integrated pest management that replaced regular spraying of insecticides with a variety of biological and cultural pest control mechanisms.
- Implemented, with the help of the Food and Agriculture Organization (FAO), a massive training program for farmers.
- Provided for limited spraying only in identifiable outbreak situations.
- Reduced and then eliminated pesticide subsidies.

While these steps were of fundamental importance for Indonesia's rice production, the problem has not been entirely resolved. The decree permitted resur-

gence-causing insecticides to be used on secondary crops; when these are rotated with rice crops on the same lands, the rice crops can be affected. Moreover, these insecticides are available in the market, and some farmers continue to use them on their rice crops as well as on secondary crops.

The resurgence-causing insecticides supplied in BIMAS packets had a devastating effect on both the country's rice crop and the BIMAS credit program. The program suffered severe defaults, and farmers whose crops had been destroyed by the brown planthopper attacks and who had not obtained debt relief, were unwilling to continue taking BIMAS loans.

This is an extreme, although not an isolated, example. Many agricultural issues—with both positive and negative effects on loan programs—must be considered carefully in order to understand correctly, and to improve, the performance of rural credit programs in developing countries.

In 1986 the government responded with a major new pest management policy

Examples of BIMAS in Four Rice-growing Environments

This section analyzes the BIMAS credit program for rice farmers as it had developed by the early 1980s in four Indonesian villages.[30] Each village reflects a different ecological environment, a different pattern of land and labor use, and a different potential for rice intensification. The many reasons that BIMAS failed—as well as the fundamental incompatibility between the program's dual goals of rapid increases in rice production and of poverty alleviation—are well illustrated in the dynamics and the results of program implementation in these villages.

The four villages, located in the provinces of East Java (village G), West Java (village C), South Sulawesi (village R), and South Sumatra (village P), are not meant to be representative of the country, nor necessarily of their provinces and districts. They were selected to represent a broad range of environments, in order to examine the implementation of four different government programs.[31]

The discussion below refers to the four villages as they were in 1980–81, when field studies were carried out in each village and when each already had extensive experience with BIMAS. The information about BIMAS implementation gathered from these villages was used to support the policy memorandums that recommended to the government that the unit desa system be changed from a channeling agent for subsidized credit to a commercial financial intermediary.

At the time of the study there was still relatively little institutional finance in the four villages; table 11.2 shows borrowing of all types in three of the villages.[32] There was considerable variation among the villages in terms of reported loans; 77 percent of household heads in the East Java village reported an outstanding loan, compared with 36 percent in the South Sulawesi village. In none of the three villages, however, did institutional credit account for more than 20 percent of reported loans. For all other borrowing, villagers depended on informal sources.

Table **11.2** **Household borrowing in three Indonesian villages by source of the largest loan, 1980–81**
(percent except where otherwise noted)

Source of loan	Village G (East Java)	Village C (West Java)	Village R (South Sulawesi)
Number of households			
in village	775	760	711
Household heads reporting			
outstanding loans	76.6	58.9	35 8
Institutional credit	17 9	20.1	14.0
BIMAS	6 6	16.5	2 7
Bank/other	11 3	3 6	11.3
Informal credit	82 1	79 9	86.0
Traders	16.5	26 9	2.1
Relatives	37 4	14.8	40 5
Other (nonrelatives)	28 2	38 2	43.4
Total	100	100	100

Note The table shows three of the four villages studied intensively under the Development Program Implementation Studies (DPIS) project carried out by HIID for Indonesia's Ministry of Finance, 1979–83 Comparable data on credit are not available for the fourth village, village P in South Sumatra However, tables 11 3 and 11 4 provide other data for all four villages Extensive interviews about BIMAS participation and a household survey were carried out in village C in 1979–80, and in the other three villages in 1980–81 Selected follow-up studies in these villages were carried out in the mid-1980s by the Center for Policy and Implementation (CPIS), an Indonesian foundation that was the successor to DPIS
Source DPIS 1983

As noted, BIMAS sought to play a crucial role in the wider rice intensification program's goal of rapid increase in rice production, and it sought to raise the incomes of poor farmers. The first BIMAS goal was realized in village G (East Java) and to some extent in village C (West Java). The second goal was reached only in village C, and only to a limited extent. But the rice intensification program, if not its BIMAS credit component, did help raise the incomes of the poor in village G because the multiple rice crops made possible by the new technology created additional employment. Neither BIMAS goal was met even remotely in the two villages off Java.

Village G (East Java): BIMAS results in an ideal rice intensification environment

At the time of the study village G, located in East Java, was experiencing rapid economic growth and agricultural intensification and had well-developed infrastructure and irrigation facilities. Thus conditions for intensified rice production were highly favorable for the cultivation of multiple rice crops using

high-yielding technology on irrigated lands. Consequently, the well-irrigated, high-quality sawah (irrigated riceland) in village G was so expensive that few villagers could afford to own or cultivate irrigated rice.[33]

With a population of 3,559 and a land area of 325 hectares, village G was the most densely settled of the villages (table 11.3). It also had the largest percentage of village land, almost two-thirds, in sawah. However, the 201 hectares of sawah in the village were owned by just 25 percent of the households. Only 34 percent of village G's households in 1980–81 farmed land at their own risk, and only 10 percent were engaged in full-time farming. Most village households were occupied in other economic activities, including small-scale trading, wage labor, and local industries such as construction, transportation, and food processing.

Table **11.3** **BIMAS participation in four Indonesian villages, 1980–81**

Feature	Village G (East Java)	Village C (West Java)	Village R (South Sulawesi)	Village P (South Sumatra)
Population	3,559	3,092	3,099	1,456
Number of households	775	760	711	246
Land area (hectares)	325	644	3,519	625
Sawah area (hectares)[a]	201	208	1,025	68
Household ownership of sawah				
None	577	295	450	117
(percentage of households)	(75)	(39)	(63)	(48)
Less than 0 25 hectares	48	343	39	8
(percentage of households)	(6)	(45)	(6)	(3)
0 25 hectares or more	150	122	222	121
(percentage of households)	(19)	(16)	(31)	(49)
Households cultivating rice in 1980/81	267	611	467	167
(percentage of households)	(34)	(80)	(66)	(68)
Households selling rice (percentage of	176	190	32	21
households cultivating rice in 1980/81)	(66)	(31)	(7)	(13)
Household participation in BIMAS				
Ever-participants (percentage of	226	349	91	63
1980/81 sawah cultivators)	(85)	(57)	(19)	(38)
Ever-participants	226	349	91	63
(percentage of households)	(29)	(46)	(13)	(26)
1980–81 participants	78	59	72	3
(percentage of sawah cultivators)	(29)	(10)	(15)	(2)
1980–81 participants	78	59	72	3
(percentage of households)	(10)	(8)	(10)	(1)

a Irrigated rice fields

Source DPIS 1983

The combination of good rainfall, excellent irrigation, available fertilizers, and high-yielding seeds resulted in substantial increases in rice production under the national rice intensification program.[34] Village G represents almost precisely the environment for which the rice intensification program was designed, but most of its inhabitants were too poor to be rice farmers. Thus by 1980–81 the number of village households that had participated in BIMAS in at least one season represented 85 percent of the village's rice cultivators. But they represented only 29 percent of village households—the wealthiest of village G's residents.

Participation and repayment in the BIMAS rice program were excellent in village G from the program's inception there in 1969 through 1975. Coverage peaked in the 1975/76 rainy season, with 138 participants covering 180 hectares. But much of the village's rice crop was destroyed by brown planthopper disease in the 1976/77 rainy season. A direct effect of the insecticides provided to village G farmers in their BIMAS packets, this destruction greatly affected the repayment of that season's loans and subsequent BIMAS participation. The brown planthopper had two kinds of effects. First there were the direct effects of massive crop destruction, lost income, and farmers' inability to repay BIMAS loans. Second were severe indirect effects resulting from poor implementation of the presidential decree on BIMAS loan forgiveness and rescheduling in cases of crop destruction.

Village G is an almost ideal environment for rice intensification, but most of its inhabitants were too poor to be rice farmers

In implementing the presidential decree on BIMAS loan forgiveness and rescheduling for the 1976/77 rainy season, a district-level decision was made to reduce by 55 percent the BIMAS debts of village G farmers whose crops were destroyed by the brown planthopper. However, the policy was not implemented as stated. The village head (*lurah*) declared the fields of 32 participants to have been affected by the 1976/77 brown planthopper attack. For those farmers—a group that included the village head and many village officials (*pamong*)—the district ruling was applied: their BIMAS debts were reduced because of crop loss.

However, 73 other BIMAS participants in village G whose rice crops were also destroyed by the brown planthopper attack were not covered by this decision. These farmers resented the implementation of the presidential decree because influential villagers and those able to pay bribes had their loan obligations reduced, while other BIMAS borrowers who had lost their crops were instructed to repay in full. They refused to do so. According to BRI records four years later, no BIMAS debt incurred that season by these farmers had been repaid—in August 1981 BRI records listed 73 borrowers from village G who still owed a total of $3,100 for the 1976/77 rainy season.[35] These farmers remained ineligible for new BIMAS loans and could not build their credit ratings at the unit desa, whereas the 32 farmers whose loans had been reduced remained eligible to continue borrowing.

BIMAS participation began to decline rapidly after the 1976/77 season. Among the 226 of village G's rice farmers who had ever participated in BIMAS, only 78 (35 percent) were still participating in 1980/81. After 1976/77 most BIMAS participants in village G were larger farmers. While the BIMAS

loan amount per hectare was set at $56, the average BIMAS loan in village G in 1980/81 was $81. Thus the average loan was taken for cultivation of about 1.5 hectares of irrigated land. Only 23 percent of the participants that season borrowed for cultivation on less than 1 hectare.[36] The largest BIMAS borrower was the village head, who borrowed about $280 in 1980/81; the second largest borrower was his father-in-law. The average BIMAS loan taken by village officials was $130.

Given the village's experience with the presidential decree for debt relief, many smallholders said they were afraid of being in debt to BIMAS. Thus village G's relatively few small rice farmers either never participated in BIMAS, dropped out of the program after the 1976/77 season, or became ineligible for BIMAS loans.

In village G the government succeeded in increasing rice output significantly, but BIMAS failed to reach low-income rice farmers

Looking back at the rice intensification program, village G farmers say that its primary benefit was the introduction of synthetic fertilizers. But the 200 kilograms of fertilizer per hectare provided in BIMAS packets was not considered sufficient for village G conditions. Thus even BIMAS participants were regular market purchasers of fertilizer.[37] There was also an economic incentive to purchase fertilizer from private traders because it was slightly cheaper on the open market.

In village G the government succeeded in increasing rice output significantly, but it failed to reach low-income rice farmers with BIMAS subsidies. Overall, rice cultivation in village G was both highly intensified and highly restricted. However, some poor residents of village G benefited from the increased employment that became available because of the multiple cropping and higher yields made possible by the rice intensification program.

Village C (West Java): Most households benefit from rice intensification, but not necessarily from BIMAS

Located in West Java with a population of 3,092 in 1980, village C is a farming community located at an altitude of 490 meters; most of its 644 hectares consists of dry land (*tegalan*) and forest (see table 11.3). Only one-third of the land was sawah; most of the sawah was rainfed rather than permanently irrigated, although some was irrigated sufficiently to permit two rice crops a year. In village C the land, which was not of particularly high quality, was controlled by a large number of smallholders. Thus 91 percent of its 760 households were involved in farming activities and 80 percent cultivated rice in 1980–81.[38]

In village C, 61 percent of households owned sawah, compared with 25 percent in village G. Village C had many more small rice farmers than village G: 45 percent of village C households owned less than 0.25 hectares of sawah, compared with 6 percent in village G. While rice production was higher in village G, where high-yielding varieties of rice were cultivated under excellent conditions, BIMAS reached a much larger portion of the inhabitants of village C.

Many village C households participated in this program in the early 1970s: 349 households (57 percent of the households of village C rice farmers, and 46 percent of all households) were BIMAS ever-participants. Fertilizer use rapidly

became widespread, but after one or two trials with high-yielding seeds, nearly all village C farmers reverted to cultivation of local rice varieties. Village C rice farmers said that because their land is hilly and most of their sawah rainfed, they found local rice varieties to be more suitable than high-yielding varieties.

The BIMAS input packets distributed in village C, which contained 300 kilograms of urea and 100 kilograms of triple superphosphate (TSP) per hectare,[39] were larger than the village G packets, which contained 200 kilograms of urea per hectare. Yet village G farmers cultivating high-yielding seeds on well-irrigated lands and many village C farmers cultivating local varieties on less irrigated lands both needed larger quantities of urea than were provided in the BIMAS packet.[40] Farmers in village C typically handled the packet problems by unpackaging the packets and customizing the inputs for their own fields. They used what they needed from the packets, purchased additional inputs as required in cash (if they could afford to), and sold or stored any excess inputs supplied in the packets.

"I dare not join BIMAS again because maybe my sawah will again be attacked by the brown planthopper"

During 1976–78, however—for four successive rice cultivation seasons—village C was devastated by brown planthopper and rat attacks. The farmers had been instructed to plant high-yielding rice seeds that were thought to be resistant to the brown planthopper. Some farmers, especially those who cultivated fields within the contiguous block of the best sawah, did so. But the fields planted in high-yielding rice varieties were destroyed by a new biotype of the brown planthopper and by rats, as were the fields of most farmers who had continued to plant local seeds.

Under the 1976 presidential decree for BIMAS debt relief in cases of crop destruction, only sawah that had been cultivated with high-yielding seeds was eligible for loan forgiveness or rescheduling. Except for the farmers with the best sawah, all other village C farmers had planted local rice varieties. Thus the provision for debt relief did not apply to them. The few farmers with the best lands received partial loan forgiveness, while those who cultivated local rice varieties did not—even though in many cases their crops had been completely destroyed. Village C farmers said that given the conditions in their village, the high-yielding seeds provided to them were appropriate only for the best lands, so the effect of the presidential decree was to favor the better-off farmers and to ignore the crop destruction suffered by smaller farmers.

By the 1980/81 season, only 17 percent of village C's 349 BIMAS ever-participants, and only 10 percent of households cultivating sawah that season, were still participating in the program, Massive crop destruction combined with the ineligibility of most village C rice farmers for debt relief caused BIMAS arrears to grow rapidly in this village. BRI and the government placed renewed emphasis on loan collection; the village head had to insist that loans be repaid by households that he knew would be unable to repay.

Some of the farmers whose crops had been destroyed were unable to repay their BIMAS loans and were not allowed to take new loans. Others became frightened and sold other crops or household possessions in order to repay their BIMAS debts; many of these farmers decided never to participate in BIMAS

again. One such BIMAS dropout was a 37-year-old farmer who owned 0.1 hectare of dryland and who sharecropped 0.15 hectare of sawah. He described his efforts to repay his BIMAS loan:

> I joined BIMAS from 1975 to 1977 because I needed fertilizer and I had no money. I took 40 kg of urea each season. My *sawah* was destroyed by brown planthopper three times in succession in 1976 and 1977. My loan was Rp 2,800 [$6] each season, including the interest. The first and second times my sawah was destroyed I repaid on time. I got the money from selling bananas, cassava, and peanuts. But the third time I just could not repay on time. I repaid after 13 months, instead of after seven months. After 1977 I stopped taking BIMAS. I dare not join again because maybe my sawah will again be attacked by the brown planthopper. Now I buy in cash whatever inputs I can afford.
>
> —DPIS 1983, p. 169

BIMAS was widely available in village C, but after 1976/77 few people wanted to participate in the program

Although BIMAS participation plummeted in village C after 1976, nearly all farmers had started using synthetic fertilizers. After 1976 inputs became readily available in the village C market, and they could be purchased as needed (whereas BIMAS borrowers had to go to the cooperative at the district capital to obtain their inputs). Because of the largely rainfed environment and continued cultivation of local paddy varieties, village C had not experienced a significant increase in double cropping of rice by the 1980/81 season, and there was no triple cropping. But there were substantial increases in average yields on irrigated sawah: from about 28 quintals of paddy per hectare before the intensification program to about 35 quintals in 1980/81.

In village C rice output increased. After 1976/77, however, this was largely because farmers purchased fertilizer in cash—not through BIMAS. In the beginning the program reached poor farmers. After 1976/77, however, the government failed to reach low-income rice farmers with BIMAS credit. BIMAS was widely available in village C, but after 1976/77 few people wanted to participate in the program because of its severe implementation problems and faulty program design.

Village R (South Sulawesi): A village with large potential for rice intensification and low participation in BIMAS

Village R, in South Sulawesi, had very different conditions from those found in the Java villages. With a population of 3,099, almost the same as the populations of villages C and G, village R had about five times the sawah area of those villages (see table 11.3). Yet only a small area of land and a few people in village R benefited from the BIMAS program for rice intensification. Most of village R's land was owned by absentee landlords and sharecropped by village R residents. Although 71 percent of household heads were classified as farmers (and 85 percent were involved in agriculture in some way), only 37 per-

cent of households owned any sawah. Relative to villages G and C, village R had lower economic growth, fewer off-farm economic activities, and fewer creditworthy enterprises.

In the 1970s and early 1980s the district in which village R is located suffered a series of calamities because of pests and drought. There was major crop devastation from the brown planthopper in 1972–73. In 1976–77 there was severe drought, as there was again in 1980–1982; poor irrigation facilities magnified the effects of the droughts. In addition, there was far more land than could be cultivated under existing conditions; this resulted in severe crop destruction by rats that multiplied rapidly in the untended lands and created yet another risk that farmers had to assess when deciding on input application levels.

Much of the irrigated riceland in village R was left uncultivated because of inadequate irrigation, droughts, pest attacks, and a labor shortage

Much of the sawah in village R was left uncultivated during 1980/81 because of inadequate irrigation,[41] droughts, pest attacks, and a labor shortage caused by the departure of villagers seeking employment elsewhere. Of the 1,025 hectares of sawah in the village, 688 hectares were cultivated that season, of which only 223 hectares were owned by village R residents. As noted, most village R farmers worked as sharecroppers for absentee landowners, usually under an arrangement in which the owner provided the inputs and the crop was shared equally.

Problems of poor irrigation and natural calamities were further compounded by the fact that in this subdistrict, BRI's unit desas differentiated between the relatively few farmers who cultivated land under irrigation projects and the many more who cultivated irrigated rice on rainfed land. According to the rules of the local BRI branch, the latter were ineligible for BIMAS loans. Instead they were provided loans that were identical to BIMAS loans in all but one respect: their loans did not contain the BIMAS loan rescheduling and forgiveness provisions for debt relief in cases of crop destruction.

For these reasons, BIMAS participation was low in village R. In sharp contrast to the two Java villages, only 91 households (13 percent of village R households and 19 percent of sawah cultivators) had ever participated in BIMAS by 1980/81. Wealthier villagers were much more likely to have participated than poorer villagers.[42]

All fields in village R and surrounding villages were officially declared destroyed in 1976 because of drought, and all BIMAS defaulters were cleared of debt repayment obligations. But this provision did not apply to the many farmers who cultivated irrigated rice on rainfed land and whose loans did not contain the provisions for debt relief in cases of crop destruction. Most were unable to repay their loans because their crops had been destroyed.

For the many village R farmers cultivating irrigated rice on rainfed land, the choice was among a BRI loan without the BIMAS crop failure provision, a private loan in kind at the prevailing rate of 62 percent for six months, purchase in cash of whatever inputs they could afford, or rice cultivation without synthetic fertilizers and other recommended inputs.

Risk aversion in village R was understandably very strong. Most village R farmers avoided BIMAS and purchased inputs in cash, and some farmers avoided buying fertilizer altogether. Low BIMAS participation was also a result of

the widespread practice under which village R residents sharecropped the lands of absentee landowners, who were generally unable to supervise input use well. Given the risks of rice cultivation in village R and their limited shares of returns, owners lacked incentives to provide sufficient funds for technically optimal input use, while cultivators lacked incentives to provide the improved, labor-intensive cultivation practices advocated by extension agents.

As one sharecropper said:

> The decision whether or not to use fertilizer rests with the owner of the fields. He is the one who provides fertilizer and insecticides, so if they are not made available, I will not use them. I do not have any money and do not want to risk a loss. Better to waste energy than to waste money—it could happen that I would not be able to repay the loan.
>
> —DPIS 1983, p. 193

The government failed in both goals in village R: rice output was not increased, and BIMAS credit did not reach low-income farmers

In contrast to the two Java villages—where many BIMAS participants also purchased some inputs in cash—BIMAS participation and cash purchase of inputs were essentially viewed as alternative farming strategies in village R. Wealthier sawah owners, including absentee landowners, tended not to purchase inputs with cash. They took advantage of the cheap BIMAS credit, often passing the input portion of the loan on to sharecroppers while keeping the cash portion for themselves. Some used the BIMAS inputs for their village R lands on lands they held outside the village.

Village R farmers who cultivated their own smallholdings tended to purchase small amounts of inputs with cash rather than to take the risks of the BRI loans that provided no debt relief in cases of crop failure. Use of this strategy increased during 1981 when an intensive government repayment drive (GERTAK) began. The BIMAS loan collection campaign of 1981 accompanied a severe drought in village R; the GERTAK drive frightened and offended farmers who could not repay their BIMAS loans because their crops had been destroyed.

Thus village R provides an example of rice intensification in a village where knowledge and acceptance of the new technology were high, but where ecology, infrastructure, and patterns of land ownership and use impeded intensification. These problems were exacerbated by the decision of the local BRI branch not to provide farmers cultivating irrigated rice on rainfed land with the debt relief provisions accorded to farmers who had permanent sources of irrigation. In the end the government failed in both its goals in village R: rice output was not significantly increased, and BIMAS credit did not reach low-income farmers.

Village P (South Sumatra): A village where nearly everything that could have been done wrong in BIMAS implementation was done wrong

With a population of 1,456 in 1980/81, village P had less than half the population of each of the other three villages and a very different agricultural en-

vironment (see table 11.3). Land in village P was plentiful (625 hectares), but labor was scarce.[43] There was significant potential for rice intensification, but tree crops—especially coffee and rubber—predominated. Village P had only 60 hectares of locally irrigated sawah and eight hectares of rainfed sawah. In addition, 30 hectares were under swidden agriculture (*padi ladang*) during 1980/81. The rest of the cultivated land was used for tree crops.

The history of rice intensification in village P can be understood only in the wider context of its ecological environment. Although government officials tried to fulfill their BIMAS targets in village P, farmers did not want to participate. Village P farmers must balance the demands and opportunities of a complex agricultural environment, and BIMAS was not designed for that environment.

Village P farmers balance the demands and opportunities of a complex agricultural environment. BIMAS was not designed for that environment

The combination of crops that a village P farmer selects in a given year depends on three main factors: land ownership, the relative prices of the potential products (rice, coffee, rubber slabs), and the tradeoffs among the various demands on household labor. There is not enough labor to cultivate intensified rice, maintain coffee gardens located far from the village, and tap rubber trees daily. The primary choice is between irrigated rice cultivation, with its heavy labor demands in certain seasons, and a cycle of upland farming involving nonirrigated dry rice cultivation in combination with coffee, rubber, and other tree crops such as durian[44] and cloves. Lands are used variously in different years depending primarily on the relative prices of rice, coffee, and rubber.

Thus rice production in village P was considerably influenced by large swings in coffee prices. The price of robusta coffee beans in the local market varied from less than 100 rupiah to 2,000 rupiah a kilogram during the late 1970s and early 1980s. When coffee prices were high, farmers neglected and even abandoned their sawah. When coffee prices were low, rice cultivation increased. Unlike coffee and rubber, the main cash crops, rice was viewed primarily as a subsistence crop. Further, rice was seen as a commodity that could either be grown or purchased. When coffee prices were low, about a third of the rice consumed in village P was purchased from outside the village. When coffee prices were high, the amount of rice purchased for consumption increased.

During 1980/81, 99 percent of the village's households were engaged in agriculture in one way or another, and 52 percent were sawah owners. But most sawah owners were not motivated to intensify their rice cultivation because this is a comparatively labor-intensive activity, while most of their income came from other crops. In addition, given the labor shortage in village P, some farmers pointed to an explicit tradeoff between their children's education and intensified sawah cultivation. They said they preferred to send their children to school rather than to have them work on the sawah.[45]

BIMAS started in village P in 1970/71, but with largely unsatisfactory results. Many farmers reported large percentages of empty rice husks from the first BIMAS harvest, an outcome later attributed to overapplication of urea because too large an amount for the village P environment was supplied in the BIMAS packets. No one applied for BIMAS for the next two years. During 1970–80, 63 farmers (38 percent of the village's 167 rice cultivators and 26 per-

cent of its households) tried BIMAS. But only 13 of these (21 percent of the ever-participants) participated more than once.

Limited participation occurred not because farmers were unaware of the benefits of rice intensification, but because BIMAS fertilizer inputs were not suited to village P soils and because the program was administered with little understanding of the village's agricultural environment. In this region the government's message that there was a need to increase awareness was correct—but it applied primarily to the implementers of the rice intensification program, not to the farmers.

The government's message to increase awareness was correct—but it applied to the implementers of the program, not to the farmers

Labor-intensive wet rice cultivation would have been difficult to intensify in village P under any circumstances. But the problems were greatly magnified by the fact that for more than a decade the fertilizer supplied in BIMAS packets was seriously incorrect, even harmful, for rice cultivation under village P conditions. The farmers said that on their already nitrogen-rich fields, most of which do not receive sufficient water, application of the large amount of urea provided in the BIMAS packets resulted in substantially decreased yields.

An agronomic team hired by the DPIS project to study the problems in village P agreed that the BIMAS packets contained too much urea and too little TSP. The team identified four rice growing micro-environments in village P: riverain sawah, which is irrigated year-round but often floods in the rainy season; sawah irrigated by tributaries of the main river, but usually with insufficient water for a second rice crop; rainfed sawah; and nonirrigated upland paddy. The fertilizer dosages of the BIMAS packets, and in most cases also the relative proportions of fertilizer types, were incorrect for all four environments. The packets were finally changed in 1981/82 under an intensive drive to increase BIMAS in the area—but the new packets doubled the amount of urea and increased the ratio of urea to TSP! Not surprisingly, most farmers preferred not to participate in BIMAS.

BIMAS participation in village P peaked between 1974 and 1976, when 10–12 farmers signed up each year. During 1975/76 severe pest attacks discouraged farmers from further BIMAS participation. During 1976–78 participation was extremely low; fewer than 10 hectares were under BIMAS. By the 1980/81 wet season only three village P farmers (5 percent of ever-participants and 2 percent of all sawah cultivators that season) were participating in BIMAS.[46]

Although there were only three BIMAS participants in village P in the 1980/81 season, cumulative arrears from 40 loans since 1970–71 totaled 622,304 rupiah (about $966 in 1981 dollars) at that time.[47] Village P farmers based their refusal to repay their loans primarily on unchanged yields resulting from an unwanted program with inappropriate inputs.[48]

To address the problems of BIMAS in this area and to increase program participation, a quasi-military drive to increase BIMAS known as Operation Work for Prosperity (*Operasi Karya Makmur,* or OKM), was begun in the subdistrict in 1981/82. Farmers were told that even those with outstanding BIMAS debts would be permitted to participate, and that the input packet would be larger—and as it turned out, even more unsuitable.

Each village head was made responsible for meeting the subdistrict OKM targets for BIMAS participants for his village. Village P's headman knew that many participants would use the fertilizer for their coffee, would not alter their sawah farming practices, and would not repay their loans. Yet he signed up his quota of participants, as he had no choice but to meet the target.

Forty-eight village P farmers participated in OKM in 1981/82, compared with three BIMAS farmers in 1980/81.[49] The ordinary BIMAS packet of inputs used between 1970/71 and 1980/81 contained 75 kilograms of urea and 50 kilograms of TSP per hectare. The OKM orders, however, were for farmers in this subdistrict to receive packets consisting of 200 kilograms of urea and 100 kilograms of TSP for the 1981/82 season.[50] That year, as usual, village P farmers used much of their BIMAS urea on their coffee. In 1982/83 only two farmers signed up for the BIMAS loans, and fertilizer purchase returned to pre-OKM levels.[51]

Village P farmers based their refusal to repay their loans on unchanged yields resulting from an unwanted program with inappropriate inputs

Throughout the life of the program, BIMAS loans were available to anyone in village P, but few villagers wanted to participate. Farmers were occasionally reprimanded for nonrepayment of loans—but not usually to the point where they repaid. Farmers would sign up when the village head needed their names to reach the village P BIMAS target. But since the inputs were not calibrated to their needs and since they might not be cultivating wet rice that season, BIMAS participation in village P did not carry with it perceived obligations to intensify rice—or even to grow it!—or to repay the loans.

The government failed to realize either of its goals in village P. BIMAS was not restricted but it was unsuitable for the village P environment, and few people wanted to participate. In village P, BIMAS neither intensified rice production nor raised the incomes of poor farmers.

Implications of BIMAS: Results in four villages

The results of the BIMAS program for rice cultivation in these four villages provide important insights into the program and its components under different environmental conditions. Table 11.4 provides a summary evaluation of BIMAS in each village in terms of seven variables: whether rice production increased, whether poor farmers' incomes increased, the extent of BIMAS coverage, the appropriateness of inputs in BIMAS packets, implementation of the presidential decree for loan forgiveness and rescheduling in cases of crop destruction, and credit repayment before and after 1976.

Increase in rice production. In village G excellent soil and water conditions interacted with the introduction of high-yielding rice technology to raise rice production substantially and to increase sales to the national rice stockpile. Rice production also increased in village C, though to a lesser extent and largely because farmers purchased their inputs in cash. Production did not increase in the two villages off Java.

Increase in incomes of poorer farmers. The BIMAS program was, for different reasons, restricted to the wealthier farmers in village G and village

Table **11.4** **Evaluation of BIMAS in four Indonesian villages**

Feature	Village G (East Java)	Village C (West Java)	Village R (South Sulawesi)	Village P (South Sumatra)
Rice production increased	++	+	–	–
Poor farmers' income increased as a result of BIMAS program	+ (indirectly)	+	–	–
Coverage				
BIMAS widely available to villagers	–	+	–	+
BIMAS ever used by more than one-third of village households	–	+	–	+[a]
BIMAS ever used by more than half of sawah cultivators	++	+	– –	–
BIMAS used by more than 10 percent of village households in 1980–81	–	–	–	– –
BIMAS used by more than 20 percent of sawah cultivators in 1980–81	+	–	–	– –
Appropriateness of BIMAS input packets for village environment[b]	+	–	–	– –
Implementation of regulations for loan rescheduling and forgiveness at times of crop loss	– –	– –	– –	–
Credit repayment. 80 percent or more before 1976	++	+	–	–
Credit repayment 80 percent or more after 1976	–	–	– –	–

++ Yes (many, much, or highly successful)
+ Yes (successful)
– No (few, little, or indicating a problem area)
– – No (very few, very little, or indicating a severe problem)
a In 1981/82 because of the OKM drive, the program reached 43 households (compared with 3 in 1980/81) But most farmers used the inputs provided on coffee, not rice, and repayment was very poor The following year 2 households signed up for the program
b Does not include the effect of the resurgence-causing insecticides provided in the BIMAS packets to all villages These insecticides caused massive crop damage during the 1970s in villages G, C, and R
Source Adapted from DPIS 1983

R. Poor farmers in village R benefited from BIMAS not at all. In village G, however, while poor farmers did not benefit directly from BIMAS, they did benefit indirectly from the rice intensification program because of the additional employment created by double and triple cropping and increased rice yields. BIMAS in village C and village P was, again for different reasons, implemented in more socially and economically egalitarian ways than in the other two villages. But only in village C did poor farmers benefit directly from the program. In village P almost no one benefited from BIMAS because as implemented, it was inappropriate for the agricultural environment there.

Extent of BIMAS coverage. While BIMAS participation was limited to the wealthier farmers in villages G and R, there was wide access to program participation in villages C and P. Yet only in village C was BIMAS widely used, and only until 1976. Ever-participation in BIMAS ranged from 46 percent of the households in village C to 13 percent of those in village R. The difficulty for villages C, P, and R was that BIMAS regulations were designed largely with village G conditions in mind. But in village G the good sawah was owned by relatively few households. In the other villages poorer farmers cultivated sawah that was primarily rainfed (as in village C), poorly irrigated (as in village P), or both (as in village R). BIMAS was not implemented in ways that suited these conditions. By the 1980/81 season, only 8–10 percent of the households in villages G, C, and R participated in BIMAS, while village P had only 1 percent participation.

Smaller farmers saw their crops fail and the decree implemented to forgive loans for larger farmers, but not for them

Appropriateness of the BIMAS input packets for the village environment. The primary problem was that BIMAS packets contained resurgence-causing insecticides that caused brown planthopper attacks on rice crops. Villages G, C, and R were all seriously affected by this problem; village P was less affected because of its much lower emphasis on rice cultivation. But in village P the difficulty was a BIMAS input packet that was inappropriate for local soil conditions, and that remained so for a decade. And when the packet was finally revised, it was even less appropriate for village P lands.

Loan rescheduling and forgiveness at times of crop loss. Because of local BRI branch decisions, corrupt implementation of the president's decree, or both, the loan rescheduling and forgiveness provisions in cases of rice crop failure were limited to the influential (village G); to those who cultivated high-yielding seeds, grown then only on the best-irrigated lands (village C); and to those who cultivated lands under irrigation projects (village R). These limitations caused widespread resentment among many smaller farmers who saw their crops fail and the presidential decree implemented in ways that reduced or forgave loans for larger farmers, but not for them.

Credit repayment. Before 1976, BIMAS credit repayment was fairly good in the two Java villages and fair in village R and village P. After 1976, however, repayment was poor in all four villages. These results reflect the national trends as shown in figure 11.2. Problems with credit repayment were closely linked to the sharp decline in BIMAS participation after 1976. This occurred partly because many participants experienced severe crop destruction caused by the brown planthopper and other pests. Many of these borrowers, who could not repay their loans, were not eligible for BIMAS loan forgiveness or rescheduling. Being in default, they could not reborrow from BIMAS. Program participation also decreased because many borrowers who had lost their rice crops and struggled to repay their loans from other sources refused to borrow again from BIMAS.

Agriculture and finance in the four villages. The specific reasons for the failure of the BIMAS credit program were different in each village, but the underlying reasons were similar (see figure 11.1):

- Subsidized interest rates prevented institutional viability.
- BRI was not allowed to select its own borrowers.
- Loans were tied to predetermined packets of inputs that were often inappropriate and sometimes destructive to the rice crop.
- In many areas credit subsidies went to wealthier villagers.
- In some areas borrowers were selected by government officials who needed to meet targets—even though the borrowers' lands were unsuitable for the inputs provided, or even for rice cultivation.
- In some years there were massive rice crop failures, often as a direct result of the insecticides that were distributed in BIMAS packets.
- Government policy for loan rescheduling was badly planned and often corruptly implemented.
- Unit desa staff were poorly trained, poorly paid, unmotivated, and generally ignored or looked down on by the rest of BRI.

Cooperatives said farmers groups were responsible for loan collection; farmers said loan collection was the cooperatives' responsibility

These examples demonstrate the complex ways in which agriculture and finance are interrelated in rural credit programs. They show how natural occurrences harmful to agriculture can be greatly exacerbated by human decisions, and reveal how serious and costly the problems can become when the latter reinforce the former. They also underscore both the rationality of rural borrowers and the imprudence of subsidized rural credit programs.

The End of the BIMAS Era

In 1982 BRI began to consider closing the unit desas or transferring them to another government agency. In selected districts in Java and Bali, BRI began quietly moving BIMAS out of the unit desas to the village cooperatives (KUDs). In the 1982 dry season 352 cooperatives provided BIMAS loans for a total of 2.3 billion rupiah; in the 1982/83 rainy season 824 cooperatives extended BIMAS credit of 19.4 billion rupiah.[52]

Although the KUDs selected to begin the transition were chosen because they were among the best-managed in the country, they generally had minimal facilities; a small, untrained, and poorly paid staff; low-level management; and very little banking, bookkeeping, and accounting expertise. In addition, BIMAS was financially unattractive from the cooperatives' point of view, because the 3 percentage point spread between borrowing from BRI at 9 percent a year and relending to farmers at 12 percent was inadequate to cover the KUDs' operating costs.

The cooperatives were instructed to issue BIMAS loans to farmers groups rather than to individual farmers. However, CPIS/BRI field work in five dis-

tricts in three provinces[53] in 1982 uncovered BIMAS farmers groups on paper, but no farmers groups actively functioning to channel BIMAS loans to farmers. The listed heads of the farmers groups said that they did not want to be involved because they might be held responsible for the repayment of the other group members. The cooperative officials said that the heads of the farmers groups were responsible for loan collection; the farmers said that loan collection was the cooperatives' responsibility. We did not find a single person who said that BIMAS loan collection was his or her responsibility.

The West Java district where village C is located was one of the districts selected for BIMAS administration through the cooperatives. Observing this change in progress in March 1983 in village C, we found that the new approach did not work because:

- The farmers groups were not real groups.
- The group leaders were given no compensation and did not want to assume responsibility for the loan repayment of group members.
- The cooperatives' procedures for BIMAS loans were lengthy, expensive,[54] and cumbersome for the farmers.
- No one in the village knew who was responsible for loan collection.
- The cooperative was not trusted because of widespread allegations of past corruption and mismanagement.

Most of the "members" of the so-called BIMAS farmers groups had been dead for more than 30 years!

In villages in Central Java we found elaborate BIMAS farmers groups listed on paper. When we asked to meet some of the farmers, we were told that this would not be possible. On investigating further, it turned out that these lists, which had been prepared for the local cooperative (KUD) officials, had actually been copied from 60-year-old lists of village landowners. Most of the "members" of the so-called BIMAS farmers groups had been dead for more than 30 years!

In late 1983 the government decided that cooperatives that collected less than 70 percent of their outstanding BIMAS credit would not be permitted to continue administering the program. Of the 74 cooperatives administering BIMAS loans in the three districts for which we collected information,[55] only 5 were able to recover more than 70 percent of the BIMAS loans for the 1982/83 season. While the remaining 69 cooperatives were not permitted to administer BIMAS loans the following season, in most cases the program was not effectively returned to the unit desas either.

By 1983 the unit desa system, built to channel subsidized credit to rice farmers, was experiencing heavy fixed costs, increasing losses, and a low and decreasing level of activity. In contrast, Indonesia's highly successful rice intensification program had achieved remarkable results. Between 1970 (when Improved National BIMAS started), and 1983 (when the decision was made to end BIMAS), the production of unhusked paddy (*gabah*) increased 87 percent, from 17.8 million tons to 33.3 million tons.

But BRI's unit desas had become a burden on the bank and on the government. In its BIMAS phase the unit desa system was costly to the govern-

ment, which subsidized the overhead of the unit banks as well as the credit to borrowers. The system was unprofitable for BRI. Morale among unit staff was poor, and service to customers was negligible. And the unit desas were deemed an impediment to BRI and a hindrance to its "real" banking activities. As Ali Wardhana commented in the introduction about the pre-1984 period: "In brief, our approach to local finance was ineffective and unsustainable."

Indonesia's rice intensification program was based on a strong national commitment to attaining rice self-sufficiency; its success was made possible by the government's continuing ability to identify and correct its mistakes, and to adjust policies and implementation strategies to the realities of the country's natural environments and human resources. When official channels of input distribution or output marketing proved inadequate, alternate channels were opened. When particular seed types or insecticides were found to be unsuitable or dangerous, they were removed from the system. Similarly, when the credit program proved ineffective, it was replaced. In 1984 the BIMAS credit program was phased out, officially ending in 1985. But BIMAS gave birth to the unit desa system—which survived and developed into an internationally renowned commercial microbanking system.

But BIMAS gave birth to the unit desa system—which developed into an internationally renowned commercial microbanking system

Notes

1. This chapter draws heavily on the Development Program Implementation Studies (DPIS) Report on Rice Intensification (DPIS 1983). The research on which that report was based was carried out primarily between 1979 and 1982 under a HIID project with Indonesia's Ministry of Finance. This was HIID's first large-scale interdisciplinary project; in addition to this author, its coordinators were Donald R. Snodgrass and the late Donald P. Warwick. Under the DPIS, four Indonesian development projects (rice intensification, family planning, primary education, and a presidential program to provide grants for village development) were studied at the national, provincial, district, subdistrict, and village levels in different parts of the country, from the perspectives of anthropology, economics, and sociology. (I served as coordinator of the DPIS study and report on rice intensification and the BIMAS credit program.) This chapter is based on the work of researchers from five Indonesian universities and on that of the HIID team. The five universities were: Universitas Padjadjaran (West Java), Universitas Kristen Satyawacana (Central Java), Universitas Airlangga (East Java), Universitas Hasanuddin (South Sulawesi), and Universitas Sriwijaya (South Sumatra). Major contributions to the field work and analysis were made by John R. Bowen, James J. Fox, Ilyas Saad, L. Hudi Sartono, Donald R. Snodgrass, Bambang Soelaksono, Marzuki Usman, Saikhyu Usman, and the late Donald P. Warwick.

2. BIMAS, an acronym for Bimbingan Massal (Mass Guidance), was implemented through the unit desas from 1970–85

3. This account of BRI's early history is taken primarily from Schmit (1994); see also BRI (1985, 1995). See Schmit (1991) for a review of Indonesian rural banking before independence, for an historical account of BRI's development, and for an excellent bibliography. See Schmit (1994) for the history of the Algemeene Volkscredietbank, Fruin (1994 [1935]) for the *Provisional Manual for the Credit Business of the General Popular Bank,* and Fruin (1999 [1933]) for the "History, Present Situation, and Problems of the Village Credit System (1897–1932)." See Suharto (1985, 1988, 1996) and

Steinwand (2001) for detailed analysis of Indonesian rural banking history. I am grateful to Leo Schmit, Klaas Kuiper, and Dirk Steinwand for personal communications that helped me better understand the early history of the banks that merged in 1950 to form the modern BRI. It has been possible here only to provide a brief sketch of this extremely interesting period; for detailed analysis, see Schmit (1991, 1994).

4. There are several versions of this story, differing in minor details (see Steinwand 2001).

5. See Steinwand (2001) for a history of the European credit union movement and for extensive bibliographic references.

6. Boeke's colonial theories were criticized by many, even in the 1920s. See Higgins (1955) and Sadli (1957). For an overview of the commentary and criticism of Boeke's theory of dualism, see Garnaut and McCawley (1980).

7. Klaas Kuiper, the translator and editor of Fruin's 1933 article, comments: "It is not easy to give the value of the Dutch guilder (NLG) for that period . . . in 1932 [the monthly salary of a village bank clerk] was between 24 and 48 NLG per month . . ." (Fruin 1999, p. 65).

8. Fruin's manual was translated into English and reissued in 1994 by the Netherlands Ministry of Foreign Affairs in honor of the 100th birthday of BRI in 1995.

9. Fruin's 1933 article was translated and edited by Klaas Kuiper and published by the Netherlands Ministry of Foreign Affairs in 1999.

10. See Schmit (1991) for discussion of the development of BRI in 1946–70, a period that is not covered here.

11. Indonesia's leading economist, Professor Sumitro Djojohadikoesoemo, played a crucial role in the formation of BRI as a state-owned bank in 1950.

12 Known as Operation for Self-sufficiency in Rice (*Operasi Pelaksanaan Swa Sembada Beras*), the plan was based on a projected network of service centers for rice farmers called *padi sentra*.

13. An exception was a pilot project known as Action Research carried out on 105 hectares by students from the Bogor Agricultural Institute in 1963–64. The project, which involved a more active approach to farmers, was quite successful, with reported yields rising by an average of 50 percent. In 1964–65 this approach was extended to 11,000 hectares. The program, known as Demonstrasi Massal Swa Sembada Bahan Makanan (DEMAS), was also successful, with reported yields of 7.3 tons of stalk paddy per hectare compared with a national average of 2.7 tons. In 1965–66 the program, then called Proyek Bimbingan Massal and known as BIMAS (an early version), was expanded to 150,000 hectares.

14. In 1967–69, the New Order government began a number of new rice intensification programs in addition to BIMAS Gotong Royong. These included BIMAS Gogo Rancah, a program for rainfed lands; BIMAS Berdikari, in which provincial governments or farmers were supposed to finance input purchases; and INMAS, a program in which farmers purchased inputs for cash. But, in general, during this period of high inflation and low foreign reserves, it was difficult obtain inputs, yields were well below expectations, and credit repayment was poor.

15. I am much indebted to Klaas Kuiper for providing me with important firsthand information and unpublished data about the Yogyakarta pilot project and the early BIMAS program.

16. This program is referred to henceforth simply as BIMAS.

17. DPIS field observations found a range from 3 to 83 villages per unit bank, depending largely on the area's population density.

18. In 1988 BRI conducted a survey of KUPEDES borrowers in 16 unit desas in eight districts in four provinces. There were two surveys: a larger one with 1,404 respondents and a smaller, more detailed one of 192 respondents. The smaller survey in-

cluded riceland ownership. It was found that 48 percent of the respondents' households owned no riceland and 25 percent owned plots up to 2,000 square meters. The average amount of irrigated land owned was 1,620 square meters; the average amount of dryland owned was 1,512 square meters (Sutoro and Haryanto 1990, pp. 5, 19).

19. See Mears (1981) for the classic study of the early development of Indonesia's new rice technology; see Fox (1991) for analysis of the different phases of the country's rice intensification program.

20. The design of Kredit Mini was partly based on the Badan Kredit Kecamatan (BKKs), the rural credit program of the Central Java provincial government, which had begun in 1970 (see chapter 9). During the pre-1984 period, however, the BKKs were allowed to charge substantially higher interest rates than the unit desas.

21. Kredit Midi was similar in design and implementation to Kredit Mini, except that it provided larger loans. Kredit Midi lasted only a few years because, like Kredit Mini, it was ended with the introduction of KUPEDES in 1984.

22. Kredit Midi operated only for a few years; its long-term loss ratio at the end of the program in 1983 was 3.8 percent. Some Kredit Mini and Kredit Midi defaults were associated with occasional curtailment of lending by BRI at specific times and places; borrowers who thought they might not be able to reborrow had less incentive to repay.

23. For example, a 1968 study of saving behavior in 490 Yogyakarta households concluded: "For the total sample . . . the marginal propensity to save is approximately 10 percent, which compares favorably with marginal savings rates derived for households in advanced nations" (Kelley and Williamson 1968, p. 390). Yogyakarta is not representative of Indonesia; nevertheless, some insight into the country's saving potential could have been gained had attention been paid to these and subsequent findings. The World Bank's 1983 study of rural credit in Indonesia found that rural savings propensity was 20 percent; this result was largely ignored or disbelieved within Indonesia at the time.

24. In 1977 the unit desa system made a profit of about $0.8 million; however, the administrative subsidy for the system that year was about $3.3 million, which was not adjusted for in calculating the profit. Thus the system made a loss that year, as well as all the other years of the BIMAS program.

25. Parts of this section are summarized and adapted from Robinson and Snodgrass (1987). Further details are provided there and in *DPIS Report* 2 (1983).

26. In many areas the standard "Packet A" was the only packet normally available. In 1980–81 Packet A consisted of 100 kilograms of urea, 50 kilograms of triple superphosphate (TSP), 50 kilograms of KC1/K20, 2 liters of insecticide, 100 grams of rat poison, seed, sprayer fee, and 10,000 rupiah ($16) in cash for "cost of living" expenses.

27. The great strength of the brown planthopper is its ability to breed and to spread very quickly. The planthopper eggs, lodged inside rice stalks, are sheltered from insecticide spraying. When the larvae emerge they suck the juices of the rice plant and can destroy a healthy rice crop in one or two days. IRRI researchers have identified more than 100 parasites or predators that prey on the brown planthopper. But when these natural enemies are destroyed by insecticides, the planthopper, which is extremely mobile, can spread very rapidly (see Fox 1991). See Shepard, Barrion, and Litsinger (1987) for discussion of the natural enemies of the brown planthopper.

28. See also Oka (1979); IRRI (1979, 1984); Hargrove and others (1979, 1985); Bernsten, Siwi, and Beachell (1982); Heinrichs and Mochida (1984); Kenmore and others (1984); and Hargrove (1988).

29. The 1983 DPIS Report on Indonesia's rice intensification program called attention to the alarming decrease in the Indonesian rice gene pool, and recommend-

ed immediate further study. The recommendation was accepted by the Indonesian Ministry of Finance. The ensuing study carried out by CPIS and successive HIID advisory projects on rice seeds and insecticide use led to analysis of the use of resurgence-causing pesticides as a major cause of pest attacks in Indonesia and brought this danger to the attention of the Indonesian government Wolfgang Linser and James J. Fox led the HIID work on rice seeds and insecticides and advised the government on its development of a national integrated pest management program for Indonesia.

30. Drawn from DPIS (1983), this section is based on the work of many people. The discussions of villages G, R, and P are based on the work of James J. Fox (village G) and John R. Bowen (villages R and P) and the DPIS field teams they coordinated. I served as coordinator for village C and for the project as a whole. As part of the DPIS study, an agronomic report on each of the four villages was prepared by faculty from agricultural universities in the four areas, under the coordination of Donald R. Snodgrass. The analysis presented here was a cooperative effort in understanding these four very different—and yet very Indonesian—villages, and it could not have been done without the skills and insights of all those who worked in these villages on the DPIS project.

31. At the request of the Ministry of Finance, the complete 1979–83 DPIS study covered BIMAS and rice intensification, family planning, primary school construction (INPRES Sekolah Dasar), and a national village grant program (INPRES Desa).

32. In village P, the fourth village studied, field work started later than in the other three villages. As a result comparable information on village borrowing is not available. However, there was little institutional finance used in this village in 1980–81.

33. Sawah refers to all irrigated rice fields, whether the water source is from irrigation facilities or from rainfall. The quality of irrigation varies considerably; village G has high-quality irrigation facilities.

34. By 1982 average yields had increased from about 27 quintals of paddy (*gabah*) per hectare before the intensification program to about 40 quintals. The primary cause of increased production in village G was the double- and triple-cropping made possible by the shorter growing time of the high-yielding seeds. However, the risks caused by the shrinking rice gene pool had been rapidly increasing; by 1983 more than 90 percent of the rice cultivated in village G was of one type: IR-36.

35. This was more than the combined total of all other outstanding village G BIMAS loans from 1975–80, as of August 1981.

36. However, the extent to which loans were shared in order to meet the 0.5 hectare requirement for a BIMAS loan is not known, nor is the degree to which land holdings were fictitiously enlarged to raise the loan size. Nevertheless, it was widely acknowledged that most village G BIMAS participants in 1980/81 were larger farmers.

37. According to the DPIS sample survey in 1980–81, 97 percent of BIMAS ever-participants had bought fertilizer with cash at least once, although 73 percent of this group did so only after 1975.

38. Rice intensification began very early in the West Java district where village C is located. The first program (*Padi Sentra*) was implemented there in 1959–62; other early programs were tried there in the mid-1960s. Improved National BIMAS began in village C in 1970–71.

39. The agronomic team from Fakultas Pertanian (Department of Agriculture) at UNPAD (Bandung) examined the six classes of sawah in village C. They concluded that the inputs provided in BIMAS packets were suitable for lands in classes 1–3 (75 hectares), which have semi-technical and local irrigation. However, the paddy lands in classes 4–6 (167 hectares), most of which are rainfed and less fertile, require more fertilizer than was contained in the BIMAS packets provided to village C farmers.

40. The requirement for BIMAS participation in village G was ownership of 0.5 hectare of sawah; in village C the requirement was the purchase of 25 kilograms of urea. Thus, given the BIMAS requirement of 200 kilograms per hectare for village G, a farmer had to borrow at least 100 kilograms of urea for 0.5 hectare. In contrast, a village C farmer was required to borrow at least 25 kilograms of urea, which at the BIMAS rate for village C of 300 kilograms per hectare, supplied only 0.08 hectare. Even the village C fertilizer packets contained too little urea for the conditions of most village C sawah.

41. Village R consists of two separate and quite different neighborhoods (*kampung*) that were formed into one village in 1967. The sawah of kampung T is primarily rainfed, while kampung M is irrigated partly by a small village dam and partly by the main subdistrict system.

42. As part of the DPIS survey, village R households were classified into four economic groups. Looking at the population of rice-cultivating households by economic group, it was found that of a total of 25 households in the wealthiest group, 16 (64 percent) were BIMAS ever-participants. Only 6 (11 percent) of the 54 households in the lowest economic group had participated in the program. The two highest groups combined totaled 98 households; of these, 38 (39 percent) were ever-participants, while in the lowest two groups 53 of 360 households (15 percent) were ever-participants.

43. Three of the four villages (all but village C) suffered labor shortages: in village G because of the new employment opportunities created by the double and triple cropping made possible by the rice intensification program, and by off-farm employment; in village R because natural and humanmade disasters caused emigration; and in village P because of the traditionally low ratio of population to land. But the labor shortage was greatest in village P.

44. A highly-valued fruit found in Indonesia and other parts of Southeast Asia.

45. This is a good example of how, in a particular environment, two government programs can come into conflict—in this case rice intensification and the presidential instruction to increase primary schooling.

46. Those farmers who did take BIMAS loans often did so not to intensify their sawah cultivation but to obtain fertilizer for coffee gardens. This use of BIMAS had the tacit approval of BRI officials. As one village P farmer commented: "In 1979/80, I took BIMAS for the first time. I asked to be put down at the BRI as a participant, but admitted frankly that I was not going to cultivate *sawah* at all that year but planned to use the fertilizer for coffee plants and dry rice (*padi ladang*). I promised that I would pay after the *ladang* harvest. This request was approved by the BRI officials and the loan has been repaid" (DPIS 1983, p. 210)." Some of the inputs received were used for coffee, some for *padi ladang,* and some were sold or given to others.

47. Because there were no subdistrict or village records available on nondefaulting participants by village, it was not possible to learn the percentage of BIMAS participants in village P who were defaulters. Based on the DPIS sample survey, however, the number of defaulters probably represented about 50–60 percent of the total number of participants. Defaults were consistently underreported by officials in this area. Thus the DPIS survey showed a considerably higher loan default rate for village P than the defaults reported for the subdistrict by the local office of the Department of Agriculture (25 percent during 1975–80), or for the smaller subdivision (*marga*) to which village P belongs—which was reported to be the marga with the lowest default rate in the subdistrict (18 percent during 1975–80).

48. Another cause of BIMAS delinquency was the overdelivery of inputs, an outcome that resulted from officials encouraging farmers to report their sawah holdings in numbers that were rounded up in order to show that area targets were reached. The following example was reported from a village near village P: "In 1974-1975, there

were five farmers from Village L who took BIMAS loans. Although they each cultivated about one-half hectare of *sawah,* they were urged by the village headman to report one hectare each They were each given the one-hectare BIMAS packet. Three of the participants had lower yields than usual; two had the same yields, all because of overuse of fertilizer" (DPIS 1983, p. 227).

49. Seventy-seven village P farmers (who cultivated 62 percent of the village sawah) were signed up to take BIMAS loans in late 1981 under the OKM drive. But twenty-nine were called so late to collect their inputs that they had already sown their seeds; all these farmers refused to participate.

50. In addition to the problems with the fertilizer supplied in the BIMAS packets, there were problems with the seeds provided. The IR-36 seeds delivered in the 1982 packets were thought by farmers to be of poor quality, and in fact only half of the seeds later sprouted. According to the extension officer, this problem was known long before seed delivery because the seeds had been tested earlier at the Seed Center (Balai Benih) and only half had sprouted there. Village P farmers replaced the nonusable seeds they had received under BIMAS with IR-32 seeds they purchased from farmers in another village.

51. The leader of sawah activities in the village, the *mantri sihing,* was supposed to be the liaison between the government's agricultural extension program and the village P farmers. However, he said he was not willing to act in this role: "I have to look after my family first; only then can I think about others." He himself had not participated in BIMAS since 1973 and did not follow the advice of the extension agent "because it is too much work."

52. These data were supplied by BRI. Figures from the Ministry of Cooperatives show somewhat more KUDs participating.

53. Sumedang in West Java, Klaten and Pekalongan in Central Java, Kediri and Malang in East Java.

54. The KUD was located further away from village C than the unit desa, so farmers had considerably higher transportation expenses than in the past.

55. Klaten and Pekalongan in Central Java and Malang in East Java.

12 Success in Microlending: The KUPEDES Credit Program, 1984–96

In 1984 Bank Rakyat Indonesia's (BRI's) unit *desas* began the transition that transformed them from a loss-making channeling agent for government-subsidized BIMAS credit for rice farmers and other subsidized rural credit programs (see chapter 11) to the world's largest, most profitable microbanking system. Kredit Umum Pedesaan (KUPEDES, or general rural credit), made possible by the 1983 financial deregulation, was introduced nationwide through the unit desas in 1984. As the unit desas' commercial microcredit program that provides loans to all creditworthy applicants for all productive purposes, KUPEDES played a leading role in driving both the transformation of the unit desa system and its subsequent achievements of wide outreach and high profitability.

The unit desa system was profitable by 1986 and has operated independent of subsidy since 1987 (Yaron and Benjamin 1997, p. 43). By 1996 the KUPEDES credit program had 4.1 trillion rupiah ($1.7 billion) in outstanding loans to 2.5 million borrowers, with a long-term loss ratio of 2.2 percent. And the unit desas had a pretax return on assets of 5.7 percent—substantially higher than typical banking industry averages in Indonesia and many other countries. This chapter considers the development of KUPEDES credit and its outreach, and of unit desa profits from 1984 through 1996. Remarkably, the KUPEDES record of wide coverage and high repayment continued during Indonesia's severe financial, economic, and political crisis that began in 1997, as did unit desa profitability.

Between 1984 and 2000, 48 trillion rupiah was disbursed in 26 million KUPEDES loans

The strength of KUPEDES as a credit program, and as the engine of unit desa profitability, derives from its design, pricing, and funding, and from unit desa organization and management. Design and pricing are discussed in this chapter, funding in chapter 13, and unit desa organization and management in chapter 14. Chapter 15 examines the unit desa system from 1997–2000 and explores the reasons for its remarkable stability—even as the country's financial system collapsed around it.

KUPEDES provides individual loans to economically active poor and lower-middle-class people throughout Indonesia. The basic principle on which the credit program is based is that institutional sustainability is required for large-scale outreach to low-income borrowers. Accordingly, the KUPEDES interest rate is set to cover all unit desa costs and risks and to return a profit to the system. Between 1984 and 2000, 48 trillion rupiah was disbursed in 26 million KUPEDES loans.

Unlike BIMAS, KUPEDES borrowers are selected by BRI without any outside intervention, and the bank bears the full credit risk. Loan decisions, made by well-trained, experienced unit desa staff, are based on evaluations of each borrower's character (willingness to repay) and the viability and cash flows of his or her enterprise (ability to repay). KUPEDES is designed specifically to meet the needs of low-income borrowers for convenient bank locations, simple loan procedures, quick processes, and flexible terms. Within its overall regulations, KUPEDES loan maturities and repayment plans are customized for each borrower's needs. Borrowers who repay their

loans promptly and whose enterprises remain creditworthy are permitted to reborrow for the gradually increasing loan sizes for which they qualify, up to the KUPEDES maximum (they can then borrow from BRI's branches, which provide larger loans). The bank does not train KUPEDES borrowers or attempt to monitor their enterprises or the use of their loans; the premise is that borrowers know their businesses better than do bank staff.

Each unit desa is treated as a "profit center" with its own balance sheet and profit and loss statement

Since 1984 each unit desa has been treated as a financial unit or "profit center" with its own balance sheet and profit and loss statement—a change that was essential for the effective implementation of KUPEDES and the new savings program discussed in chapter 13. Unit desa regulations, products, reports, and job descriptions, are simple and standardized across all units. Unit managers and staff are given substantial responsibility and held accountable for their performance. They are provided intensive, high-quality training and financial incentives based on the performance of their unit. Simple, transparent loan accounting and reporting enable frequent assessment of each unit's portfolio quality and immediate followup in case of problems. Finally, unit staff are regularly supervised by well-trained supervisors from the unit's supervising branch. These supervisors also receive incentives based on the performance of the units they supervise.

Repayment has been high for a number of reasons, among them that:

- Borrowers are carefully selected based on their ability to use loans productively and their ability and willingness to repay them.
- Loans are provided in gradually increasing amounts based on the borrower's repayment record and the creditworthiness of the enterprise.
- Borrowers want to repay in order to keep their options open to borrow again on what are considered attractive terms at reasonable cost.
- Unit staff treat their clients with respect and courtesy.

This chapter and the two that follow are about the transformation of the unit desa system from BRI's ugly duckling, wanted by no one, into the goose that lays its golden eggs.

During its 15 years of operation (1970–84) BIMAS disbursed 2.7 million more loans than KUPEDES did during its first 17 years of operation (1984–2000). But BIMAS, funded by government subsidies, disbursed only 1 percent of the credit disbursed by KUPEDES, which is funded by locally mobilized savings (table 12.1). By 2000 KUPEDES had 7.8 trillion rupiah ($816 million) in 2.7 million outstanding loans. In addition, BIMAS was noted for its high defaults, while KUPEDES is characterized by high repayment rates. With BIMAS, the unit desas made high losses; with KUPEDES they have made continuing high profits.

BIMAS, funded by government subsidies, disbursed only 1 percent of the credit disbursed by KUPEDES, which is funded by savings

Indonesia's Enabling Conditions

Enabling conditions in the Indonesian environment were crucial for the emergence of large-scale commercial microfinance at BRI, beginning in 1984. First, the country had had good, consistent macroeconomic management and political stability for nearly 20 years. Second, there was sustained, high-quality leadership among economic ministers—essential for the development of the financial system generally and of the proposed large-scale system of sustainable microfinance. Third, the 1983 financial deregulation—the first in a series of financial and other economic reforms—opened the way for profitable microfinance at BRI. Finally, large-scale commercial institutional microfinance developed in Indonesia because of the confluence in the 1980s of six ideas:

- It was believed that macroeconomic considerations mandated that the private sector become responsible for a larger share of national savings and investment.
- Substantial investment of the country's oil wealth in rural areas in the 1970s had resulted in significant rural development and higher per capita income, creating widespread demand for banking services by the 1980s.
- The serious deficiencies of many government-subsidized rural credit programs had become well known to some high-level government officials, and the status quo was considered unacceptable.
- The interest rates of informal commercial lenders had been studied, and it was thought that it might be possible for commercial institutions to provide small loans profitably at considerably lower cost to low-income borrowers.
- The major contributions that microenterprises make to the economy in general and to employment in particular, and the extensive demand for microfinance—for both loans and savings services—were beginning to be perceived by technocrats.
- Indonesia already had rural financial institutions that had consistently provided profitable commercial microfinance—both credit and savings—in some cases for many decades (see chapters 9 and 10). This meant that there were ways to learn about local markets, techniques to screen borrowers, and methods to attract savers that had been successful in Indonesia. These lessons

Table **12.1** **A comparison of BIMAS and KUPEDES**

Feature	BIMAS	KUPEDES
Area and years of operation	Nationwide, 1970–85[a]	Nationwide, 1984–present
Source of finance	Bank Indonesia	Unit desa savings[b]
Credit risk borne by	Bank Indonesia 25 percent, Ministry of Finance 50 percent, BRI 25 percent	BRI: 100 percent
Program goals and borrower targets	To increase rice production and provide subsidized credit to poor rice farmers	To provide commercial microloans for all productive purposes to all creditworthy borrowers
How well did the program achieve its goals?	Not well	Well
Selection of borrowers	Committees of government officials	BRI unit desa staff and, for larger loans, branch supervisors
Disbursement/repayment of loans	Primarily in kind/in cash	In cash/in cash
Nominal monthly effective interest rate	1.0 percent	2 8 percent[c]
Loan maturity	One to two rice harvests (changes made over life of program)	Up to three years, depending on type of loan
Payment schedule	One payment at end of loan	Choices available, monthly installments most popular
Incentives for repayment	Reborrowing at a below-market rate	Reborrowing from a loan program suited to borrowers' needs, prompt payment incentive
Number of loans (cumulative)	28 8 million (1970–85)	26 1 million (1984–2000)
Value of loans (cumulative)	636 7 billion rupiah (1970–85)	47,775 8 billion rupiah (1984–2000)
Number of outstanding loans at end of last year available	563,023 (1983/84)[d]	2,715,609 (2000)
Value of outstanding loans at end of last year available	23 billion rupiah ($21 9 million, 1983/84 wet season)	7,827 billion rupiah ($816 million, 2000)
Overdues[e]	Default rate—51 percent dry season (1983); 55 percent wet season (1983/84)	Long-term loss ratio—1 9 percent (2000)
Share of profitable units	0 percent (1983)	98 percent (2000)
Unit desa profit or loss	–12 6 billion rupiah (—$12 7 million, 1983)	1,160 billion rupiah ($121 million, 2000)

Note For BIMAS, the table covers only the credit program for rice cultivation

a BIMAS officially ended in 1985, but it effectively ended in 1984 with the start of KUPEDES In 1984–85 BIMAS focused on collecting old loans

b Startup funds for the KUPEDES loan portfolio were provided by the government for 1984–85

c For prompt payers Rates vary somewhat by loan maturity and payment plan

d Includes 1983 dry season loans and 1983/84 wet season loans This was the last year that BIMAS was active in lending

e. BIMAS and KUPEDES measure overdues differently, and the available data are different and not strictly comparable The default rate for BIMAS shown here is the percentage of the amount disbursed that was in default at the end of 1983 (But BRI continued to collect BIMAS loans after the program ended, and by 1990 the default rate was 16 5 percent) For KUPEDES the long-term loss ratio is defined as the cumulative KUPEDES amount due but unpaid since each unit opened relative to the total amount due

Source BRI data, Patten and Rosengard 1991, pp 63–65

would now be integrated into the planning and implementation of large-scale financial intermediation among low- and lower-middle-income people, and combined with massive organizational reform to bring about Indonesia's microfinance revolution.

Bank Rakyat Indonesia's New Approach to Microlending at the Unit Desas

When the KUPEDES loan program began in 1984, the unit desas were unprofitable, run-down, disorganized, and demoralized. It had taken the work of many people from 1979–83—and considerable funds from the Ministry of Finance—to understand local microfinance demand, to prepare for the restructuring of the unit desas, and to design the new loan product. This process has sometimes been misunderstood. For example, it has been incorrectly stated that in June 1983 the minister of finance asked an advisory group from the Harvard Institute for International Development (HIID) to assess the unprofitable unit desas and that "the team came up with an experimental solution within a few weeks that eventually became the KUPEDES system" (Hulme and Mosley 1996, vol. 2, p. 40). In fact, the minister of finance asked us for advice on the unit desas in 1979, and the recommendations for KUPEDES were completed in 1983—so the process took a few years, not a few weeks! Many institutions and more than a hundred people were involved in the work.

KUPEDES implementation required fundamental changes in unit desa organization, management, operations, and human resources

Institutions and governments considering the restructuring of large rural banking systems should not be misled into thinking that a few weeks, or even a few months, will be sufficient for the careful planning of such an undertaking. This is a major effort, one requiring leadership, funds, and extensive work at multiple levels. Of course, today the unit desas and other financial institutions offer many lessons that were not available in the early 1980s, and the process need not take as long as it did then. Nevertheless, the effort required to plan the restructuring of a large rural banking system should not be underestimated. And planning is just the beginning.

Implementing KUPEDES

The introduction of KUPEDES was not simply a matter of offering a new loan product; its implementation required fundamental changes in unit desa organization, management, operations, and human resources. The structure of the units had to be changed from branch windows to individual profit centers. Unit staff had to be given more responsibility, provided the authority to carry out new tasks, trained in the skills needed to make good performance possible, offered the incentives to achieve high productivity, and held accountable for their performance.

Analogous steps had to be taken at branch and regional offices to enable the effective supervision of unit activities, and at the head office to develop

appropriate information management, coordinate planning, and maintain effective control over the system. New borrower selection processes and loan collection methods had to be developed, as well as new accounting, reporting, and information management systems. In addition, microbanking training centers for unit desa staff and supervisors had to be established and the trainers trained.

All this occurred; the institutional changes are discussed in chapter 14. Neither KUPEDES credit nor unit desa savings should be seen simply as new products. Crucial differences between the old and new cultures in the unit desa system made possible the extraordinary performance of KUPEDES since 1984 (figure 12.1; see also the figure in the introduction to volume 2). KUPEDES differed from BIMAS in almost every way (see table 12.1). Moreover, even though the unit desas' new institutional framework was essential for the implementation of KUPEDES, the BIMAS credit product would have failed even with the new unit desa organization. A good product is a necessary, though insufficient, condition for a profitable, large-scale microcredit program.

In 1996 the subsidized loans had an average balance 20 times that of KUPEDES—and an arrears rate 10 times as high

Microcredit: subsidized and commercial

The introduction of KUPEDES as a commercial microcredit program in 1984 and the official end of BIMAS in 1985 did not mean the end of subsidized credit at BRI. The old tension between social and commercial approaches to rural banking (discussed in chapters 9 and 11) continued. KUPEDES was based on the idea that commercial microcredit is the only way to meet large-scale microcredit demand from low-income people on a continuing basis. But this approach was not yet widely understood.

In addition, because subsidized rural credit programs tend to reach local elites, it is often politically difficult to terminate such subsidies. Thus, as KUPEDES began in the unit desas, subsidized agricultural credit programs financed from the government budget were continued at BRI—but in the bank's branches, not in the unit desas. These subsidized programs were, of course, rationed. It was assumed that since KUPEDES, funded by savings, would not need to be rationed, it would gain a large market share. This is, in fact, what happened.

A comparison of BRI's subsidized loans at the branches and its KUPEDES loans at the unit desas in 1996 shows dramatic differences. Only 16,670 subsidized loans through the branches were outstanding, less than 1 percent of the 2.5 million KUPEDES loans outstanding at the units (see figure 12.1). And at $1.7 billion, KUPEDES loans at the units had more than seven times the value of the subsidized loans at the branches.

The subsidized loans do not reach the poor. At the end of 1996 the average outstanding balance of the subsidized loans at the branches was $14,275—more than 20 times the average balance of the nonsubsidized KUPEDES loans ($684) at the unit desas. Measured in both cases by portfolio status (defined as aggregate overdue principal installments relative to total principal outstanding), KUPEDES arrears were 3.6 percent, while arrears for the subsidized loans were more than 10 times higher (39.3 percent).

Figure **12.1** **The evolution of microcredit at Bank Rakyat Indonesia, 1970–96**

	1970–83	1984–96
External environment	• Indonesia had a substantial oil surplus • Extensive donor funds available • Government provided subsidies for loan interest rates for unit desa operations • Central bank provided loan funds and set interest rates and regulations for all loans • Unit desas and government-sponsored cooperatives introduced • Interest rates deregulated in 1983	• Oil revenues declined • Donor funds decreased • BRI permitted to set its own interest rates on most loans and deposits • Government-subsidized loans reduced substantially in scope and amount, and channeled through BRI branches, not through the unit desas
Microcredit at the branches	Branches did not provide microcredit during this period	**Activities** Government continued to provide some high-priority subsidized credit schemes for production of rice, secondary crops, tree crops, and sugarcane These programs were channeled through BRI's branches **Results (1996)** • Number of outstanding loans 16,670 • Value of outstanding loans $0 24 billion • Average outstanding loan balance $14,275 • Arrears as a share of outstanding loans (portfolio status)[a] 39 3% • Net interest revenue $14.5 million
Microcredit at the unit desas	**Activities** • Large-scale, supply-leading approach to rural credit • Implementation of more than 350 government-subsidized credit programs for rice, other food crops, cattle, fisheries, tree crops, poultry, small business, and the like • Little effort to mobilize savings **Results** • Loans often reached rural elites instead of intended borrowers • Severe repayment problems • Very low savings • Continuing and increasing losses for BRI and government	**Activities** • KUPEDES introduced in 1984 • No subsidized loans • KUPEDES accompanied by major unit desa reorganization • Active savings mobilization **Results (1996)** • Number of outstanding loans 2.5 million • Value of outstanding loans $1.7 billion • Average outstanding loan balance $684 • Arrears as a share of outstanding loans (portfolio status)[a] 3 6% • Net interest revenue $269 8 million • Unit desa system profitable since 1986 • All loans funded by locally-mobilized savings

a Portfolio status measures aggregate overdue principal installments relative to total principal outstanding
Source Adapted from an unpublished diagram by Sugianto

In addition, the net interest revenue received by BRI from KUPEDES in 1996 was $270 million, more than 18 times the net interest revenue received from all the subsidized programs in the branches (see figure 12.1). Overall, the unit desas with their KUPEDES loans and savings mobilization program (see chapter 13) have been efficient and profitable since 1986, while BRI's subsidized programs have continued throughout to generate high arrears and large losses.[1]

Perception Gaps among Policymakers, Bureaucrats, and Villagers

Net interest revenue from KUPEDES in 1996 was more than 18 times that received from all subsidized programs in the branches

The bold strategy for developing rural banking nationwide through BRI, as outlined by Indonesia's economic planners in 1983, was based on previous policy decisions that placed high priority on the development of the country's rural areas. By the time of the financial deregulation in June 1983, rural areas were generally, if not uniformly, experiencing economic growth and increasing monetization, communication, education, and demand for financial intermediation (chapter 9).[2]

In the early 1980s the Indonesian government, anticipating a significant decline in the real value of oil revenues, began to undertake wide-ranging financial reforms and to seek increased private savings and investment. In these circumstances long-term government funding for a nationwide rural credit program could not be obligated. Moreover, a large and continuing commitment of central bank funds for the unit desas was considered too risky given the track record of rural credit programs with high defaults in Indonesia and elsewhere.

But Indonesia's economics ministers recognized the potential for a large-scale rural banking system and supported its introduction with government funding. President Soeharto supported the development of BRI's unit desa system—an endorsement that was important for the success of the transition and the system's later development. As part of the wider financial reforms, BRI was permitted to set its own interest rates in the unit desas. But the bank was informed that after the startup period it would be on its own, with no continuing government financial support for the unit desas.

The idea behind the restructuring of the BRI unit desa system was to meet local credit demand with a loan instrument that would be suitable for all types of productive loans, charging interest rates that would enable long-term institutional viability. And KUPEDES would be financed by locally mobilized savings.

The views of high-level policymakers, however, were far removed from those of many bureaucrats—both inside BRI and in other government agencies—whose understanding and participation would be critical for implementing the new system. The perception was widespread among BRI and other government officials that most villagers were low-income farmers, uneducated, unchanging, and generally incapable of, or averse to, using banks. And these officials pointed to the 1970–83 record of BRI's unit banking system—high arrears, high losses, and low savings—as proof of their conclusions.

But the views of many villagers were similar to those of the policymakers. Of course, the planners and bureaucrats were not monoliths, and rural inhabitants did not hold a single view on banking. Nevertheless, opinions were extensively shared within each category, while there were profound differences between bureaucrats with views of rural stagnation, and villagers and policymakers who perceived the country's rural growth and increased demand for financial services. The 1983 deregulation of interest rates and the mounting emphasis on domestic funds mobilization opened a new era in Indonesian rural banking. What made it a reality, however, was the extraordinary achievement in narrowing the perception gap between BRI officials and other government bureaucrats on the one hand and villagers and policymakers on the other.

There were profound differences between bureaucrats with views of rural stagnation, and villagers and policymakers who perceived the country's rural growth

Policymakers

The minister of finance and other members of the government's economics team thought that a commercial microbanking approach might be able to meet what seemed to be extensive rural demand for appropriate savings facilities. Savings could fund a large and growing commercial microloan portfolio, and profits from the system could build the long-term viability of the unit banking system. If accomplished, these results would contribute to the country's economic development. It was also hoped that BRI's unit desas would serve as a model of commercial financial intermediation for low-income clients that would eventually be adopted by other Indonesian banks and financial institutions.

But this perspective required farsighted vision. Given the losses of the unit desas by 1983, as well as the negative attitudes of many middle- and lower-level government officials and bankers toward rural banking, it required an exceptionally broad view of the country's economy and society to recognize Indonesia's potential for establishing a profitable system of financial intermediation at the local level. But the government's economics team now held this view, and BRI's newly appointed (in August 1983) president-director soon became a strong advocate of commercial microfinance.[3] However, implementing the new microfinance program was difficult, and its success was far from assured when BRI's unit desa system opened its doors to commercial microfinance in 1984.

The policymakers knew that a fundamental change in bureaucratic understanding would be required for the shift to commercial financial intermediation. On the lending side the critical lessons to be learned were that subsidized credit is unavailable to most people and that informal commercial lenders typically charge very high interest rates to poor borrowers. Thus available loans with interest rates that would enable institutional profitability should be in high demand—as turned out to be the case. The lessons required for successful rural savings mobilization were, first, that many people preferred to hold substantial portions of their savings in banks—if the banks could provide security, convenient locations, confidentiality, a range of savings instruments offering liquidity and positive real returns in different combinations, and access to loans. And second, collecting savings from the general public would enable the units to serve small savers profitably.

For profitable administration of a restructured unit desa system, the primary lessons that had to be learned were:

- The spread between interest rates on loans and the cost of funds would have to be set to enable unit profitability, and each unit desa would have to become a financial unit, a profit center.
- Products would have to be few in number and carefully designed to meet demand.
- A management information system would be needed to provide simple, transparent, accurate, and timely information about the performance of each unit.
- Where necessary, bank units would have to be moved from their locations near rice fields to local market centers.
- Staff would need to be retrained.
- A culture of accountability would have to be established.
- Incentives would be needed to motivate unit employees to locate and serve a large number of customers—who were now to be called (and treated as) clients, not beneficiaries.
- Units would have to be regularly and carefully supervised by well-trained staff from each unit's supervising branch.

Myopic vision among officials was not confined to BRI

In brief, the decision to restructure BRI's unit banking system required a complete change in the philosophy and operations of the system. Systems and operating procedures had to be designed to provide simple, transparent incentives to all parties—clients, staff, supervisors, and managers—for efficient operations. And, because of the heavy fixed costs and the losses of the old system, the fundamentals of the new system would have to be in place within months.

The high-level leadership invested in the transformation of the unit desas was essential, and included the coordinating minister for economics and finance, the finance minister, and other technocrats; BRI's new President-Director Kamardy Arief; and Sugianto, who became responsible for the unit desa system at the time of the transition (and was appointed a BRI managing director in 1986, in charge of BRI's microbanking activities; Robinson 1998b). Without such leadership and commitment, the unit desas could not have been transformed to a commercial microbanking system.

Bureaucrats

As noted, however, many government officials and others held widespread, deeply rooted misconceptions about rural markets, about microfinance demand, and about villagers' attitudes. The gap in perceptions is well illustrated in a paper presented at a 1987 seminar at Bank Indonesia:

> The relationship between formal credit-providing institutions and their clients is based on an economic relationship . . . [However, the] Indonesian village economy is underdeveloped and [such relationships] are still unsuitable in villages . . . [Our

villagers] are not able to manage in a money economy . . . [and they] have psychological obstacles to saving in banks.[4]

This view represents a common holdover from the theories of a dual economy—an imported capitalistic system and an indigenous, primitive, "Eastern" social system—held by J. H. Boeke and his followers (see chapter 11). Boeke's colonial theories had been criticized even in the 1920s and 1930s, and they were widely discounted in academic circles in Indonesia and internationally by the 1950s. But the concept of economic dualism stayed with many government officials for decades afterward. Many bureaucrats (and some academics) raised on these ideas were often blinded to realities in rural Indonesia, ignoring the rapid rural development of the 1970s and 1980s.

Until 1984 neither BRI unit desa staff nor their supervisors in branch offices had been expected to act as bankers. Beginning in 1983, extensive field work by BRI and Center for Policy and Implementation Studies (CPIS) research teams in villages, unit desas, and branches found widespread ignorance of village activities among local BRI staff. Unit desa staff and their supervisors generally understood neither the new policies they were required to implement nor the productive activities and financial flows of the rural areas they were supposed to serve.

Changing the perceptions and the ethos of BRI's staff was the bank's most difficult task—and its most spectacular achievement

Unit desa staff rarely visited the villages in the service areas of their units. Believing that the villagers were primitive and their needs limited, the staff typically treated their customers with disdain. As one BRI supervisor said to me in 1985, "Why have banks for villagers? Our villagers are still uneducated. They think loans are gifts from the government. They will not use banks for savings because they spend everything they earn just to live. Anyway, even if they had money, they would not keep it in a bank. They do not trust banks, and they keep any savings in animals, gold, or land." All too often, bureaucrats with perceptions like these were given the job of implementing the 1983 financial reforms and of building BRI's local banking system.

Myopic vision among officials was not confined to BRI. Officers of various departments (agriculture, industry, cooperatives) charged with rural development, officers of local governments, and personnel from other banks shared many of the same misunderstandings about productive enterprises, income flows, and financial markets in rural areas.

There were exceptions—some government officials knew rural areas well, and some BRI staff were dynamic and innovative in their relationships with villagers. But innovations were rarely appreciated by supervisors. Changing the perceptions and the ethos of BRI's staff, a sine qua non of the bank's success, was its most difficult task—and its most spectacular achievement.

The generally abysmal knowledge about village conditions held by BRI and other government bureaucrats gave rise to a number of incorrect assumptions about villagers in general, and commercial banking in particular. A number of such views, common in Indonesia in the 1970s and early 1980s,[5] have been reported in many other developing countries as well:

- "Villager" and "farmer" are synonymous.[6]
- Villagers—who are generally poor, ignorant, and backward—are not "bank-minded."
- Villagers cannot afford commercial interest rates for loans.
- Farmers need continual instruction about the inputs to be used on their fields and cannot be trusted with cash. Thus borrowers should receive all or most of their agricultural loans in input packets.
- Subsidized credit is required to provide low-cost loans to low-income farmers who can neither save nor afford commercial credit.
- Villagers do not need financial savings instruments. They rarely have excess liquidity—and when they do, they usually spend it for consumption. Those who save prefer nonfinancial forms.

Many villagers perceived clearly the increasing demand for financial services from low-income people

These views, held as they were by legions of central, provincial, and local government officials and others, presented a formidable obstacle to the restructuring of the unit desas. They continued to be held by some people for many years, but by 1996 the financial deregulations, BRI's experience, and the increased use of local banking services generally had done much to dispel such misconceptions about rural banking and microfinance—which were reduced even further by the stunning performance of Indonesian microbanking during the recent crisis.

Villagers

Unlike most government and bank officials, many villagers perceived clearly the increasing demand for financial services from low-income people. Rural moneylenders, traders, commodity wholesalers, and other informal lenders recognized the high demand for loans. As active participants in the economic growth then occurring in the villages, they understood that the rising demand for loans, especially for working capital, reflected the new opportunities becoming available for productive rural activities.

Credit might, of course, be obtained from family, neighbors, friends, rotating savings and credit associations (ROSCAs, or *arisan*), savings and loan societies (*simpan pinjam*), village rice banks (*lumbung padi*), and others. But these types of lending usually did not meet the growing demand for credit that would be sufficient for ongoing production purposes. Informal commercial moneylenders of various kinds were widely present, but the cost of borrowing from them was typically very high, especially for poor borrowers—who paid monthly effective interest rates ranging from 10 percent to well over 100 percent (see table 6.1). Government-subsidized credit programs were widespread but unavailable to most low-income borrowers (or inappropriate for their needs, as discussed in chapter 11).

Villagers understood what most bureaucrats did not: before the "seed-fertilizer revolution" of the 1970s, villagers borrowed primarily to finance consumption. They would borrow to feed their families in the pre-harvest or "hungry" (*paceklik*) season, at times of crop failure, for family emergencies, and to cover the costs of ceremonies such as circumcisions, weddings, and funerals.

Beginning on a large scale in the early 1970s, however, rural inhabitants began to borrow for production expenses (Mears 1981). Starting with loans for inputs of new agricultural technology, demand quickly expanded for loans for productive off-farm activities, local industries, trade, and services. This was the potential demand for institutional commercial credit perceived by villagers, moneylenders, and economics ministers, but not by many bureaucrats and bankers.

The perception gap was equally large on the savings side. Key policymakers, informed by extensive studies of villagers, believed that if appropriate financial savings instruments were made available in conveniently located banks, village households would convert some of their excess liquidity into financial savings. But most BRI staff and government officials interviewed in the early 1980s flatly denied the existence of such rural savings and the potential for conversion of any rural savings that might exist into financial form.

"We had to change the culture of the unit desa system, and we did."
—Kamardy Arief, BRI president-director, 1983–92

Yet discussions with villagers in many parts of the country indicated huge demand for institutional savings instruments and services geared to rural needs. Villagers interviewed in the early 1980s often said that they kept more cash in the house than they wanted because of the lack of alternative options (see chapters 7 and 13). They did not convert excess cash into institutional financial savings primarily because TABANAS, the only savings instrument available at the unit desas, limited the number of withdrawals. But beyond some needs for ready cash kept at home, households and enterprise owners throughout the country said that they wanted savings accounts from which they could withdraw on demand—in a conveniently located, secure bank. Some made use of conveniently located People's Credit Banks (BPRs; see chapter 9), but for most people in rural areas such banks were not available, security was lacking, or products were unsuitable.

These perception gaps began to close during the 1980s as bureaucrats gradually came to see the reality that villagers had experienced and policymakers had recognized. BRI's unit desa system led the way. How the closing of the gap came about is best summarized in the words of Kamardy Arief, the BRI president-director: "We had to change the culture of the unit desa system, and we did."

The Transition from BIMAS to KUPEDES

Ceilings on interest rates for most state bank loans and deposits were repealed and liquidity credits to banks from Bank Indonesia were sharply reduced as part of the June 1983 financial deregulation.[7] Banks were given more autonomy in decisionmaking and encouraged to expand their products and activities. State banks, instead of serving primarily as channeling agents for government subsidies, were to be transformed into commercial banks.

In this context the question of whether to close or to restructure BRI's unit desas became a critical policy issue. BIMAS was visibly moribund, and unit desa losses for 1984 were projected to be more than $30 million. In 1983 the Harvard Institute for International Development (HIID) submitted a report to the

government, *Rice Intensification: Development Program Implementation Studies Report 2* (DPIS 1983), that reviewed the findings of the research carried out between 1979 and 1983 on rice intensification and the BIMAS credit program.[8] This report (referred to hereafter as the DPIS report) recommended that BIMAS be ended and that a general rural credit program with commercial interest rates be implemented through BRI's unit banking system. Various government agencies and agricultural institutions also issued reports on the problems of BIMAS, and the government became quite familiar with the difficulties of the unit desas.

The DPIS report also proposed a substantially increased effort to mobilize rural savings. This approach was favored because it could both provide savings services to the rural population and finance the new credit program. The report recommended that the general rural credit program be:

The question of whether to close or to restructure BRI's unit desas became a critical policy issue

- Accessible to all villagers.
- Flexible enough to fit village patterns of repayment, either in full after a specific period or in installments over the course of the loan.
- General enough to minimize procedural mechanisms, eventually streamlining the administration of village borrowing.
- Viable enough to operate without continuing government subsidies (DPIS 1983, p. 447).

The proposed program was described as follows:

> General rural credit should be available for many kinds of economic activity carried out by villagers, such as agriculture, trade, and small scale industry. Access to credit should be based on the individual borrower's creditworthiness, not on a particular project or operation.
>
> —DPIS 1983, p. 447[9]

The financial deregulation that allowed banks to set their own interest rates on most loans and deposits made it possible for the government to transform the unit desas from "rice banks" to "real banks." But should this transformation be attempted? On the one hand, it would be a high-risk strategy: no bank in the world had developed sustainable commercial microfinance on the scale of Indonesia's unit desa system.

On the other hand, the minister of finance had funded four years of extensive research that had shown clearly that the rapid economic development in many rural areas had substantially increased the demand for credit. The government also recognized the low level of rural banking activity and the high interest rates charged to rural borrowers by informal commercial lenders. In addition, compelling evidence had been collected showing that many villagers would save in unit desas if savings instruments and services were appropriate for their needs. Moreover, closing the unit desas would end the provision of banking services in more than 90 percent of the locations where formal banking services were

available. It would also put out of work about 18,000 employees (including both unit bank staff and night guards). It was clear from the beginning that restructuring the unit desas would be a high-risk, high-reward strategy.

Policy issues

Immediately following the financial deregulation in June 1983, Minister of Finance Ali Wardhana requested from HIID detailed policy recommendations on what would be needed to change the unit desa system into a commercial banking network, as well as estimates of what it would cost. He asked the three questions mentioned in his introduction to this book:

- Would rural borrowers pay interest rates for loans that enable the unit desas to cover all costs?
- Would rural people deposit savings in units, enabling loans to be capitalized by savings?
- How should the new system be financed, and how long would it take until the unit desas broke even?

The Indonesian government made three decisions that laid the foundations for sustainable microfinance. The first was that the unit desas would be retained

The year before the deregulation a few of the HIID consultants to the DPIS project had formed a small, informal Rural Credit Working Group to work on policy issues that would result in specific recommendations for restructuring the unit desa system.[10] In mid-1983, at the request of the minister of finance, the group responded to his questions and prepared recommendations for converting the unit desas into a system of commercial microfinance. Many detailed discussions on policy and implementation were held with the Ministry of Finance and BRI in 1983; the Rural Credit Working Group worked closely with both the ministry and BRI in preparing the recommendations.

The nationwide evidence gathered by the DPIS project was used to answer the first two questions. First, low-income rural borrowers would pay the interest rates that BRI's unit desa system would need to charge because the only other credit options for most were to borrow from family, friends, and informal savings and loan groups such as ROSCAs (whose loans were often not appropriate for use as working capital) or from informal moneylenders at very high cost, especially for poorer borrowers.

Second, rural households would save in the unit desas if they were offered security, convenient locations, confidentiality, access to loans, and a choice of instruments with different ratios of liquidity and returns. For most low-income households, liquidity—not previously available at the unit desas—was the key. In emergencies these households wanted access to their savings at all times during bank hours.

In answer to the third question, the Rural Credit Working Group recommended that the nominal interest rate on loans for working capital be set at a 1.5 percent a month flat rate on the original loan balance (equivalent for most loans to about a 2.8 percent a month effective interest rate on the declining outstanding loan balance).[11] Borrowers who did not repay on time would pay

a penalty of 0.5 percent a month flat rate. It was suggested that interest charges be stated as a flat monthly rate because rural borrowers were accustomed to the flat rates typically charged by moneylenders. In addition, it was thought that stating a flat monthly interest rate of 1.5 percent, instead of the equivalent 32 percent annual effective interest rate (for prompt payers with a 12-month loan with monthly payments),[12] might lessen potential political opposition.

The Rural Credit Working Group calculated that these rates would enable the unit desa system to break even within two years—if credit outstanding reached $201 million and if loan losses were held to 4.5 percent of amounts disbursed. It was recommended that the new loan program be funded initially from the capital of the Kredit Mini program ($67million) and from Bank Indonesia liquidity credits at 15 percent interest a year, the same rate that the unit desas paid depositors for savings.

The second decision was to end subsidized lending at the unit desas and to introduce KUPEDES at commercial interest rates

The new savings mobilization program would eventually provide additional funds; it was assumed that the interest rate for savings would be 15 percent a year, the rate of the national TABANAS savings program. The Rural Credit Working Group estimated that given these assumptions, the bank would be able to cover all the costs of the unit desa system, to break even within two years, and then to earn a profit.

Important influences on these recommendations were the lessons on rural finance learned from BRI's Kredit Mini and Kredit Midi programs (see chapter 11); from Bank Dagang Bali, a private bank (chapter 10); and from some of the People's Credit Banks (BPRs; chapters 9 and 14). These institutions had learned long before how to provide and recover small loans made to low-income borrowers. Except for BRI's Kredit Mini and Kredit Midi, whose subsidized interest rates were controlled by the government, these institutions had also learned how to lend to low-income borrowers profitably.

As discussed later in this chapter, BRI's transition from BIMAS to its new general rural credit program—which came to be called Kredit Umum Pedesaan, or KUPEDES—owed an important debt to these institutions. Basic lessons were learned from them about microcredit—and from Bank Dagang Bali and some of the People's Credit Banks, about microsavings as well.

Three crucial decisions

In late 1983 the Indonesian government made three decisions that laid the foundations for the new approach to microfinance. The first was that BRI's unit desa network would be retained, despite the fact that it was no longer required for its original purpose of financing rice farmers through BIMAS. The unit desas would be restructured into a commercial banking network that would serve rural areas. Units would be moved, closed, or added as necessary to provide full microfinance coverage in rural areas. The planning focus was entirely rural because in 1983 all of BRI's 3,626 unit desas were located in rural areas. (In 1989, however, the unit desa system was extended to urban areas, and KUPEDES came to be known as general purpose credit rather than its literal translation as general rural credit.)

The second decision was to end subsidized lending programs at the unit desas and to introduce in their place the KUPEDES program of general rural credit at commercial interest rates. Kredit Mini and Kredit Midi were ended in late 1983. Outstanding BIMAS loans were transferred to the branches, although the unit desas acted as agents for the branches in collecting BIMAS loans. All new BIMAS lending stopped in early 1984, and the program officially ended in 1985.

The third decision was to place high priority on mobilizing rural savings through the unit desas—both to meet demnd for savings services and so that KUPEDES would not require government funding in the future. The savings side of microfinance in the restructured units is discussed in chapter 13.

Loan and deposit interest rates would be set so that the spread between them would be sufficient to permit the profitability—and hence the long-term viability—of the unit desa system. KUPEDES would be introduced in tandem with the reorganization of the unit desas. Previously branch windows, the units would now become commercial financial units with their own reporting system. KUPEDES would be the units' first new product.

The third decision was to place high priority on mobilizing rural savings

Cutting back on credit subsidies

One issue remained. The cutting back of the subsidized credit programs was a sensitive matter that had to be handled carefully. In Indonesia, as in most developing countries, rural credit subsidies tend to reach local elites whom governments want to retain as political supporters. Such subsidies are notoriously difficult to withdraw.

In Indonesia the solution was one of simultaneous implementation through different offices. KUPEDES would be a commercial credit program available in the subdistricts at the unit desas and financed through locally mobilized savings. The subsidized agricultural credit programs financed from the government budget would be continued, but at BRI's branches in district capitals. Since the subsidized credit would be rationed—unlike the commercial credit—KUPEDES could be expected to gain a large share of the rural credit market.

This was a very Indonesian solution, drawn as it was from a culture in which opposites are considered complementarities, and from a nation whose unofficial motto has been "*bisa diatur*" ("it can be arranged").[13] As a result the government was able to retain the allegiance of many rural elites while increasing support among villagers to whom institutional credit had not previously been available.

Thus when BIMAS was phased out in 1984 and officially ended in 1985, it was immediately reincarnated into Credit for Farm Enterprises (Kredit Usaha Tani, or KUT), a subsidized credit program for which BRI was required to act as a channeling agent for the government. But KUT was offered through BRI branches, not through the unit desas. As in BIMAS, KUT loans were sectoral and tied to input packages designed for well-irrigated lands. Hence the subsidies once again tended to reach wealthier villages—in this case through loans to farmers groups.

As in BIMAS, KUT arrears were high. From the program's start in 1985 through the rainy season in 1990, KUT extended $208 million in loans (in 1990 dollars).[14] By the end of 1990 the amount overdue and unpaid since the pro-

gram began was $37 million, or 18 percent of the loans disbursed during 1985–90.

In comparison, KUPEDES disbursed $2.8 billion in credit (in 1990 dollars) from its inception in 1984 through the end of 1990. The amount overdue and unpaid since the beginning of the program was $29.9 million (in 1990 dollars), or 1.1 percent of total loans. Thus by 1990 KUPEDES had lent more than 13 times as much as KUT, yet the absolute amount of overdues was lower in KUPEDES.

KUT was then phased out and replaced by a series of other subsidized rural credit programs. As instructed by the government, BRI continues today to implement a small number of "high priority," highly rationed subsidized credit programs—with similar results (see figure 12.1). These programs are available to borrowers through BRI branches, not through the unit desas.

The intent behind the initial capitalization of the KUPEDES loan program was to provide "the subsidy to end subsidies." It worked

Thus KUPEDES rapidly gained a large market share and maintained a high repayment rate. The losses of KUT and the other subsidized programs were essentially a cost to the government for allowing KUPEDES to operate without hindrance from rural elites accustomed to subsidized loans.

Starting the KUPEDES credit program

KUPEDES received its initial funding from the $67 million in capital of Kredit Mini (which was converted into equity for the unit desas) and from $140 million in liquidity credits from Bank Indonesia at 15 percent a year.[15] The interest rate was set at 15 percent (the same rate that the unit desas paid depositors for TABANAS savings) so that BRI would not have an incentive to rely on Bank Indonesia as the main long-term source of funds for lending at the units, rather than to make a strong effort to mobilize local savings.[16]

The Ministry of Finance agreed to continue subsidizing BRI's operating losses on the unit desas until the system broke even, which was estimated to take two years. It also continued to support extensive technical assistance to BRI for the development of the units.

The intent behind the initial capitalization of the KUPEDES loan program was to provide "the subsidy to end subsidies" (Patten 1996, p. 4). And it worked. The KUPEDES credit program began nationwide through the unit desas in February 1984. BRI's newly transformed unit banking system broke even on a monthly basis by late 1985, a little less than the two years that had been estimated, and the units showed a profit for 1986—and for every year since.

A few days before the final decision was made to proceed with the restructuring of the unit desas, Finance Minister Ali Wardhana called a meeting to review the issues involved. During the meeting he enumerated a long list of all the things that could go wrong (the Ministry of Finance represents the government as the owner of BRI). I recall becoming more and more glum as the discussion continued. At the end, however, he smiled and said, "But this is Indonesia. We will do it." And they did. No country attempting to transform its rural banking system should underestimate the need for sustained, high-level leadership.

Unit desa products are the focus of this chapter (credit) and of the next chapter (savings instruments). Chapter 14, on BRI's organizational structure, might

have preceded the discussion of the units' products. But a more accurate feel for the development of the unit desas can be given in this way. In fact, it was the new products—and the operational and organizational requirements needed to meet the large demand for these products —that drove the reorganization of BRI, step by step. Since 1984 BRI has been gradually restructured to make possible an increasingly effective nationwide implementation of the units' products. Thus the discussion in chapter 14 explores the dynamics underlying the development of the unit desas into individual profit centers providing specialized products for the microfinance market, and analyzes the effects of the new products on BRI's institutional structure.

No country attempting to transform its rural banking system should underestimate the need for sustained, high-level leadership

Basic Principles of KUPEDES

Since 1984 managers and staff of the unit desa system have worked to formulate and implement the key principles of profitable microcredit (box 12.1). Of course, BRI did not invent all the principles it uses. Some were developed over thousands of years by moneylenders. Some date back more than a century to the early People's Credit Banks in Indonesia and their predecessors in Europe. Some were pioneered by NGOs and other financial institutions in other countries and continents. Some were known to Fruin in the 1920s. Some were adapted from Bank Dagang Bali and some from the Badan Kredit Kecamatan of Central Java. And some were a legacy of the unit desas' Kredit Mini and Kredit Midi programs (which had in turn been influenced by the Badan Kredit Kecamatan).

Some important common lessons came from these otherwise quite different sources. Among them:

- Financial services can be provided profitably to low-income people.
- Interest rates for loans must be set higher than those normally charged by standard banks, reflecting the fact that delivering many small loans locally is more expensive than providing a smaller number of bigger loans in large bank branches.
- Loan arrears can be kept low, primarily by careful borrower selection, and because borrowers are motivated to repay in order to retain the option to reborrow when products and services suit their needs.
- Institutional activities are restricted entirely to financial services.

BRI also learned from Bank Dagang Bali and some of the People's Credit Banks (BPRs) that with appropriate products and services, substantial amounts of voluntary savings can be mobilized from large numbers of low-income savers and used to finance loans.

In addition, the unit desas learned from moneylenders that there is extensive demand from low-income borrowers for small, short-term, general-purpose loans in a range of amounts, and that the loans should have simple

Box **12.1** **Basic principles of KUPEDES**

Outreach and profitability

- Institutional sustainability is required for large-scale outreach to low-income borrowers
- The KUPEDES interest rate is set to cover all costs and risks, and to return a profit to the system

Borrower selection and retention, and loan terms and repayment

- Borrowers are selected by BRI without any outside intervention, and BRI bears the full credit risk
- KUPEDES loans from 25,000 rupiah to 25 million rupiah ($10 50 to $10,491 in 1996) are available to all creditworthy borrowers for all productive activities, including trade and services
- Loan decisions are based on evaluations made by well-trained, experienced unit desa staff of the borrower's character (willingness to repay) and of the viability and cash flows of his or her enterprise (ability to repay)
- The amount of the loan is based on the borrower's current income flows, not on income estimated to be generated by the loan
- KUPEDES is designed to meet the needs of low- and lower-middle-income borrowers for convenient bank locations, simple loan procedures, quick processes, and flexible terms
- Within overall KUPEDES regulations, the loan maturity and payment plan are customized for each borrower's needs
- Borrowers who repay their loans promptly and whose enterprises remain creditworthy are permitted to borrow again for the gradually increasing loan sizes for which they qualify up to the KUPEDES maximum
- Borrowers who do not repay their loans are not permitted to borrow again However, payments can be rescheduled if nonrepayment is caused by catastrophic events occurring throughout an area
- To maximize personal responsibility for loan repayment, KUPEDES lends to individual borrowers, not to groups
- BRI does not train borrowers or attempt to monitor their enterprises or the use of their loans, the premise is that borrowers know their businesses better than do bank staff

Administration and operations

- Each unit desa is treated as a financial unit, or profit center, with its own balance sheet and profit and loss statement
- All unit desa regulations, products, reports, job descriptions, and the like are simple and standardized across all units
- Unit managers and staff are given substantial responsibility and held accountable for their performance. They are provided intensive, high-quality training, and financial incentives based on unit performance
- Simple, transparent loan accounting and reporting enable frequent assessment of unit portfolios and immediate followup in case of problems Accounting is on a cash, not accrual, basis, only income actually received is posted.
- Automatic criteria for decisionmaking based on predetermined criteria are used whenever feasible—for example, for loan reserve and writeoff procedures and for additions to a unit's staff
- Unit staff are supervised weekly by well-trained supervisors from the unit's supervising branch

The amount of the loan is based on the borrower's current income flows, not on income estimated to be generated by the loan

procedures, quick decisions, flexible terms, reborrowing facilities, and graduated amounts—and that borrowers will pay the costs of such loans.

Finally, the unit desa system mined its experience with Kredit Mini and Kredit Midi. Unlike BIMAS, Kredit Mini and Kredit Midi loans had been provided in cash, borrowers were selected by local unit desa staff who appraised the creditworthiness of each loan applicant, loan terms were relatively short, regular installment payments on principal were required, and repayment rates had been high. While these loan programs had been constrained by the 12 percent annual effective interest rate mandated by the government for state banks, interest rate caps disappeared with the 1983 deregulation. BRI was thus free to build KUPEDES on the lessons of Kredit Mini and Kredit Midi, but to do so at an interest rate that would enable the units to achieve profitability.

Central principles of KUPEDES credit include lending to individuals, pricing for profitability, methods of borrower selection and retention, loan terms and repayment, and a new approach to organization, administration, and operations at the unit desas (see box 12.1). The role of KUPEDES in the unit desas can be understood only in the context of the simultaneous reorganization of BRI's microbanking system. Each supported the other, and neither could have succeeded alone.

BRI does not train borrowers; the premise is that borrowers know their businesses better than do bank staff

KUPEDES and unit desa reorganization

To implement the new KUPEDES product and the forthcoming savings instruments, BRI began to reorganize the unit desas in late 1983 and early 1984 (chapter 14). As noted, by 1984 each unit desa was treated as a financial unit, or profit center. Separate reporting for each unit enabled unit staff and supervisors to evaluate performance monthly and to take action quickly when problems arose. Unit staff promotions and incentives were based on the performance of their unit. Unit desa regulations, products, reports, job descriptions, and the like were made simple and standardized across all units.

This approach made it possible for the unit desas to be successfully managed by local high-school graduates who, after previous experience as unit desa bookkeeper, teller, and credit officer, are selected and trained by BRI and promoted to unit manager. Standardization and simplicity also make it possible for the branches to supervise large numbers of units effectively, and for the regional offices and the head office to oversee a large system efficiently. Unit managers and staff are given substantial responsibility, and they are held accountable for their performance. They are given intensive, high-quality training so that they will know their jobs well, and performance-based financial incentives to encourage them to do these jobs well. In addition, unit staff are regularly and frequently supervised by well-trained supervisors from the unit's supervising branch.

A new system of loan accounting and reporting was designed to be simple and transparent. Accounting is on a cash, not accrual, basis; only income actually received is posted. The staff of each unit produce five monthly reports: a balance sheet, a profit and loss statement, a credit report that details loan ar-

rears over time, an achievement of targets report, and a unit development report (UDR). The UDR, which assesses the condition of the unit using 26 indicators, provides the basic monthly information used by unit and branch managers to review the performance of their units. This report, aggregated monthly at the branches, regional offices, and head office, serves as the main indicator of unit desa performance over time (see chapter 14).

These 5 reports replaced the 32 monthly reports required of each unit before 1984. The unit desas' management information system now provides far better information in 5 reports than was available from the 32 reports of the BIMAS era. Use of these 5 reports enables frequent and regular assessment of each unit's portfolio, permitting immediate action to be taken on loans in arrears.

Accounting is on a cash, not accrual, basis; only income actually received is posted

To reduce opportunities for corruption and to increase staff efficiency, automatic criteria for decisions based on preset requirements are used whenever feasible. Thus loan reserve and writeoff procedures are determined by the length of time the overdue loan balance has gone beyond its due date, while credit officers are added to units depending on the number of borrowers, and bookkeepers and tellers are added depending on the number of daily transactions.

The KUPEDES interest rate was set to cover the relatively high overhead costs of the units (including depreciation), and the commercial cost of funds; it covers estimated inflation and risk, and it enables profitability.

Borrowers are selected by the bank without outside intervention, and BRI bears the full credit risk. Loans are made available to all creditworthy individuals for all productive activities, and prompt payers whose enterprises qualify are permitted to reborrow for gradually increasing amounts. As BRI's president-director put it in 1996, "More than 80 percent of KUPEDES borrowers borrow again, and they need to know that their ability to borrow again depends on their own performance, not on factors outside their control" (Moeljono 1996, p.4). Loan procedures are simple and quick, and 36 combinations of maturities and payment terms provide borrowers with a variety of options.

Selecting KUPEDES borrowers

Low- and lower-middle-income Indonesian households typically have multiple income sources; a 1990 BRI study of KUPEDES borrowers showed between 1 and 12 economic activities per household, with an average of 3.6 (Sutoro and Haryanto 1990). For a KUPEDES loan, the borrower identifies one of the household's economic activities as the loan purpose and must show that the present income of that enterprise is capable of repaying the loan. Thus the amount of the loan is based on the current income flows of the enterprise, not on income estimated to be generated by the loan.

Loan decisions are based on unit staff evaluations of borrowers' characters and the viability and cash flows of their enterprises. Just as the bank is fully responsible for selecting borrowers and bears the full credit risk for KUPEDES, for most loans the manager and credit officer of a unit desa choose the unit's

borrowers and bear the responsibility for their decisions (all unit desa managers have served previously as credit officers). Since credit officers must assess the level of business and the cash flows of microenterprises that normally do not have formal accounting records, business plans, or financial statements, they are trained to prepare simple balance sheets and income statements for many kinds of microbusinesses.

For example, a credit officer evaluating the enterprise of a woman who raises chickens and sells eggs must know the local egg market: the prices of chickens of different qualities, the price of feed, the probability of disease, the average laying rate, the prices of eggs, transportation costs, the wholesale and retail demand in the area, and so on. The credit officer will then have to decide whether the potential borrower's statements about her business are essentially accurate, and whether the enterprise can support the projected loan payments. (The credit officer also evaluates other household economic activities, which serve as backup for loan repayment in case the borrower's egg business slumps or fails). The egg seller may be able to make the loan payments, but will she do so? The credit officer is also trained to evaluate the character of the potential borrower through discussions with other unit clients who know her, her neighbors, her buyers and suppliers, and her village officers.

Unlike BIMAS, KUPEDES credit—widely available to all creditworthy borrowers—has not become politicized. Since interest rates are not subsidized, capital is not constrained, KUPEDES loans are not rationed, and there is little scope for corruption. In addition, staff bonuses and promotions depend on high repayment rates. For both reasons, there is little incentive to lend to unqualified borrowers or to relend to defaulting borrowers.

Since interest rates are not subsidized, capital is not constrained, KUPEDES loans are not rationed, and there is little scope for corruption

Characteristics of the KUPEDES Loan Product

KUPEDES, a general-purpose loan instrument, is the only loan product offered in the unit desas (and it is available only in the units).[17] The decision to offer a single loan product that would be available for all productive purposes contributed substantially to keeping the units simple and transparent—both among the key reasons for the units' success.

Loan purposes

In designing the KUPEDES loan product, BRI acknowledged what moneylenders and borrowers had always known: credit is fungible. As noted, a KUPEDES loan applicant must cite one activity as the borrowing enterprise. But BRI recognizes that KUPEDES loans are often used by borrowers for other economic activities, as well as for consumption.

KUPEDES loans are classified as working capital or investment capital according to the purpose stated in the loan application. Loans are available for up to two years for working capital and up to three years for investment capital; most loans are repaid in monthly installments. At the end of 1995, 72 per-

cent of outstanding loans were for working capital and 28 percent were for investment capital (BRI 1996a, p. 4).[18]

The most frequently stated loan purpose is trade, which accounted for nearly 44 percent of loans and about 45 percent of the value of outstanding credit in a 1995 survey of KUPEDES borrowers. But the share of trade loans was probably overstated because it is relatively easy for small traders to demonstrate the cash flows that can justify a loan. Many traders also engage in agricultural activities and use some of their KUPEDES loans for agriculture and other purposes. Agriculture accounted for the stated purposes of 18 percent of the loans and 17 percent of the outstanding credit in the survey (BRI 1996a, p. 4). A large variety of other purposes made up the rest—especially small industry, transport, and other services.

KUPEDES, a general-purpose loan instrument, is the only loan product offered in the unit desas

BRI does not permit KUPEDES loans to be taken for purposes such as ceremonies, health care, education, housing, consumer durables, and basic household needs. But the units are aware that some loan proceeds are used for these purposes. For BRI the most important concerns are that the borrower can profitably use and repay the loan, and that the repayments are made as scheduled.

Loan sizes

KUPEDES loans were originally available for 25,000–1 million rupiah ($23–931 in 1984). Since then the rupiah maximum has been gradually raised: in 1996 KUPEDES loans were available from 25,000–25 million rupiah ($10.50–10,491). The increases in the maximum loan size have been driven primarily by the demands of KUPEDES borrowers who, over time, qualified for larger loans.

In practice, however, few KUPEDES loans are above 5 million rupiah at disbursement ($2,098 in 1996); the 1995 KUPEDES loan survey found that only 3 percent of respondents' loans at disbursement were above that amount (table 12.2). More than three-quarters of the loans were below $900 (BRI 1996a, p. 5). In 1996 the average loan at disbursement was $1,025, but most loans fell well below that amount (BRI 1997b, p. 7).

Interest rates

When KUPEDES began in 1984, the monthly interest rate was set at 1.5 percent for working capital loans and 1.0 percent for investment loans, both calculated on a flat basis on the original loan balance.[19] In 1990, however, both types of loans began to be offered at the same flat rate, 1.5 percent a month.[20] This rate is equivalent to about a 32 percent annual effective interest rate for a 12-month loan with monthly installments if all payments are made on time. Adjusting this 32 percent rate to account for annual inflation in Indonesia in 1984–96 suggests a 22–27 percent range in real effective annual lending rates for most loans. But borrowers who make loan payments late pay a higher interest rate than those who pay on time (see discussion of the prompt payment incentive, below).

Monthly installments are calculated so that all payments of principal and interest remain the same throughout the payment period. This is an attractive feature for KUPEDES borrowers, who like its simplicity and regularity. However, there are other payment schedules, including single-payment and seasonal

Table **12.2** **Size distribution of KUPEDES loans at disbursement, 1995**

Loan size (January 1995 U.S. dollars)	Share of loans made (percent)
<$225	14.6
$226–450	30 2
$451–900	31.9
$901–2,250	20 2
>$2,250	3.1

Source BRI 1996a, p 5

In designing KUPEDES, BRI acknowledged what moneylenders and borrowers had always known: credit is fungible

loans. Thus there is some variation in KUPEDES annual effective interest rates depending on loan maturities and payment schedules; the nominal annual rate can be as low as 19 percent on some short-term, single-payment loans.

In 1995 BRI lowered the interest rate on larger KUPEDES loans. This change was made to reflect the fact that operating costs decrease as loan sizes increase, and to ensure that the units would remain competitive with the many banks entering the same market niche (largely as a result of the unit desas' success). Because of the way the KUPEDES loan product works, larger loans generally imply longer-term unit clients. Thus the interest rate reduction effectively rewarded good borrowers who qualified for larger loans.

The flat monthly interest rate on loans of 3 million–5 million rupiah ($1,259–2,098 in 1996), for those who pay on time, was set at 1.5–1.2 percent of the original loan amount, with the larger loans carrying the lower rates. (The interest on loans above 5 million rupiah was also 1.2 percent a month). The 1.2 percent flat monthly rate is equivalent to an annual effective rate of about 26 percent for a 12-month loan with monthly installments. Thus the annual effective interest rate for most KUPEDES loans ranged from 32–26 percent if payments were made on time. The average annual effective rate was estimated at about 30 percent.[21] KUPEDES loans over $2,098 had an inflation-adjusted real interest rate ranging from 17–20 percent in 1995–96.

But as discussed in chapter 15, during the recent financial crisis the interest on larger loans was returned to the original 32 percent annual effective rate, the same as the interest on smaller loans. And in September 1998 the annual effective interest rate was raised to 45 percent. It was then gradually lowered to the original 32 percent by late 1999. In both cases late payers paid higher rates.

Loan terms

Maturities and repayment terms. Within its standardized package of loan terms, KUPEDES offers borrowers considerable flexibility in meeting their vary-

ing credit needs. Loans are available for maturities ranging from 3 months to 24 months for working capital loans and to 36 months for investment loans.

Repayment terms include monthly payments, seasonal payments, single payments (for loans with maturities of one year or less), and loans with grace periods up to nine months. As noted, however, most loans are repaid in monthly installments. Unit staff and most borrowers prefer the discipline imposed by regular payments, and BRI has found that loans with monthly payments perform considerably better than loans with seasonal maturities, single payments, and grace periods.

According to BRI's 1995 loan survey, 40 percent of KUPEDES loans were taken for 12 months, 17 percent were taken for 18 months, and 25 percent were taken for 24 months. Only 7 percent of loan maturities were longer than 24 months; 11 percent were fewer than 12 months. Borrowers are limited to one working capital loan and one investment loan at the same time; the combined amount can be no larger than 25 million rupiah ($10,491 in 1996). Prepayment of loans, with an interest rebate, is permitted for loans with maturities of nine months or more, but not within the first or last three-month period.

BRI has found that loans with monthly payments perform considerably better than loans with other payment schedules

The loan table book used to determine which terms most closely meet a borrower's needs lists 36 combinations of maturities and repayment terms. For each maturity-repayment combination, the table shows, for a number of loan amounts, the size of each payment, the principal and interest components of the payment, and the amount of prompt payment incentive (see below) that can be earned in a six-month period. Since the loan term tables are printed, unit staff do not calculate the terms for particular loan amounts, nor do they compute payments, thus increasing staff efficiency. Using the loan tables and reviewing the payment schedules with borrowers also helps make loan arrangements transparent, reducing the likelihood that staff members will attempt to collect extra fees or provide special terms to favored customers.

Prompt payment incentive. A prompt payment incentive (insentif pembayaran tepat waktu, or IPTW) has been built into KUPEDES since the program started in 1984. A flat monthly rate of 0.5 percent of the original balance is added to each payment. If all scheduled payments are made on time and in full for six months, the incentive payments are returned to the borrower. But if any scheduled payment is not made on time, the incentive for that six-month period is treated as a late payment penalty and forfeited to the bank.

For a monthly installment loan, a six-month incentive refund is equivalent (on average) to about 30 percent of the monthly payment. If a payment is late in both six-month periods of a 12-month loan, the entire incentive is forfeited, and the annual effective interest rate can then exceed 40 percent. Thus the prompt payment incentive provides a substantial inducement for timely repayment.[22] An example of the prompt payment incentive is provided in box 12.2.

The prompt payment incentive is paid into the borrower's savings account. All borrowers are required to have a savings account at their unit for this purpose; many use it for additional savings as well.

Box **12.2** **The KUPEDES prompt payment incentive**

The following is an example of a one-year KUPEDES loan of 1,000,000 rupiah ($420 in 1996) with 12 equal monthly payments

Loan principal		1,000,000
Monthly principal payment (1,000,000/12)		83,333
Monthly interest payment (flat rate of 1 5 percent x 1,000,000)		15,000
Monthly prompt payment incentive (0 5 percent x 1,000,000)	+	5,000
	+	20,000
Total monthly payment		103,333
	x	12
Total to be repaid		1,240,000 rupiah ($520 in 1996)
Less prompt payment incentive (if all payments made in full and on time)	-	60,000
Net amount repaid by prompt payers		1,180,000 rupiah ($495 in 1996)

Thus interest payments for prompt payers total 180,000 rupiah. If all payments are made in full and on time, the approximate interest rate is an 18 percent annual flat rate (based on the original balance), which is equivalent to about a 32 percent annual effective rate (based on the declining balance)

Source BRI data

36 combinations of maturities and repayment terms are available so that borrowers can customize their loans to meet their needs

Collateral. Until 1992 the unit desas were legally required to take collateral that was at least equivalent to the value of the loan. The units continued to require collateral after the law was changed, but BRI established more flexible rules about the kinds of security that are acceptable.

Most KUPEDES loans are collateralized with land. However, a 1990 BRI study of rice-producing areas found that nearly half of unit desa borrowers had no riceland (Sutoro and Haryanto 1990). In addition, obtaining full title to land is often difficult and expensive. Therefore, if full land title is not available, lesser certificates and land tax bills and receipts are acceptable. The units also accept as collateral most forms of fixed and movable assets for which proof of ownership can be ascertained, including furniture, machinery, motorcycles, bicycles, and household goods. Savings and payroll deductions can also be used for collateral. A 1992 BRI study of loan collateral showed that 24 percent of loans were collateralized with land or a house plot with full title, while 59 percent were secured with lesser documentation of land or house plot ownership (BRI 1996a, p. 8). In

1996 a new law tightened collateral requirements for loans over 5 million rupiah ($2,098).

BRI views KUPEDES collateral primarily as a psychological incentive and an indication of the borrower's intent to repay. Except in unusual cases of fraud or borrower deception, the units rarely take legal steps to collect collateral from defaulters. As Fruin's (1994 [1935], p. 149) handbook put it, "using assets as a criterion [in loan decisions] is intended primarily to maintain a reasonable relationship between debt and property; it is not a question of them being of much value to the bank upon enforced sale."

Research on household assets carried out by BRI in the 1990s indicated that about 90 percent of Indonesian households own assets that could qualify as collateral at a BRI unit (BRI 1998a, p. 8). Thus the loan security requirement is not viewed as a major barrier to loan accessibility. In practice, however, not all unit managers accept all forms of collateral, and in some cases the collateral requirement can prevent otherwise qualified borrowers from obtaining a KUPEDES loan.[23]

The loan is based on the creditworthiness of one of the household's enterprises but all household income streams are assessed

Implementation of the KUPEDES Credit Program

Implementation of the KUPEDES credit program includes evaluating and approving loan applications, delivering and collecting loans, and measuring and managing delinquency; these aspects of the program are discussed in this chapter. But KUPEDES administration also involves asset-liability management; reporting, audit and internal supervision; human resource management, logistics, cash flow arrangements, and other issues that are discussed in later chapters.

From application to collection

KUPEDES has a simple loan application and approval process. A potential borrower discusses his needs with his local unit desa's credit officer, manager, or both. They encourage applicants who appear to be creditworthy and discourage those who seem unlikely to be fundable. Applicants who will probably not be found creditworthy usually go no further. Although no statistics are kept, BRI estimates that less than 5 percent of those who formally apply for KUPEDES loans are rejected (BRI 1996a, p. 9).

This is an Indonesian way of doing business. The result is that in most cases there is no direct denial of credit, the prospective borrower does not lose face by being rejected, and a potentially negative relationship between the bank and the would-be borrower is avoided. This approach is important to both the bank and the client for the long run. Perhaps the client is a saver, or may become one. Perhaps the enterprise in question will become creditworthy in time. Perhaps another family member is, or will become, a unit client. Future options are left open.

Applicants who are encouraged to apply for credit then fill out the loan application, which requests the borrower's name, address, occupation, family sta-

tus, borrowing history, loan purpose, amount and terms requested, and a brief description of how the money will be used, including the amount to be supplied from the applicant's own funds (BRI 1996a, p. 9). If needed, unit staff help applicants to fill out the form.

After a borrower has completed the application, the credit officer visits the borrower at her workplace (in many cases this is also the applicant's home), appraises the activity for which the loan has been requested, and collects detailed information on household economic activities and income flows. Although the loan is based on the creditworthiness of one of the household's enterprises, all household income streams and expenses are assessed. The credit officer prepares simple income statements and balance sheets based on information the household supplies; for loans above 750,000 rupiah ($315 in 1996), these are summarized on a credit information form. Another form provides details on the loan collateral.

Most KUPEDES loan decisions are made by the unit desa manager. There are no loan committees

If a loan applicant is new to the unit desa, the credit officer or unit manager will talk with the village head or other local government representative about the candidate and make inquiries about the person's creditworthiness from the applicant's buyers and suppliers. Neighbors and other unit desa clients in the area are also questioned about the applicant. For a repeat borrower, the application process is similar but shorter, and the field visit is less detailed.

Most loan decisions are made by the unit desa manager. Each unit manager has a loan authority limit; within overall BRI rules, the amount of the manager's authority is set by the manager of the supervising branch. The amount set depends on the unit manager's experience and performance. For loans above the unit manager's authority, the decision is made by the unit development officer posted at the branch or the branch manager; there are no loan committees for KUPEDES loans.

Loan applications from defaulting borrowers are rejected, although borrowers who repay in full during the loan term, but not on time, may be considered for new loans depending on the circumstances. Loans are disbursed in cash at the unit desa immediately after the loan has been approved. Loan payments are made at the units on a prearranged schedule.

Measuring and managing delinquency

BRI places great emphasis on measuring and managing loan delinquency. As soon as a borrower misses a payment, the credit officer is expected to visit him; many overdue payments are collected on such visits. If the loan payment has not been made after several visits, the unit manager will also visit the borrower. If this fails, the unit development officer from the branch will work with the credit officer and unit manager to collect the loan. Most overdue repayments are collected during this process. However, if a unit's collection rate falls below 95 percent in a particular month, the unit manager's loan authority can be withdrawn. All loans must then be approved by the branch until the unit's collection rate again reaches 95 percent and its manager's loan authority is restored.

A loan installment that is unpaid is classified as overdue one week after the due date. Only the overdue installment is so classified; the balance of the loan is classified as current.

Loan loss reserves are calculated monthly at each unit. A unit's reserves consist of the total of 3 percent of principal outstanding, 50 percent of balances on loans up to three months past their final due date, and 100 percent of balances on loans three months or more past their final due date.

All balances on loans 12 months past their final due date are written off, although loan collection continues. Reserve and writeoff procedures are automatic; they are determined by the length of time the overdue loan balance has gone beyond its due date. This method—in which the loan officer and branch manager do not make individual judgments about the collectibility of a loan—helps them to avoid the temptation to underestimate risks or to overstate profits by not reserving adequately against loss. It also provides an automatic, conservative estimate of the value of the loan portfolio.

Reserve and writeoff procedures are automatic; they are determined by the length of time the overdue loan balance is beyond its due date

BRI uses four measures in assessing KUPEDES portfolio quality: portfolio status, long-term loss ratio, short-term loss ratio, and 12-month loss ratio (box 12.3). The first three are reported monthly by each unit and are then aggregated regionally and nationally. The fourth is calculated only at the regional and national levels. Taken together, these four measurements indicate trends in portfolio quality.[24] As discussed later in the chapter, the KUPEDES repayment rate was high during 1984–96, and it continued to be high during the recent crisis (see chapter 15).

Outreach

KUPEDES loans reach borrowers of many kinds, and the loans finance a wide variety of economic activities distributed over thousands of miles.[25] Unit desa borrowers operate small and microenterprises in trade, agriculture, livestock, poultry, dairying, fishing, and food processing; in services (transportation, restaurants, gas stations, repair services); and in manufacturing (textiles, garments, leather goods, furniture, crafts, bricks, tiles, jewelry, herbal medicines, and others).

According to a KUPEDES impact study carried out in 1988 in four provinces, the average capital investment in the borrowing enterprise was $652 (Sutoro and Haryanto 1990, p. 19).[26] BRI conducted another survey in 1996 to learn more about KUPEDES borrowers' opinions on the loan product and the unit desas, and to collect data on aspects of KUPEDES (such as loan size distribution) not available from BRI's monthly reports.

The 1996 survey was not designed as an impact study. Rather, its purpose was to learn how respondents viewed the KUPEDES product. However, some of its questions concerned respondents' perceptions of the impact of their loans on their households' economic growth. While the survey results should not be interpreted as definitive evidence of KUPEDES impact, they are useful as a general overview of borrowers' opinions. But because the survey was conducted by BRI staff, it is possible that—despite assurances of confidentiality (which are not given much credence in rural Indonesia)—

Box 12.3 **Measures of KUPEDES portfolio quality**

Portfolio status
Portfolio status measures the aggregate amount of overdue principal installments relative to total principal outstanding On the one hand portfolio status understates the risk in the portfolio because it includes only overdue payments, not the outstanding balance of overdue loans—which are at higher than normal risk Moreover, when the amount of outstanding loans is growing rapidly, portfolio status tends to understate portfolio risk because the denominator of the ratio is rising quickly But there is an offsetting tendency for portfolio status to overstate risk because most overdue installments are eventually collected In December 1996 the KUPEDES portfolio status was 3 65 percent

Long-term loss ratio
The long-term loss ratio measures the cumulative amount that has come due and been unpaid since the unit opened relative to the total amount that has come due Because the long-term loss ratio measures KUPEDES performance since a unit opened, it is a useful historical record, but it is not sensitive to short-term changes in collection experience In December 1996 the KUPEDES long-term loss ratio was 2 15 percent

Short-term loss ratio
The short-term loss ratio measures monthly changes in the components of the long-term loss ratio Because it is a measure of short-term changes in several variables, it is volatile and difficult to interpret alone A substantial change is an indication that the unit manager and branch supervisor should look closely at each component for the month to see what caused the sudden change in the ratio In December 1996 the KUPEDES short-term loss ratio was 1 30 percent

Twelve-month loss ratio
The 12-month loss ratio measures the change over the most recent 12-month period in the components of the long-term loss ratio It is a useful indicator of changes in portfolio quality because it covers a long enough period to avoid short-term volatility, but a short enough period to reflect portfolio trends In December 1996 the KUPEDES 12-month loss ratio was 1 59 percent

Source BRI 1996a, pp 10–11

99 percent of respondents said that KUPEDES loans had helped their enterprises grow

some clients may have responded with more positive views than they actually held.

The 1996 sample of 1,500 people consisted of 12 KUPEDES borrowers from each of 125 unit desas, located in 62 branches throughout all 15 of BRI's regions.[27] Each respondent had borrowed from KUPEDES at least three times. The sample was stratified proportionately on size of loan and on economic sector, according to unit desa national data. Of the 12 borrowers sampled in each unit desa, 9 had outstanding loans up to and including 3 million rupiah ($1,259), 2 had loans between 3 million and 5 million rupiah, and 1 had a loan above 5 million rupiah ($2,098). In each of the unit desas surveyed, seven of the sample borrowers were drawn from the trading sector, three from agriculture, and one each from industry and other enterprises.

From the original sample of 1,500, information was obtained from 1,341 respondents.

Additional views about KUPEDES were obtained through intensive interviews with borrowers carried out under BRI's International Visitors Program beginning in 1996; the examples of specific borrowers below are drawn from those interviews.

Most borrowers (68 percent) in BRI's 1996 survey were between 30 and 50 years old, and most (68 percent) had attended primary or junior high school (table 12.3). Twenty-nine percent of the respondents were women (in the 1988 survey 24 percent of the larger sample of 1,404 borrowers were women and 29 percent of the smaller sample of 192 borrowers were women). De facto, however, proceeds from KUPEDES loans to other household members are often used by female household members for their enterprises. Since loans are typically used not only for the official loan purpose but also for other household economic activities, many more women use KUPEDES loans than are recorded as so doing.

89 percent of the respondents reported that the capital of the borrowing enterprise was larger than when they took their first KUPEDES loans

Using loans for enterprise growth. Most KUPEDES borrowers in the 1996 survey were long-time unit desa customers; 56 percent had been clients for more than five years. Fifty-one percent reported that they had borrowed from KUPEDES between three and five times, and thirty-one percent had borrowed between six and ten times.

An overwhelming 99 percent of survey respondents said that KUPEDES loans had helped their enterprises grow. While the 1988 and 1996 surveys were concerned with different issues, there are some areas of overlap; enterprise growth and profitability is one. A strong finding of the 1988 impact survey had been that on average the profits of borrowers' enterprises had increased substantially (by 93 percent after adjusting for inflation) after three years of KUPEDES borrowing. This increase was attributed largely to higher volumes of goods produced, bought, and sold; payments made to suppliers in cash rather than on credit; and opportunities to work year round without work stoppages caused by lack of working capital (Sutoro and Haryanto 1990, p. 8).

Eighty-nine percent of the respondents in the 1996 survey reported that the capital of the borrowing enterprise was larger at the time of their most recent KUPEDES loan than it had been at the time of their first KUPEDES loan. Longer-term borrowers typically reported enterprise growth, increasing sales, and their qualification for larger loan sizes. For example, CS, a farmer in East Java, received his first KUPEDES loan in 1986: an 18-month working capital loan for 300,000 rupiah ($183 in 1986; BRI 1996a, p. 11). Over the next 10 years he received six additional KUPEDES loans, gradually increasing in size to 1.2 million rupiah ($504) in 1996, to finance the cultivation of rice, peanuts, chili peppers, corn, and vegetables. CS reported that during 1992–96 his sales had nearly doubled and that in 1996 he had been able to hire six seasonal employees.

Similarly, LW, the proprietor of a market stall in Central Java, took her first KUPEDES loan in 1990, an 18-month working capital loan for $316.[28] She used the loan to purchase traditional Javanese snacks, candy, crackers, tea, sugar,

Table **12.3** **Excerpts from responses to KUPEDES borrower survey, 1996**

Survey question	Response	Share (percent)
Loan type	Working capital loan	88
	Investment loan	12
Loan purpose	Trade	70
	Agriculture	16
	Industry	6
	Other	8
Gender of borrower	Male	71
	Female	29
Age of borrower at time of survey	<25	1
	26–30	5
	31–35	15
	36–40	19
	41–45	21
	46–50	13
	>50	26
Highest level of education	No school	2
	Primary school	40
	Junior high	28
	High school	26
	University	4
Length of time as a unit desa customer	1–3 years	20
	3–5 years	24
	5–7 years	26
	>7 years	30
Number of KUPEDES loans taken	1	4
	2	14
	3	20
	4	17
	5	14
	6–10	31
Ever late in paying a KUPEDES installment?	No	85
	Yes	15
If yes, reason for late payment	Family needs	45
	Business problems	35
	Other	20
Borrowing enterprise	Primary business	82
	Secondary business	18

(Table continues on next page)

A farmer in East Java reported that during 1992–96 his sales had nearly doubled and that he had hired six seasonal employees

56 percent had renovated their houses and 52 percent had been able to pay more school fees

Table **12.3** **(continued)**

Survey question	Response	Share (percent)
Is the capital of the borrowing enterprise	Larger	89
larger for the most recent KUPEDES	Same	8
loan than for the first?	Smaller	3
Has the use of KUPEDES helped the	Yes	99
borrowing enterprise grow?	No	1
Has the use of KUPEDES helped the	Yes	99
well-being of the borrower's family?	No	1
What effects has the growth of the	Renovated or improved housing	56
borrowing enterprise had on the	Able to pay more school fees,	
borrower's family?	keeping children in school longer	52
	Purchased household goods	33
	Recreation or entertainment	31
	Purchased a vehicle	26
	Installed electricity	21
	Purchased cattle	14
	Installed telephone	11
	Other	7
Friendliness and helpfulness of	Friendly and helpful	98
unit desa staff	Not so friendly or helpful	2
	Unfriendly and unhelpful	0
How quickly is the borrower normally	Quickly	95
served by unit desa staff?	Not very quickly	4
	Slowly	1
Does the borrower find it difficult to	No	81
pay the KUPEDES interest rate?	Yes	19
Time taken to process last KUPEDES	<1 week	76
loan application	1–2 weeks	22
	>2 weeks	2
Time taken to process earlier	<1 week	72
KUPEDES loan applications	1–2 weeks	25
	>2 weeks	3
Reasons for choosing KUPEDES	Already had a long relationship	
	with the unit desa	73
	Quick loan decisions	66
	Easy loan procedures	64
	Good service	62
	Unit located nearby	57
	No other option	21
	Other	7

Table 12.3 (continued)

Survey question	Response	Share (percent)
Does the borrower plan to apply for another KUPEDES loan?	Yes	98
	No	2
Size of planned KUPEDES loan relative to current KUPEDES loan	Larger	81
	Same	17
	Smaller	2
Has the borrower ever been a customer of another bank?	No	90
	Yes	10
If yes, reasons the borrower moved from the other bank to the unit desa	Lower interest rate in unit desa	55
	Unit desa is near house or workplace	42
	Good service	35
	Forms easy to fill out	29
	Quick loan decisions	25
	Many choices of loan terms	15
	Payment plan not difficult	12
	Other	31

Source BRI 1996b

76 percent said they received their loan in a week; only two percent said it took more than two weeks

and other items that she sells in her market stall. LW said that when she first started borrowing from KUPEDES, her monthly sales averaged 3.2 million rupiah ($1,683 in 1990). But by 1995, when she received her seventh loan for 5 million rupiah ($2,166 in 1995), her average monthly sales had more than tripled.

Improving the household's standard of living. Ninety-nine percent of the respondents in the 1996 survey said that KUPEDES loans had helped improve the well-being of their families. Respondents reported further that the growth of their enterprises had enabled them to use their income for a variety of purposes that benefited their families. Fifty-six percent had renovated their houses or made house improvements, and fifty-two percent had been able to pay more school fees, enabling their children to stay in school longer. Others reported installing electricity, a telephone, or both; purchasing household goods; buying a vehicle; or spending for recreation and entertainment.

The 1988 survey had reported that most respondents, after an average of three years of KUPEDES loans, had said their families were better off in that they ate more proteins, kept their children in school longer, renovated their houses, opened savings accounts, and used medical services.

RH, a weaver from South Sulawesi, received a Kredit Mini loan in 1982 and then seven KUPEDES loans of progressively increasing amounts to finance her sarong weaving business (BRI 1996a, p. 13). The Kredit Mini loan was for 150,000 ($216 in 1982). By 1996, her seventh KUPEDES loan was for 2.5 million rupi-

ah ($1,049 in 1996). She employs several of her neighbors, and she reported that her average monthly sales of sarongs had increased more than 10 times during the period she had borrowed from the unit desa. In addition to helping support her family, RH was able to use profits from her weaving business to pay for her siblings to attend university. Other examples of the uses and benefits of KUPEDES loans, as described by borrowers, are provided in volume 1, box 1.1.

Borrowers' views on KUPEDES loan terms and procedures. Respondents to the 1996 survey generally said that they found KUPEDES loans to be suitable for their needs. Eighty-one percent said that they did not find it difficult to pay the KUPEDES interest rate. Eighty-five percent reported that they had never been late in paying a KUPEDES installment; most of the 15 percent who said they had been late on at least one payment of one loan said the reason was "family needs" (45 percent) or "business problems" (35 percent).

Borrowers reported unit staff to be friendly and helpful (98 percent) and to provide quick service (95 percent)

The units were reported to be efficient in making loan decisions. Seventy-six percent of respondents said that they had received their most recent loan within a week of applying for it; only two percent said that it had taken more than two weeks for their loan to be disbursed. Borrowers reported unit staff to be friendly and helpful (98 percent) and to provide quick service (95 percent).

When asked about their reasons for borrowing from KUPEDES, as opposed to other lending sources, 73 percent of respondents mentioned that they had already had a long relationship with the unit desa. Other important reasons were quick loan decisions (66 percent), easy loan procedures (64 percent), good service (62 percent) and the convenient location of their unit desa (57 percent). Nearly all the respondents (98 percent) said that they planned to borrow again from KUPEDES: 81 percent of them planned to borrow a larger amount, 17 percent the same amount, and 2 percent a smaller amount.

Only 10 percent of the respondents said they had ever been a customer of another bank. This corresponds closely with the 1988 study, which found that 92 percent of 192 respondents said no when asked whether they had ever received a loan from a bank or government agency. When asked why they moved to a BRI unit, the 10 percent in the 1996 survey who had banked elsewhere cited the lower KUPEDES interest rate (55 percent), the more convenient location of the unit desa (42 percent), the good service (35 percent), the simpler forms and procedures (29 percent), and the quicker loan decisions (25 percent). The many choices of loan terms and easy payment plans of KUPEDES were also mentioned as reasons for moving to the units. Overall, KUPEDES repayment and profits are high, outreach is wide, and borrowers report being generally satisfied.

KUPEDES Performance, 1984–96

The number and value of KUPEDES loans outstanding from the start of the program in 1984 through 1996 are shown in table 12.4. The quality of the KUPEDES loan portfolio from 1984–96 can be seen in table 12.5.

Table **12.4** **Number and value of KUPEDES loans, 1984–96**

Year	Number of outstanding loans (thousands)	Value of outstanding loans (millions of U.S. dollars)
1984	641	103
1985	1,035	204
1986	1,232	204
1987	1,315	260
1988	1,386	313
1989	1,644	471
1990	1,893	727
1991	1,838	731
1992	1,832	799
1993	1,896	928
1994	2,054	1,117
1995	2,264	1,383
1996	2,488	1,710

Source BRI unit desa monthly reports

Table **12.5** **Loss ratios for KUPEDES loans, 1984–96** (percent)

Year	Long-term	Twelve-month	Short-term	Portfolio status
1984	0 98	0 98	1 40	0.54
1985	1 66	1 84	2 42	2 08
1986	2 23	2 65	2 83	4 50
1987	2 56	2 99	4.83	5 80
1988	3 23	4 55	1 11	7 42
1989	2 92	2.28	0 32	5 39
1990	2 62	2 01	1 56	4 12
1991	3 29	4 86	2 76	8 55
1992	3 32	3 40	3 27	9 10
1993	3 07	2 15	1.23	6 46
1994	2.59	0 70	0.50	4 47
1995	2 29	1 09	1.93	3 49
1996	2 15	1 59	1 30	3 65

Note See box 12 3 for definitions of the four loss ratios

Source BRI unit desa monthly reports

KUPEDES and unit desa savings are nationwide programs, reaching many clients in the Outer Islands as well as on Java and Bali

Outreach and repayment history

In the program's first seven years the volume of KUPEDES lending grew rapidly and the quality of the loan portfolio remained high. Early problems were quickly identified in part through a three-year, three-round survey of KUPEDES implementation in 1 percent of the unit desas.[29] The early implementation difficulties included insufficient information provided by the head office to the branches and units, some overly risk-averse branch managers who permitted few KUPEDES loans to be made, rigid enforcement of collateral rules—especially insistence on full land title, and locally imposed restrictions on lending to particular kinds of borrowers. Except for the reform or retirement of intransigent or incompetent branch managers—which took much longer—most of these problems were overcome within a few years. By 1990 there was $727 million in 1.9 million outstanding loans and the long-term loss ratio (see box 12.3) was 2.6 percent.

The slow growth in the amount of KUPEDES outstanding during 1991–92 was caused primarily by credit restrictions at BRI that resulted from a tight money policy imposed by the government. This policy was imposed from June 1990 until April 1992 to control inflation, which had risen from 6.4 percent in 1989 to 9.4 percent in 1991 (Cole and Slade 1996, pp. 56–65). During this period interest rates on deposits increased sharply and the government put strong pressure on banks to slow lending. The number of outstanding KUPEDES loans decreased slightly in 1991 and 1992, and the rupiah growth of KUPEDES credit was limited during those years.

Also largely as a result of the tight money policy, KUPEDES arrears began to increase in late 1991 and continued to do so until early 1993 (see table 12.5). There were several reasons for the repayment problems of this period. First, some large suppliers and buyers, unable to obtain credit at urban bank branches, decreased or ceased business activities with their local trade partners, many of whom were KUPEDES borrowers. This resulted in cash-flow problems and lower production for some unit desa borrowers. Second, some KUPEDES borrowers, concerned that they might not receive new loans, delayed payment on their current loans. Third, a prolonged drought was followed by heavy flooding and a sharp increase in pest problems in 1991–92; in many areas crop losses were high.

However, BRI—because of its unit desa system—weathered the tight money period better than did most other banks. There were two important reasons, both of which foreshadow aspects of the crisis years beginning in 1997 (see chapter 15). Small savings accounts tend to be stable; unit savers do not take their accounts offshore and BRI had less of a liquidity problem than other banks faced. In addition, the KUPEDES interest rate had a high enough margin to enable the unit desa system to remain profitable in 1991–92 without increasing its lending rate during this period of higher interest rates on savings and lower than usual repayment rates.

By 1992 inflation was down to 7.6 percent; the monetary restraints were lifted in April 1992. The 1992/93 rice harvest was a good one, and the effects

Table **12.6** **Geographic distribution of KUPEDES outstanding loans and unit desa deposits, 1996**

Indicator	Java and Bali	Outer Islands	Total
KUPEDES outstanding loans			
Number (millions)	1 8	0 7	2 5
Share (percent)	71	29	100
Value (billions of U S dollars)	1 17	0 54	1 71
Share (percent)	68	32	100
Long-term loss ratio	1 7	3 5	2 2
Unit desa deposits			
Number of accounts (millions)	10 5	5 6	16.1
Share (percent)	65	35	100
Value (billions of U S dollars)	1 93	1.04	2 97
Share (percent)	65	35	100
Population (millions)[a]	117 6	77 2	194 8
Share (percent)	60	40	100

Note The distribution of loans and deposits shown in table is approximate, the Outer Islands are slightly underrepresented BRI aggregates reported totals by its 15 regional divisions Two of these divisions—Jakarta and Denpasar—are also responsible for loans and deposits from some regions in the Outer Islands that are included in their totals

a Data are for 1995

Source BRI data, Government of Indonesia 1996

The unit desas' return on assets for 1996 was 5.7 percent—much higher than the industry average in Indonesia

of the tight money policy had lessened considerably by early 1993. KUPEDES arrears had also decreased by early 1993; the 12-month loss ratio was 2.15 percent for 1993 and 0.70 percent for 1994.

Overall, during 1984–96 BRI's unit desas lent out $11.1 billion (after adjusting for inflation)[30] in 18.5 million KUPEDES loans. During 1996, 3,595 unit desas made 1.9 million loans, for an average of 158,000 loans per month. At the end of 1996, there was $1.7 billion in 2.5 million outstanding KUPEDES loans. The average loan balance was $684 and the long-term loss ratio was 2.15 percent.

Geographic coverage

The geographic distribution of KUPEDES outstanding loans and unit desa deposits in 1996 is shown in table 12.6. Java and Bali (with 60 percent of Indonesia's population) are somewhat overrepresented in the number of unit desa savings accounts (65 percent) and loans (71 percent), as well as in the value of savings (65 percent) and outstanding loans (68 percent). But KUPEDES and unit desa savings are clearly nationwide programs, reaching clients in the Outer Islands as well as on Java and Bali.

Table **12.7** **Unit desa profits and losses, 1984–96**

Year	Profit or loss (millions of U.S. dollars)	Profitable units		Loss-making units		Return on assets (percent)[a]
		Number	Share of total (percent)	Number	Share of total (percent)	
1984	-23	336	13 6	2,133	86 4	—
1985	-0 8	1,192	48.3	1,277	51 7	—
1986	6	1,647	72 5	626	27 5	—
1987	14	1,887	80 6	454	19 4	—
1988	18	2,090	80.9	495	19.1	—
1989	21	2,253	79 2	591	20 8	—
1990	34	2,708	89 1	332	10 9	3 0
1991	33	2,696	84.0	514	16 0	2 7
1992	41	2,744	85 9	450	14 1	2 6
1993	66	2,918	89 3	349	10 7	3 3
1994	121	3,173	93.7	215	6 3	5 1
1995	174	3,361	95 7	151	4 3	6 5
1996	177	3,412	94 9	183	5.1	5.7

— Not available

a The return on assets calculated by BRI for the unit desas is a pretax ratio Although BRI pays taxes, as a bank division the units do not

Source BRI unit desa monthly reports

The long-term loss ratio is higher on the Outer Islands (3.5 percent) than on Java and Bali (1.7 percent), reflecting the difficulties inherent in building effective management and supervision systems covering numerous units in outlying locations—especially on the world's largest archipelago. Still, with the KUPEDES overall long-term loss ratio of 2.2 percent in 1996, the problem is not severe.

Unit desa profitability

In 1983 there were no profitable unit desas, and BRI wanted to close the system because of its high losses. Table 12.7 shows the percentage of profitable units from 1984 (13.6 percent) to 1996 (94.9 percent; most of the loss-making units in 1996 were ones that had been only recently opened). The table also shows unit desa profits and losses since KUPEDES began in 1984. In 1996 the unit desa system earned $177 million in pretax profits after covering all costs, including the commercial cost of funds, overhead costs (including the costs of supervising the units and the costs of training unit staff and their branch-level supervisors), and loan risk. Because the units are part of BRI, all profits in the unit desa system during the previous year are transferred to BRI's general account at the end of each year.[31]

The unit desas' return on assets for 1996 was 5.7 percent,[32] much higher than the industry average in Indonesia. Because, as a division of BRI, the unit desa system does not pay taxes, BRI calculates the unit desas' return on assets as a pretax ratio. The industry average (after tax) was 1.5 percent in 1996.

The units' profits come from two main sources: revenues from KUPEDES and interest on unit savings deposited at the branches. For the unit desa system in 1996, interest revenue was calculated at 23.1 percent of average earning assets. Interest expenses (10.9 percent) and operating expenses (6.5 percent) totaled 17.4 percent, leaving a net profit of 5.7 percent (Maurer 1999, p. 132).

In 1996 the unit desas accounted for 17 percent of BRI's rupiah loan portfolio and 42 percent of its rupiah deposits. The units' $177 million in profits also covered the losses of the rest of the bank that year ($33 million)—remarkable results for a system BRI had wanted to close just 13 years earlier.

> In competitive financial systems, a 1 percent return on assets is considered an indication of sound financial performance; figures of 2–3 percent are often recorded in the better performing commercial banking systems in emerging commercial markets . . . Whatever common financial indicator is used to assess their performance, the units have earned returns on rural financial intermediation that are well above those in the banking industry . . . In 1995 [the unit desas] achieved a negative subsidy dependence index; the units could have reduced the yield on their loan portfolios by 44.5 percent (from 31.6 to 17.5 percent) and still remained independent of subsidies and earned an adequate market rate of return on equity . . . *A negative subsidy dependence index of 44.5 percent has no equal in rural or microfinance . . . This indicates the "real" profitability that has resulted from effective rural finance intermediation and underscores the tremendous potential for efficient and profitable rural finance in other countries.*
>
> —Yaron, Benjamin, and Charitonenko 1998, pp. 165–68, emphasis added

But the extraordinarily high profits of the unit desa system cross-subsidized wealthier borrowers in the bank's other divisions

The complex issues of the extraordinarily high profits of the unit desa system—and the use of these profits to cross-subsidize BRI's wealthier borrowers in the bank's other divisions—are discussed in later chapters. But the unit desa achievements show clearly that microfinance can achieve—simultaneously and continuously—wide outreach and high profitability. However, there is still large unmet demand for small loans in Indonesia.

BRI's microbanking experience is of great importance for the microfinance revolution. Considering the high costs of borrowing from moneylenders (see chapter 6), there is no doubt that microcredit can be profitably delivered at a fraction of the cost that many low-income borrowers pay informal lenders. In addition, the unit desas have demonstrated dramatically that microfinance institutions can provide savings services profitably to millions of savers, while simultaneously financing their loan portfolios with locally mobilized savings.

Since 1989 KUPEDES has been fully funded by unit desa savings. But the symbiotic relationship between savings and lending in the units extends well

beyond the fact that their savings finance their lending. The relationship exists at multiple levels:

- Most borrowers are also savers.
- Many microenterprises are started with savings and expanded through loans.
- Some small savers in the units have developed the confidence they needed to become KUPEDES borrowers.
- Savings accounts provide the units with good information about the savers' creditworthiness—which is very useful when savers want to borrow.
- Borrowers know that the units, with their savings, are not capital constrained and that they can borrow again if their enterprises qualify and their repayment records are good—and that to a large extent they can thus control their future credit options. (This point is crucial for understanding the performance of the unit desa system during the recent crisis; see chapter 15.)

The unit desas' profitability "underscores the tremendous potential for efficient and profitable rural finance in other countries"

Unit desa clients know that their financial needs are met by a full-service bank, with efficient staff who understand that small business *is* business and who are friendly, helpful, and respectful to their customers. The development of KUPEDES and the growth of savings in the unit desas are closely intertwined. The ways in which the unit desas increased their savings from about $18 million at the time of the June 1983 deregulation to $3 billion in December 1996 are discussed in the next chapter. These are two parts of the same story; one cannot be fully understood without the other.

Notes

1. The unit desas generated $177 million in profit in 1996. The losses of the subsidized programs are not provided because the branches do not report profit and loss by program. But the branches lost $33 million that year.

2. During 1979–90 extensive field work on local finance was conducted in nearly all Indonesian provinces as part of the development of BRI's unit banking system. This research was supported by the Ministry of Finance and was conducted first by Development Program Implementation Studies (DPIS) and then by its successor, the Center for Policy and Implementation Studies (CPIS), in cooperation with BRI. Both received technical assistance from the Harvard Institute for International Development (HIID), funded by the Ministry of Finance.

3. The new president-director, Kamardy Arief, came to BRI from Bank Indonesia, where he had been responsible for rural credit, including the country's subsidized rural credit programs. His attitude toward credit subsidies changed dramatically soon after he was selected to lead BRI's reforms. Commenting that "where you sit has a profound effect on what you think about," he provided exceptional leadership in the unit desas' transition to commercial financial intermediation for low- and lower-middle income people.

4. This quotation comes from a 1987 Bank Indonesia seminar on a case study of savings and credit in Yogyakarta and Central Java, held in collaboration with the Pusat Penelitian Pembangunan Pedesaan (Center for Rural Development Studies) and Gadjah Mada University.

5. This section is based on field research in nine provinces by DPIS from 1979–82 and on field research by BRI and CPIS in nearly all provinces from 1983–90 (see note 2).

6. This perception was deeply entrenched despite the 1980 census report that 47 percent of household heads in rural Java did not work, rent, or sharecrop agricultural lands at their own risk. Of the 53 percent who did, nearly half (43 percent) worked land of less than 0.25 hectares.

7. This section is partly based on DPIS (1983), HIID's Rural Credit Working Group policy memorandums, and Robinson (1997c, 1998a).

8. As coordinator of HIID's DPIS Rice Intensification Project, I drafted this report, which was based on the work of a great many people.

9. The report also provided recommendations on debt relief policies and their implementation in cases of substantial crop loss.

10. The original members of the Rural Credit Working Group were James J. Fox, Donald R. Snodgrass, and I; we worked closely with Marzuki Usman of the Ministry of Finance. In late 1982 the group was joined by Richard H. Patten, and in 1983 by David O. Dapice and C. Peter Timmer.

11. In 1983 average annual inflation was 11.8 percent, and in 1984 it was 10.4 percent. In all succeeding years through 1997 inflation was below 10 percent.

12. Effective KUPEDES interest rates vary somewhat depending on loan maturity and payment schedule.

13. The practice of simultaneous implementation of opposite approaches through different channels is common in Indonesia. Two other examples come from BIMAS. The village cooperatives (Koperasi Unit Desas, or KUDs) were established as the sole suppliers of subsidized inputs to BIMAS participants. Severe problems caused by this approach were perceived early, however, and in 1976 the government permitted widespread private participation in the distribution of subsidized fertilizer, except through the BIMAS program. After the 1976 decision the share of KUDs in the rapidly growing market for fertilizer plunged from 74 percent in 1975 to about 18 percent in 1982, while fertilizer use rose rapidly. Similarly, although it had been planned that KUDs would be the primary agents for purchases of paddy from farmers, this marketing plan did not work well. When it was discovered that most paddy was purchased from farmers by private traders, bypassing KUDs, it was decided to continue the marketing function of KUDs, which were typically run by local elites, but to allow farmers to market their paddy as they wished.

14. These figures are not adjusted for inflation because I do not have the KUT loan amounts and overdues by year. However, average annual inflation was single digit in all years between 1985 and 1990.

15. For discussion of KUPEDES, see Sugianto (1989, 1990a, 1990b); Sutoro and Haryanto (1990); Robinson (1991, 1992b, 1994a, 1995b, 1995c, 1997c, 1998a); Snodgrass and Patten (1991); Patten and Rosengard (1991); Gonzalez-Vega (1992); Martokoesoemo (1993); BRI (1996a, 1996b, 1997a, 1997b, 1998b); Boomgard and Angell (1994); Hook (1995); Moeljono (1996); Mosley (1996); World Bank (1996); Yaron, Benjamin and Piprek (1997); Yaron, Benjamin, and Charitonenko (1998); Charitonenko, Patten, and Yaron (1998); Institute for Development of Economics and Finance and BRI (1999); Patten, Rosengard, and Johnston (1999); and Maurer and Seibel (forthcoming). For additional references, see volume 1, chapter 2, note 16.

16. Additional funding for KUPEDES was later supplied by two World Bank loans—one in 1987 for $97 million and one in 1990 for $120 million. But because these loans were made after the units had already mobilized substantial savings, they were not needed to finance the KUPEDES portfolio. By 1989 the units had more savings than outstanding loans, and the World Bank loans were used primarily for other BRI purposes.

Nevertheless, the international recognition that these loans conferred on the units was important politically in Indonesia, and the review procedures for KUPEDES performance instituted under the loan agreements helped to encourage transparency during the expansion of KUPEDES. The first loan, signed in May 1987, was for $96.7 million; the interest rate was set at the average rate of all BRI interest-bearing accounts. To encourage savings mobilization in the unit banks, a limit was placed on the World Bank loan funds that could be drawn: 65 percent of the increase in the amount of outstanding loans in the first year and 60 percent in the second year. The second loan, signed in August 1990, was for $120 million; funds could be drawn monthly at 5 percent of the loan or 30 percent of the increase in the amount of outstanding loans during the preceding month (whichever was lower). The interest rate for the second loan was set at the three-month rate of the central bank's Sertifikat Bank Indonesia (SBI), or the average rate of the five state-owned banks for three-month fixed deposits (whichever was lower) Both loans were made for 20-year durations, including a grace period of five years. In addition, in 1989 the Export-Import Bank of Japan provided a $28.2 million loan for KUPEDES. The interest is the average rate of all BRI interest-bearing accounts, and the loan was made repayable semiannually over a 15-year period starting in September 1991.

17. This section and the one that follows draw on two BRI unit desa information modules (BRI 1996a, 1997b) prepared under a BRI–U.S. Agency for International Development cooperative agreement for the International Visitors Program, with technical assistance from HIID. In addition, Richard M. Hook, Don E. Johnston Jr., and Patricia Markovitch provided helpful information. Except where specified otherwise, the discussion of KUPEDES characteristics, implementation, outreach, and performance in this chapter refers to 1996. KUPEDES in 1997-2000 is examined in chapter 15.

18. This percentage breakdown probably understates the amount of KUPEDES loans for investment capital. Because less documentation is required for working capital loans, these loans tend to be preferred. Some borrowers use working capital loans at least partly for investment purposes.

19. KUPEDES working capital loans were not subsidized, but a 3 percent liquidity credit was provided by Bank Indonesia for KUPEDES investment loans.

20. In 1990 working capital and investment loans were both provided at a 1.5 percent a month flat rate for the first 3 million rupiah and a 1.0 percent a month flat rate for the amount above 3 million rupiah. In 1991 the KUPEDES interest rate was changed to a 1.5 percent a month flat rate for working capital and investment loans of all amounts. Subsequent interest rate changes have applied to both types of loans.

21. The effective interest rate would be somewhat higher if the borrower's loss of the use of the prompt payment incentive funds during the loan period were included in the calculation.

22. In 1983, when the Rural Credit Working Group calculated the interest rate that would be needed for a two-year break-even period, we did not have a good estimate of the portion of borrowers who would repay on time and have their incentive payments returned, and those who would repay late and forfeit their payments. We estimated, in a way that we thought would be conservative, that a relatively high number of borrowers would be late on at least one payment. But with KUPEDES repayment rates at 98 percent or higher during 1984–85, we had to recalculate and show that KUPEDES might break even somewhat later than predicted since a smaller amount would be forfeited to the bank than had been estimated. In the end, however—even with a high repayment rate—the unit desa system broke even in just under two years, as estimated.

23. In 1994 the unit desas began a pilot project, KUPEDES Skala Kecil (Small-scale KUPEDES) offering small loans without collateral. Loans for less than 500,000

rupiah ($210 in 1996) were provided for maturities up to one year. In August 1997 KUPEDES Skala Kecil, operating in 432 unit desas in four BRI regional offices, had $1.1 million in 10,891 outstanding loans, for an average loan balance of about $100. Portfolio status (overdue principal installments relative to total principal outstanding) was just 0.59 percent. Noncollateralized small loans have since been incorporated to some extent into KUPEDES lending. But there is still considerable scope for expansion of this approach.

24. A fifth measure, portfolio at risk, is not used at the units although BRI has said that it might be a useful addition (BRI 1996a, p. 11). Portfolio at risk is a measurement of portfolio quality defined as the total outstanding balance of loans with late payments divided by the total outstanding balance of the loan portfolio.

25. This section draws in part on BRI (1996a, 1997b).

26. The 1988 survey had two components: a survey of 1,404 respondents and a smaller, more detailed study of 192 respondents drawn from the larger survey. The references made here refer to the smaller of the two surveys (which contain most of the survey questions) unless otherwise specified.

27. Because the sample consisted only of current KUPEDES borrowers, no information is available about previous KUPEDES borrowers who did not have outstanding loans at the time of the survey.

28. This account is from an interview conducted by BRI's International Visitors Program in 1997.

29. The three rounds, carried out by BRI, CPIS, and HIID teams, surveyed 36 unit desas in 19 BRI branches in 9 provinces. See Patten and Snodgrass (1987).

30. See volume 1, table 2.3, note a for method of calculation.

31. Because the units do not retain their earnings from year to year, return on assets is generally used to measure the system's profitability. However, see Yaron, Benjamin, and Charitonenko (1998) for an analysis of the unit desas' return on equity from 1990–95, based on start-of-year equity. "The [unit desa] system has been exceptionally profitable by any banking standards. Whereas banks in low-inflation countries might earn 15–20 percent (after tax) on their average annual equity, BRI-UD [unit desa system] earned more than 60 percent on its average equity in 1990 and 1991. By 1995 this figure had more than doubled to 136 percent. When net income is measured against start-of-year equity, the return on equity increases to about 90 percent in 1990 and 1991, rising to an astounding 407 percent by 1995 (a net income of 403 billion [rupiah] on a start-of-year capital of 99 billion [rupiah])" (p. 164).

32. The decrease in the unit desas' return on assets from 1995 to 1996 was due primarily to an increase in loans with the new lower interest rates in effect in 1996, and to an increase in the interest paid on depositors' savings.

13 Mobilizing Massive Savings: Bank Rakyat Indonesia's Unit Desas, 1984–96

In 1984, as the KUPEDES commercial credit program got under way, Bank Rakyat Indonesia's (BRI's) managers and advisers tried to answer three questions. Could the bank learn in what forms and for what purposes low-income households in developing countries save?[1] Could it provide savings instruments and services that meet the needs of low-income savers better than the savers could meet their needs themselves? And could it price those instruments and services in such a way that savings mobilization finances the loan portfolio and contributes to unit *desa* profitability? In hindsight, the answer to all three questions was yes.

After a decade of offering savings accounts, BRI's unit desa system had only $18 million in savings when financial sector deregulation began in June 1983 (see chapter 12).

This low level of deposits was widely—but wrongly—attributed to an assumed lack of demand for financial savings instruments: it was believed that rural people were unable to save, unwilling to save in financial form, and did not trust banks. In fact, the problem was with the banks (which did not understand the nature or the extent of the demand for rural savings services) and with the government (whose regulations made it impossible for banks to meet this demand profitably).

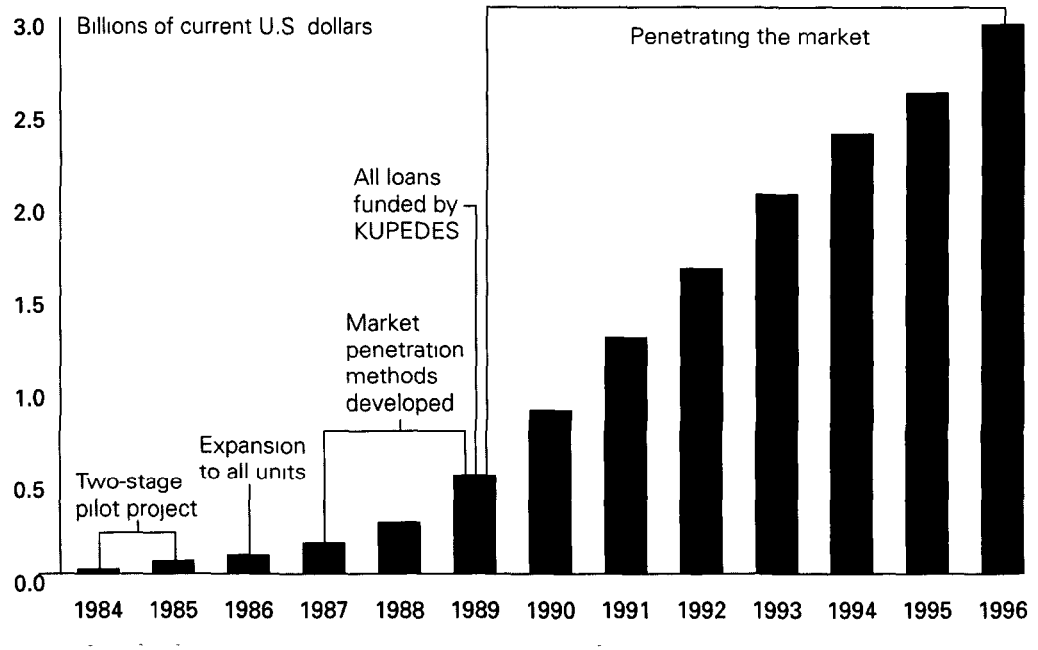
The Harvard Institute for International Development's (HIID's) 1983 Development Program Implementation Studies (DPIS) report on rice intensification and the role of the unit desas (see chapter 11) recommended that in conjunction with the introduction of KUPEDES, the unit desas greatly increase their efforts to mobilize rural savings. The savings program was developed in three phases: research and design of a new savings program and testing of the program in a two-stage pilot project (1984–85), the phased expansion of the new program throughout the country (1986), and development of methods for market penetration (1987–89).

It was widely believed that rural people were unwilling to save in financial form. In fact, the problem was with the banks and the government

Figure 13.1 shows how unit savings developed at each of these stages. The effects of this effort to build a high-quality savings program are shown there in detail. By the end of 1989 the unit desas had designed and tested appropriate products, established an organization able to deliver these, and developed effective techniques for penetrating the market for savings mobilization. In 1989 all KUPEDES loans were funded by unit savings, as they have been ever since. Thus it took six years from the first stage of demand research to a successful savings program implemented nationwide.

After 1989 the units achieved steadily increasing penetration of the Indonesian market for rural savings and, with the opening of urban units in 1989, urban savings in low-income neighborhoods. Between 1989 and 1996 the value of unit savings increased by more than 450 percent, from $534 million to $3 billion. (Average annual inflation was in the single digits throughout that period.) The number of savings accounts increased 155 percent, from 6.3 million in 1989 to 16.1 million in 1996. Even when the country entered a period of severe crisis in 1997, the number of savers and the amount of savings in rupiah terms continued to grow steadily (chapter 15).

Figure **13.1** **The evolution of microsavings in the unit desas, 1984–96**



Source BRI unit desa monthly reports

Traditionally much of the savings of rural Indonesian households was held in nonfinancial forms such as grain, gold, and animals (see chapter 7). Many villages had rice banks where rice could be saved and borrowed. But as the economy became more monetized, it also became common to hold cash savings in the house. Although people continued to save both in kind and in cash, many said that they would prefer to hold some of their savings in financial institutions if secure, convenient institutions and appropriate products and services were available.

Their reasons centered around the problems associated with saving in other forms. Gold and cash present security risks. Grain is too apt to be borrowed. Caring for more than a few animals represents an unacceptable opportunity cost to many households, especially those in which the adults are working and the children are in school. Raw materials (wood, cloth, leather) for microenterprises take up space and may deteriorate in storage. And land purchase often requires a long wait before an appropriate match is found among land size, type, location, and selling price.

Problems of opportunity cost and liquidity were clearly perceived. For example, in densely populated areas where fodder was scarce and space limited, taking care of more than a few animals was considered too time consuming. As one Javanese farmer said, "Now we have more work opportunities than in the past, and the shepherds are all in school. If we put all our savings in animals, who will take care of all of those animals?" Another commented, "When you have to pay the school fees, you cannot sell the cow's leg."

Informal financial savings opportunities abound in Indonesia, in ubiquitous rotating savings and credit associations (ROSCAs, known as *arisan*) and other informal savings and credit associations. These were, and are, very popular. But as a savings mechanism, they too have problems. Returns are often unavailable or uncertain. In addition, the members' funds are, to varying degrees, illiquid, and the amount of their savings is publicly known. There is also a risk that members who have received their payout will not continue to make their payments (chapter 7).

Another method of savings is to store funds with a member of the community. Thus some farmers store excess liquidity with their commodity buyers, employees with their employers, and sharecroppers with the owners of the land they cultivate. Again, however, this approach carries some risk and generally provides no returns. Savers could also put their savings in Bank Perkreditan Rakyat (People's Credit Banks, or BPRs; see chapter 9). But BPRs were not located in all areas of the country. In addition, while many BPRs were financially self-sufficient, many others had high default rates, putting savers' money at risk. Thus until 1984 there was no uniformly available method of saving in rural Indonesia, formal or informal, that was generally suitable for rural demand.

How did the units move from dismal failure in mobilizing savings during 1970–83 to spectacular success since 1984? The basic principles of unit desa savings mobilization are building trust; pricing for profitability; offering savers a combination of security, convenience, liquidity, confidentiality, service, and returns; and providing staff with training and incentives—while holding them responsible and accountable for performance (box 13.1). The rest of this chapter considers how these principles were developed and implemented in the unit desas.

It took six years from the first stage of demand research to a successful savings program implemented nationwide

Why Did BRI Emphasize Savings in Its Unit Desas?

There were suggestions in 1983 and 1984 that with the new KUPEDES commercial loan program, the unit desas could become self-sustaining even without substantial savings mobilization. There was also concern that it would be too difficult for staff to implement savings mobilization and KUPEDES simultaneously. In addition, many people had strong doubts that there were rural savings worth mobilizing; others thought increased collection of rural savings would be too costly and could jeopardize the viability of KUPEDES. But there were three main reasons that the government decided that the credit and savings components of the newly commercialized unit desas would be planned and implemented together.

To finance the demand for credit and enable institutional sustainability

In the early 1980s the Indonesian government was anticipating declining oil revenues and seeking increased private savings and investment. In this context it was decided that extensive long-term funding for a nationwide rural credit

"Now the shepherds are all in school. If we put our savings in animals, who will take care of the animals"

Box 13.1 Basic principles of unit desa savings mobilization

The fundamentals of unit desa savings mobilization are building trust, offering savers security, convenience, liquidity, confidentiality, service, potential access to loans, and returns, pricing for profitability, and providing staff with training and incentives, and holding them responsible and accountable for performance

Security, convenience, service, and outreach

- The bank must be, and must be perceived as, trustworthy
- The location of the units and their working hours are arranged to be convenient for clients
- Clients are treated with respect and given high-quality service
- Savings are collected from the public

Products and pricing

- A choice of several savings instruments with different ratios of liquidity and returns is available, savers maintain as many accounts of whatever types they wish
- Labor-intensive, and therefore costly, savings products have interest rates that are tiered depending on the minimum monthly balance in the account The rates range from no interest for very small accounts to market rates for the largest accounts
- The interest rates of savings instruments are set so that the spread between the blended cost of funds of the savings products and the KUPEDES loan interest rate is maintained at a level that permits unit desa profitability
- Units with excess savings deposit them at their supervising branch and receive interest on these deposits, units in which savings are insufficient to finance loans borrow from their branch and pay interest The transfer price—the interest rate for the units' saving and borrowing at the branches—is set monthly by BRI The transfer price serves as a signal from the head office to indicate when the relative emphasis on savings and lending needs to be shifted. For example, if BRI wants the units to mobilize more savings or to slow the rate of growth of lending, the transfer price is raised
- Cash management is implemented so that cash is routinely available at the units to meet withdrawals and to finance loan disbursements
- Some savings products permit accounts to be held in the name of institutions or organizations
- Lotteries with attractive prizes are provided for some savings instruments, with free lottery tickets given to savers in proportion to the minimum monthly balance in their accounts The drawings are used as vehicles for publicity
- Savers may use their accounts to build credit ratings, savings accounts can also be used as collateral for KUPEDES loans.
- Savers' accounts are kept confidential

Staff training and incentives

- Unit staff and their branch supervisors are well trained in learning from the local population, in systematically identifying potential savers, in helping clients use the different products offered at the units, and in maintaining good long-term relationships with savers
- Unit staff and branch supervisors are provided performance-based incentives, both in cash and in institutional recognition

program could not be committed from Bank Indonesia, the central bank. Instead KUPEDES would be financed by locally mobilized savings. It was correctly anticipated that meeting the country's demand for microcredit would

eventually require far more funds than had been required for all previous rural credit programs combined, and that this demand could be profitably financed with locally mobilized deposits.

To limit government risk

The proposed rural credit program was considered too risky for long-term commitment of central bank funds. It was well known that many rural credit programs in Indonesia and other developing countries had a history of high defaults and losses. No sustainable large-scale model of rural financial intermediation could be found in any developing country. Indonesia's economics ministers recognized the potential for a banking system that would provide commercial microfinance throughout the country and supported its introduction with government funding. But they also recognized the need to limit government risk.

"When you have to pay the school fees, you cannot sell the cow's leg"

To encourage rural savings mobilization

As part of the wider policy of encouraging private savings, the government wanted to provide institutional capacity to meet what was accurately estimated as large potential demand for savings services in rural areas. It was thought that an approach that offered savings instruments specifically designed to meet local demand could generally provide customers with positive real returns, while also helping to build the long-term viability of BRI's unit banking system. Both results would contribute to economic development in rural areas. From the start the aim was to provide loans to low- and lower-middle-income borrowers, but to collect savings from the public—individuals ranging from the poor to the wealthy, as well as associations and institutions—that lived, worked, or operated near a unit desa.

Developing and Testing the New Savings Program

KUPEDES began nationwide in February 1984 with the understanding that a new program of savings mobilization in the unit desas would follow.[2] BRI decided that the savings program would be developed more gradually than KUPEDES for two reasons. First, there was less urgency to begin quickly in savings mobilization and less information about demand. Second, given the unit desas' continuing losses and large fixed costs, the imminent termination of BIMAS, and the start of KUPEDES in all unit desas simultaneously, unit staff would have to devote their full attention in the first year to introducing the new credit program and taking on the responsibilities that accompanied it (see chapters 12 and 14).

In 1984 BRI and the Center for Policy and Implementation Studies (CPIS) expanded their cooperation to include work on the new savings program.[3] A small group began research and planning for the new savings program, while the rest of the unit desa management and staff worked to get KUPEDES under way. The new savings program was designed and tested in 1984–85 and implemented nationwide in 1986. There was considerable internal opposition dur-

ing 1983–84 to the start of a major savings initiative. But as unit desa deposits in the pilot projects began to increase dramatically in 1985, an old proverb came to be quoted in BRI: "The people who say it cannot be done should not interfere with the people doing it."

Early field research

Building on the DPIS and CPIS research on local finance that had been carried out for the Ministry of Finance since 1979, in 1984 BRI's unit desa system began to focus specifically on analyzing the demand for different kinds of savings instruments. CPIS, with assistance from HIID, conducted extensive research with BRI into formal, quasi-formal, and informal savings methods in rural areas. People in many parts of the country were asked what they liked and did not like about their present forms of savings. Individuals, owners and managers of small and microenterprises, and leaders of organizations were queried about their actual forms of saving and their preferred savings alternatives.[4] The aim was to design an institutional savings program that would meet the savers' demand in better ways than they could accomplish by themselves.

In 1983 no sustainable large-scale model of rural financial intermediation could be found in any developing country

These studies offered substantial evidence for two conclusions.[5] First, economic growth and monetization had created a large, unmet demand for savings services. Many villagers wanted to save in banks and to convert some of their nonfinancial savings into institutional deposits—if suitable deposit products and services could be made available.

Second, there was extensive demand in rural areas for a liquid financial savings instrument, not then available at the unit desas. Tabungan Nasional (TABANAS), the national savings program administered by Bank Indonesia, was the only deposit instrument offered at the unit desas, and it limited withdrawals to two per month.

When people were asked why they did not use TABANAS, which had been available through the unit desas since the early 1970s, the replies were nearly identical. From one end of the country to the other, respondents said that the restriction on withdrawals was unacceptable. As a Sulawesi woman said, "If there is a family emergency and we cannot withdraw our savings, then what will happen to us?" Or as a Javanese farmer put it, "Suppose we had withdrawn twice already and then there was an emergency. We would be *malu* to ask to withdraw again." Malu, a word with a wide range of meanings in Indonesian and not easily translatable, essentially means to be ashamed. A poor saver would feel malu to request a forbidden withdrawal from a government bank. Many people said they would be afraid to request a third withdrawal, even in an emergency.

In 1984 field work was carried out in six districts of Java and Bali to begin identifying the needs of rural savers and analyzing their savings methods, income flows, and reasons for saving. The study encompassed both the demand for savings facilities and the villagers' views on saving in whatever local financial organizations were locally available—ROSCAs, cooperatives, People's Credit Banks (BPRs), and the like.

For the most part ROSCAs were viewed positively but peripherally. They were generally not considered suitable for long-term savings or, because of illiquidity and lack of confidentiality, for the main savings of a household or enterprise. And it was recognized that they are risky. Some of the people interviewed had lost their savings in ROSCAs. Some local credit organizations required compulsory savings but were not permitted to mobilize voluntary savings. Others offered voluntary savings, but many institutions were tainted by corruption and were not trusted. As a farmer in Central Java put it, "I would be afraid to put my savings in the village cooperative. Maybe they would use it to cover their losses." Except for some of the People's Credit Banks and Bank Dagang Bali, there were few institutions that offered voluntary savings instruments for the public *and* were widely trusted.

BRI deposits, however, were implicitly guaranteed because BRI is a government bank. Although there was no formal deposit guarantee, it was widely believed that savings were safe at BRI because it is a state-owned bank.

The CPIS/BRI report on the research findings stated:

> Based on our impressions during the last five years of fieldwork:[6] (1) economic growth has far outstripped banking facilities in many rural areas; (2) considerable excess liquidity is presently found in the villages; (3) traditional forms of savings (animals, gold, grain) are often unsuitable for modern village conditions; (4) there is widespread demand for savings accounts that are secure, convenient, and liquid; (5) the BRI has a strong comparative advantage in the rural areas . . . If attention is given to offering a wider range of financial instruments; if the unit desa system undergoes some reallocation of resources in order to improve the physical accessibility of banking services for customers; and finally if initiatives are taken in marketing, advertising, and training, the BRI unit *desas* should be able to raise sufficient savings to support the volume of lending required to make the system self-sufficient.
>
> —CPIS Rural Savings Report 1, 1984a, pp. 2–4.

The aim was to design an institutional savings program that would meet the savers' demand in better ways than they were able to accomplish by themselves

The planning stage

Six main ideas emerged from the field research on savings and the early experiences of KUPEDES, and these were used in the design of the new savings program:

- Liquidity is the primary key to mobilizing rural savings.
- Developing clients' trust in the institution would be essential.
- Security and convenience are crucial.
- A combination of several savings instruments would be needed to meet the varied demand.
- Deposits could be mobilized not only from individual households, but also from the many groups, associations, and institutions operating in rural areas.

- Deposit instruments offering different ratios of liquidity and returns could simultaneously meet demand and, in combination with KUPEDES, permit institutional profitability.

The emphasis was to be on developing a microbanking system that would provide financial services nationwide and be stable, profitable, and viable for the long run. Savings and loans would be designed, revised, priced, and implemented together. Because in its post-1983 form the unit desa system was a large experiment with a number of unknowns, BRI decided that the spread between loan and deposit interest rates would be relatively large in the beginning, both to protect against risk and because it was anticipated that the system would be somewhat inefficient at first.

Few institutions offered voluntary savings instruments for the public and were widely trusted

The design for the savings program incorporated four instruments. Village Savings (Simpanan Pedesaan, or SIMPEDES), a deposit instrument that would permit an unlimited number of transactions, was designated the flagship of BRI's new rural savings program. SIMPEDES would be aimed at rural households, firms, and organizations that demanded full liquidity as well as returns.

TABANAS would be continued, and Deposito Berjangka, a time deposit instrument previously available at BRI only through its branches, would now be offered at the unit desas as well. The fourth instrument, giro, a type of current account used primarily by institutions with special requirements, would be made available at the unit desas as well as at the branches.

A transfer price mechanism was established. Because the unit desas are not independent entities, they cannot place their funds on the market. Instead units are required to deposit excess liquidity in an interest-bearing account at their supervising branch; units in deficit borrow from their branch. The interest rate is set monthly by BRI's head office. To encourage savings mobilization, the transfer price was set at a rate higher than the highest time deposit interest rate; it would then be cheaper for a unit to mobilize savings than to borrow from its branch.

The transfer price could stimulate savings mobilization only because the units were now treated as individual profit centers, and because staff incentives were provided for unit profitability. Previously, when there had been no possibility of unit profitability, savings mobilization could not have been encouraged through the transfer price. Over time the transfer price has served as a signal from the head office to indicate when the relative emphasis on savings and lending is to be shifted, and incentives motivate staff to direct their efforts where needed. For example, during the tight money period in the early 1990s, as well as in the crisis that began in 1997, the transfer price was set high to encourage additional savings mobilization.

The first SIMPEDES pilot project

By mid-1984 enough progress had been made on the design of SIMPEDES to suggest that a pilot project should be the next step. The purpose of the pilot would be to test the instrument, to develop methods of estimating and locat-

ing savings potential in the pilot area, and to learn how to train the staff in savings mobilization. In order not to confuse issues in the pilot branch or overload the unit staff, the introduction of the time deposit and giro accounts in the units was postponed until a later stage. TABANAS would be continued as usual in the units of the pilot branch; the pilot would focus entirely on SIMPEDES.

The 27 unit desas of BRI's branch in Sukabumi District, West Java, were selected for the pilot because they were located in a largely rural district within a two-hour drive of Jakarta (important for supervision of the pilot by the head office); because they had an above average, but not exceptional, record; and because Sukabumi was a large branch with units located in different kinds of areas with multiple economic activities.

Deposits could be mobilized not only from individual households, but also from the many groups, associations, and institutions operating in rural areas

Estimating the demand for savings services. As a first step in preparing for the pilot project, CPIS/BRI teams visited Sukabumi villages and began developing ways of estimating demand for unit desa savings instruments.[7] Because there was considerable skepticism among many BRI managers and staff about rural savings potential, a conservative approach was taken in estimating demand for BRI savings services. The research teams thought, correctly as it turned out, that even an extremely conservative approach would provide estimates so much greater than current unit savings that BRI would realize that a major increase in savings was possible.

Accordingly, it was assumed that:

- On average, 10 percent of the income of the 40 percent of households in Sukabumi with the highest annual incomes would be available for savings in some form, and that 20 percent of that amount (2 percent of their estimated annual income) would be deposited in the unit desas in the first year of the pilot project.
- On average, 0.5 percent of the income of those households represented present savings that would be captured by the units within the first year.

A more realistic but still conservative estimate of savings available to the units would have been based on perhaps 5 percent of the income of the 60 percent of the households with the highest incomes; it would also have included higher deposits from stocks. But the aim was an estimate based on assumptions so conservative that there would be no objection to them at BRI.

The subdistrict of Jampangkulon was selected for the study on rural demand for savings services. The study covered the 20 villages (14,398 households) that comprised the service area of the Jampangkulon unit desa.

Two main data sources were used for the Jampangkulon household income data; these were then cross-checked against each other. The first, the 1981 SUSENAS[8] income figures for the 40 percent of households in rural West Java with the highest incomes, were used to estimate the income of Jampangkulon households with potential savings. As noted, it was assumed that 2 percent of

the income of those households would constitute the potential for unit desa savings. However, households with reported annual incomes below 300,000 rupiah ($279) were excluded even if they were among the top 40 percent of income earners. Using this method, the estimate for potential unit desa savings from income flows in the 20 Jampangkulon villages was 59 million rupiah ($54,934) for the first year of the program. However, SUSENAS is believed to underreport income significantly, and it was realized that the actual savings potential was likely to be larger.

The second source of data, a field study of 17 of the 20 Jampangkulon villages, was undertaken by BRI/CPIS teams. In previous DPIS/CPIS field work in West Java, it had been learned that each village maintained a written list of households classified into categories based on their incomes and assets. Assignments of households to particular categories were made by the officials of each village and reviewed in a village meeting. The classifications were used to determine the annual contribution each household was required to make to the village. These contributions were used to provide the matching resources from the villages that are required as a condition of the government's annual village development grants (INPRES Desa). Different villages had developed different economic categories, but all the villages visited in West Java had such lists.[9]

The unit desas' first year's savings potential from 20 villages served was estimated at nearly 9 times the units' 1984 balance

The research teams were able to obtain these lists from village leaders. Both formal and informal village leaders were asked to estimate the average net income for the households in each category on the village list. This approach typically engendered discussion and debate among the leaders, and eventually a general consensus. Using these data, the teams estimated potential unit savings. In the 17 villages visited, 2 percent of household income flows amounted to 65.8 million rupiah ($61,266), compared with 59 million rupiah ($54,934) for all 20 villages, using the SUSENAS data. Given that the latter tend to underreport income, the results were very close. CPIS Rural Savings Report 2 (1984b, p. 10) commented, "We consider that these two methods [of estimating income], one using micro data and the other using macro data, constitute a check on each other, and that the results agree."

Finally, some additional conservative assumptions were made about other savings that could be mobilized by the unit desas from savings from stocks (estimated, as noted, as 0.5 percent of annual household income) and the excess liquidity of local associations and institutions. Adding these to the estimates of potential household savings from income flows, the total savings potential for the 20 Jampangkulon villages for the first year was conservatively estimated at $78,000—nearly nine times the subdistrict's unit desa savings of $9,032[10] on 31 September 1984.

Starting the SIMPEDES pilot project. SIMPEDES, a fully liquid instrument with no limit on the number of transactions, was introduced in the unit desas in Sukabumi on 1 November 1984. It was, and remains, a unit desa instrument; it is not offered to BRI's branch clients. The interest rate was set at 12 percent a year[11] on the minimum monthly balance; this was lower than

the 15 percent annual interest rate then paid on TABANAS deposits of 1 million rupiah ($931) or less.[12] But the results of the demand studies had convinced BRI that the liquidity of SIMPEDES would compensate for the difference in interest rates. In addition, SIMPEDES interest was compounded and posted monthly, whereas TABANAS interest was not compounded and was posted annually.

Also in contrast to TABANAS, SIMPEDES permitted deposits to be made in the name of organizations and institutions. Field research had indicated that many members of formal and informal rural organizations would welcome the opportunity to deposit group funds in an account held in the name of the organization. The members of such groups generally preferred this arrangement to the customary one under which jointly held savings were kept in the home of the group leader or treasurer, thus providing opportunities for (reportedly frequent) corruption. SIMPEDES was, therefore, designed in part to meet this latent demand from organizations and institutions.

Lotteries, adapted from BDB, were held quarterly for SIMPEDES savers. The number of SIMPEDES lottery coupons a depositor held was determined by the minimum monthly balance in her account. The lottery prizes were awarded in a district-level ceremony; local dignitaries were invited and the festive setting was used as an occasion for BRI to provide information about the unit desa system and its products and services. Although Bank Indonesia had held national-level lotteries for TABANAS for years, there was little interest in these because they were too remote; no one we interviewed knew anyone who had won a TABANAS lottery. No one even knew anyone who knew anyone who had won. But a district-level lottery generated excitement because it was local.

At the end of October 1984, after nearly a decade of offering TABANAS savings accounts, deposits totaled $161,060 in the unit desas of the Sukabumi branch. Shortly before the SIMPEDES pilot project pilot began, I asked a high-level Sukabumi branch officer how long he thought it would take for the Sukabumi unit desa deposits to double. He replied that if things went very well, deposits might double in five years.

Two months after the SIMPEDES savings product was introduced, Sukabumi's unit desa deposits had more than doubled

Early results of the pilot project in Sukabumi. The first pilot project in Sukabumi quickly showed evidence of huge demand for the SIMPEDES instrument.[13] By the end of December 1984, two months after SIMPEDES was introduced, Sukabumi's unit desa deposits had more than doubled, from $161,080 to $438,826—an increase of 172 percent (table 13.1).

This rapid increase was caused, in part, by the fact that the timing of the pilot project coincided with the government's annual disbursement of village grants under INPRES Desa.[14] As part of the pilot project, these funds were, for the first time, deposited in the 162 village bank accounts that were opened in unit desas throughout Sukabumi (one account per village). The total amount deposited from this source was $150,837; the funds could be withdrawn by the villages in January 1985. In addition, the government purchased land from Sukabumi residents during this period, and $30,726 of the deposit total represents

Table **13.1** **Unit desa savings in the Sukabumi pilot project, 31 October–31 December 1984**

	TABANAS		SIMPEDES		Total	
Date	**Amount (thousands of U.S. dollars)**	**Number of accounts**	**Amount (thousands of U.S. dollars)**	**Number of accounts**	**Amount (thousands of U.S. dollars)**	**Number of accounts**
31 October 1984	161 1	7,181	n a	n a	161 1	7,181
31 December 1984	153 0	7,030	285 8	2,655	438 8	9,685
Change (percent)	-5 3	-2.1	n a	n a	172 4	34 9

n a Not applicable

Source CPIS Rural Savings Report 3, 1985a

But it soon became evident that SIMPEDES in the pilot project was a highly labor-intensive—and therefore expensive—instrument

a few large deposits from the land sales. But even if these special sources of funds are excluded, Sukabumi's unit desa savings rose dramatically in two months: from $161,080 to $257,263, an increase of 60 percent. By the end of 1984, when SIMPEDES was only two months old, it accounted for 65 percent of the value of savings and 27 percent of the number of savings accounts in the unit desas of the Sukabumi branch.

To put the early pilot experience into perspective, it must also be noted that after the 1983 financial reforms, unit desa savings had increased elsewhere in the region as well, although to a lesser extent than in Sukabumi. The unit desas in the 30 other subdistricts of BRI's West Java regional office increased their savings from $3.3 million at the end of October 1984 to $4.3 million at the end of December 1984, an increase of 30 percent.

It rapidly became apparent that the Sukabumi pilot project would be successful in mobilizing savings. Because of the popularity of the instrument, more SIMPEDES accounts were added daily. But it soon became evident that SIMPEDES as implemented in the Sukabumi pilot project was a highly labor-intensive—and therefore expensive—instrument.[15] There were many reasons for the high labor costs including the numerous SIMPEDES transactions, the units' greatly increased bookkeeping and reporting, the work involved in the monthly compounding and posting of SIMPEDES interest, new arrangements for cash management and security, activities related to the SIMPEDES lottery, and promotional efforts. In order to close the books for the day, unit staff frequently found themselves working until late at night.

Either additional staff would have to be employed at the units, raising costs, or the savings workload would cut into KUPEDES lending, lowering income and increasing risk. In either case profits would decline in the Sukabumi unit desas. It was decided, therefore, that SIMPEDES would have to be revised before it could be expanded to other areas.

In keeping with BRI's new priorities on learning customers' views, it was decided to conduct additional research in Sukabumi villages to determine

Table **13.2** **The most important characteristic of SIMPEDES: responses of 144 SIMPEDES savers in the Sukabumi pilot project, January–February 1985** (percent)

	Account size		
	"$47	>$47	All respondents
Characteristic	(N=120)	(N=24)	(N=144)
Unlimited withdrawals	60	84	64
Maintaining at least the current interest rate	5	4	5
Lottery prizes	31	8	27
Interest posted monthly	4	4	4

Source CPIS Rural Savings Report 4, 1985b

which aspects of the new instrument were most important to SIMPEDES savers, and which could be safely changed or eliminated.

Back to the drawing board. CPIS/BRI teams surveyed 144 SIMPEDES savers in six Sukabumi unit desas in January and February 1985 to determine which aspects of the instrument were important to savers and which were not. Table 13.2 shows the respondents' answers to a question asking what they thought was the most important of four characteristics of the SIMPEDES instrument: its 12 percent annual interest rate, the lottery prizes, the unlimited number of withdrawals permitted, or its monthly posting of interest. The unlimited number of withdrawals was considered most important by 64 percent of respondents (and by 84 percent of those with accounts over $47). Lottery prizes were next with 27 percent. Only 5 percent of the respondents said they considered the interest rate to be the most important feature of SIMPEDES.

The 49 respondents who had both SIMPEDES and TABANAS accounts were asked which account they would prefer if they could have only one. Among this group, 42 (86 percent) said SIMPEDES, 2 (4 percent) said TABANAS, and 5 (10 percent) said they did not want to choose because they needed both.

Additional research was undertaken in February 1985 to study the size distribution of SIMPEDES accounts.[16] Because information on account size distribution was not available from the monthly reports, the balances of 304 SIMPEDES accounts were obtained through a 10 percent random sampling of accounts in 13 Sukabumi unit desas. The results showed that 7 percent of the accounts contained 64 percent of the funds, while 70 percent of the accounts contained 9 percent of the funds.

For BRI to set appropriate SIMPEDES interest rates, several factors had to be considered:

- SIMPEDES costs are sensitive to average account size because of the high labor costs of the instrument and because the average account size for indi-

In order to close the books for the day, unit staff frequently found themselves working until late at night

vidual savers in Sukabumi was low (in late 1984 and early 1985 it ranged from $47 to $57).

- Most SIMPEDES account holders preferred the labor-intensive service aspects of the instrument to the interest rates.
- Since 7 percent of the accounts in the sample contained 64 percent of the funds, attention would have to be paid to possible interest rate sensitivity among the larger account holders. If a sufficient number of these were to close their SIMPEDES accounts because of a decrease in the interest rate, the average account size would decrease and SIMPEDES could become financially nonviable.

SIMPEDES would have to be revised before it could be expanded to other areas

Given the concerns about the cost of SIMPEDES, as well as the results of the Sukabumi studies, BRI decided to conduct a second-stage pilot project in 12 additional districts on Java using a modified SIMPEDES instrument with a lower overall interest rate, fewer lotteries, and a number of cost-cutting administrative reforms. The second-stage pilot began in July 1985. The SIMPEDES pilot project in Sukabumi was also continued, making a total of 13 pilot branches.

The second-stage SIMPEDES pilot project

The lower-cost SIMPEDES instrument was introduced in the unit desas of 12 branches in the provinces of West, Central, and East Java, and in Yogyakarta.[17] Instead of a 12 percent across-the-board interest rate, as in Sukabumi, a tiered interest rate was introduced. No interest was paid on accounts with minimum monthly balances below $22, 9 percent a year was paid on accounts between $22 and $177, and 12 percent on accounts over $177. TABANAS continued to pay 15 percent on all accounts below 1 million rupiah ($889) and 12 percent on amounts above that, as per Bank Indonesia requirements. Savers with accounts under $22 were informed that they could choose between the liquidity of SIMPEDES and the returns of TABANAS.

SIMPEDES lotteries were conducted in each pilot branch, but the frequency was reduced from four to two times a year, reducing the costs for prizes, the tax on prizes, coupons, and labor. A number of administrative changes were also made to reduce costs; for example, the lottery system was made more efficient, savers were charged a fee for the SIMPEDES bankbook, and cost-cutting changes were made in promotional activities. During the course of the second-stage pilot, further minor adjustments were made to the modified SIMPEDES instrument, and it was adapted in various ways to local conditions. In addition, Deposito Berjangka, a time deposit instrument previously available in the branches, was gradually introduced in the units of the pilot branches.

Staff training in estimating and identifying potential unit desa savings was carried out in all the pilot branches. Outside West Java the villages visited did not have lists of households by economic category, so a (less accurate) method was devised to generate such lists. Formal and informal village leaders were gathered in what would now be called focus groups; the term was not then known

Table **13.3** **Savings mobilization in the second stage of the SIMPEDES pilot project, June–December 1985** (thousands of U.S. dollars)

SIMPEDES			Unit savings			SIMPEDES as a share of unit savings in the 13 pilot branches, 31 December 1985
June 1985	December 1985	Increase (percent)	June 1985	December 1985	Increase (percent)	
428	4,564	966	5,479	11,405	108	40 0

Note The table presents aggregate totals from the 13 pilot branches (Sukabumi, which began as the first stage of the pilot project on 1 November 1984, Sleman, which began in the pilot on 1 February 1985, and the 11 other branches that began in the pilot on 1 July 1985)

Source CPIS Rural Savings Report 7, 1986b

to the researchers or BRI staff. In the discussion the village leaders were asked to estimate how many households in the village "had more than enough income and assets to meet their needs," how many "had enough for their needs," how many "did not have enough for their needs," and how many "were very poor." In most cases this triggered discussion among the participants that led to a detailed set of categories.[18] The participants were then asked to estimate average income and income ranges for the different categories; savings potential was later estimated from this information.

Of the 12 new pilot branches, one began on 1 February 1985 and the others began on 1 July 1985. Most got off to a slow start but were generally running well by August or September. Deposito Berjangka (fixed deposits) and giro accounts were introduced to the units, and TABANAS was continued. The total savings of the unit desas in the 13 pilot branches grew by 108 percent between 30 June and 31 December 1985, from $5.5 million to $11.4 million (table 13.3). By the end of 1985 SIMPEDES accounted for 40 percent of unit savings in the 13 pilot branches (Sukabumi plus the 12 new ones).

In the pilot 7 percent of the SIMPEDES accounts held 64 percent of the funds, while 70 percent of the accounts held 9 percent of the funds

The tiered interest rates, fewer lotteries, and many cost-cutting administrative measures of the modified SIMPEDES instrument were effective in lowering the overall cost of funds. In addition, the average SIMPEDES account ($47 at the beginning of the first-stage pilot project in Sukabumi) was considerably larger ($116) in the 12 new branches in the second stage of the pilot. The costs of SIMPEDES in the second-stage pilot project were similar to those of TABANAS: about 2 percentage points above the 15 percent cost of loanable funds from Bank Indonesia in 1985. Moreover, there appeared to be considerable room for further efficiencies and cost decreases.

In preparation for expansion of the new savings program, a CPIS/BRI study was carried out in the 12 new pilot branches in September 1985 to assess savers' reactions to the modified SIMPEDES product in particular, and to the unit desa savings program in general. Interviews were conducted with

Table **13.4** **The most important characteristic of SIMPEDES: responses of 76 SIMPEDES savers in the 12 new branches of the second-stage pilot project, September 1985** (percent)

Characteristic	Account size ≥$90 (N=14)	>$90–445 (N=20)	>$445 (N=42)	All respondents (N=76)
Unlimited withdrawals	93	65	79	77
Maintaining at least the current interest rate	7	5	7	7
Lottery prizes	0	25	12	13
Interest posted monthly	0	5	2	3

Source CPIS Rural Savings Report 5, 1985c

After 6 months SIMPEDES accounted for 40 percent of unit savings in the 13 pilot branches

169 unit desa savers in the pilot branches. The sample was structured to cover about 24 respondents in each of seven categories: large, medium-size, and small SIMPEDES savers; large, medium-size, and small TABANAS savers; and time deposit holders.

As earlier in Sukabumi, questions were asked about savers' views on possible changes in SIMPEDES terms. The responses were analyzed by size of account to learn whether there was a significant difference in views between savers with smaller and larger accounts. Since the latter group had to be retained if the former were to be served by a cost-effective instrument, this survey was crucial for BRI's decision about whether the modified SIMPEDES instrument was ready for nationwide implementation.

Table 13.4 shows the responses of the 76 SIMPEDES savers in the sample to the question, "For your needs, what is the single most important feature of SIMPEDES?" Seventy-seven percent of respondents said that an unlimited number of withdrawals was the most important aspect of the instrument. Liquidity was especially important to the smallest savers, with 93 percent of those with account sizes of $90 or less selecting unlimited withdrawals as the most important SIMPEDES feature.

Only 7 percent of respondents cited interest rates as the most important aspect of SIMPEDES. Moreover, there was little variation in the answer across the account size distribution.

However, another question asked was, "Would you still save in SIMPEDES if the annual interest rate were reduced from 12 to 6 percent?" (table 13.5). Here 69 percent of the 74 people responding to this question said yes and 31 percent said no. The importance to the savers of the interest rate rose with the size of their savings accounts. All respondents with minimum monthly balances of $90 or less said they would continue saving in SIMPEDES (in this group, those with balances above $22 were receiving 9 percent interest). Among larger account holders, 76 percent of those with accounts of $90–445 said they would stay in SIMPEDES, while only 55 percent of those with ac-

Table **13.5** **"Would you still save in SIMPEDES if the annual interest rate were 6 percent?": responses of 74 SIMPEDES savers in the 12 new branches of the second-stage pilot project, September 1985** (percent)

	Account size			
Characteristic	≥$90 (N=13)	>$90–445 (N=21)	>$445 (N=40)	All respondents (N=74)
Yes	100	76	55	69
No	0	24	45	31

Source CPIS Rural Savings Report 5, 1985c

counts of more than $445 said they would continue with SIMPEDES at a 6 percent interest rate.

In answers to other questions, 93 percent of the respondents said they would continue in SIMPEDES if the lottery were held annually instead of semiannually, and 79 percent said they would stay in SIMPEDES even if there were no lottery.

Thus SIMPEDES seemed to be popular. The costs of the instrument in the 12 new branches were considerably lower than in the first-stage Sukabumi trial. Further, it appeared that there was room for future adjustments to the instrument if additional cost reductions proved necessary.

Only 7 percent of respondents cited interest rates as the most important aspect of SIMPEDES

The results of the second-stage SIMPEDES pilot project were watched carefully not only because of the interest in the performance of the new savings instrument, but also because the KUPEDES loan portfolio was growing rapidly. It had become clear that there was a large market for credit at the KUPEDES interest rate and that the units could make and collect such loans. By the end of 1985 the outstanding KUPEDES portfolio had reached $204 million and was approaching full use of the funds that had been provided by the government in 1984. Since BRI would receive no additional government grants or subsidies for KUPEDES (other than some technical assistance), the unit desas planned to mobilize substantial savings to enable the continued rapid expansion of the loan portfolio.

Expansion and Market Penetration of the New Savings Program

By 1985 the SIMPEDES pilot results had begun to attract the attention of Indonesia's economics ministers. In President Soeharto's January 1986 budget speech he stated that SIMPEDES was important for mobilizing rural savings—which, in turn, was important for the nation's development. The president also instructed that, from then on, all village grant funds (INPRES Desa) would be deposited directly into unit desa bank accounts held in the name of each village (as had become the practice in the districts under the SIMPEDES pilot project).

In early 1986 BRI decided that the modified SIMPEDES product was ready to be implemented throughout the unit desa system. SIMPEDES continued to be considered the flagship in a set of four savings instruments that would also include TABANAS, Deposito Berjangka, and giro accounts. Unlike the other instruments, however, SIMPEDES would not be available in the branches, but only in the unit desas. Later SIMASKOT, the urban version of SIMPEDES, was introduced in new units that were opened in cities beginning in 1989.

SIMPEDES interest rates, based on savers' minimum monthly balances, were to be kept the same as in the second-stage pilot: no interest for accounts with balances below $22, 9 percent for accounts between $22 and $177, and 12 percent for accounts over $177. SIMPEDES would remain fully liquid, and lotteries would continue to be held semiannually. This product would be aimed widely at households, firms, and organizations for whom liquidity was a priority. TABANAS would continue unchanged, with interest (also calculated on the minimum monthly balance) paid on all accounts and withdrawals limited to two per month. TABANAS provided higher interest rates for smaller accounts than did SIMPEDES (or later, SIMASKOT). Its target was the interest-sensitive small saver; many of its account holders are children.

SIMPEDES would be aimed widely at households, firms, and organizations for whom liquidity was a priority

As a time deposit instrument, Deposito Berjangka would provide the highest interest rates and the lowest liquidity of the four instruments. It would be offered in the unit desas for 1, 3, 6, 12, or 24 month periods, at annual interest rates ranging from 13 to 16 percent. Deposito Berjangka would be used by households and enterprises that wanted higher returns and could afford to save in a nonliquid instrument, as well as by people saving for long-range goals (business expansion, construction, purchase of machinery, land purchase, education, retirement, and the like).

Giro, the low-interest demand deposit account that had previously been offered at the branches, would now be available at the units primarily for use by institutions and for special accounts, such as those used to finance government-facilitated religious pilgrimages to Mecca.

As a package, the instruments would provide savers with security, convenience, confidentiality, and a choice of instruments with different ratios of liquidity and returns. Savers could have as many accounts of whichever types they wanted.

Preparing to expand the savings program, January–March 1986

In early 1986 the emphasis at BRI's head office in Jakarta turned to developing a core group of trainers who would travel from region to region to explain the bank's new approach to rural savings mobilization and to train regional and branch staff (who would then train the unit staff) in the operations of SIMPEDES and the methods of finding local sources of savings. In January a training session was held at the head office for the core group of trainers, with followup training in the regions during February and March.

A book of case studies in savings was prepared for use by the trainers (box 13.2).[19] The cases, drawn from CPIS/BRI field work and from the experiences of the 13 pilot branches, provided examples of savings mobilized by unit desas

Box **13.2** **Excerpts from Bank Rakyat Indonesia's unit desa savings mobilization casebook**

- Savings potential can be found all around us, if you look you will find it
- Service is the key treat potential savers with respect and consideration, listen to them and learn from their experiences and needs, and educate them about the ways in which BRI services can help them
- Good relationships with local government officials and informal village leaders are essential Cultivate their friendship, pay attention to their concerns, and demonstrate appreciation for their help Attend village and subdistrict meetings regularly and widen your acquaintance with potential clients
- Unit desa employees are members of the community Use your contacts with neighbors, friends, schools, and organizations to promote BRI services and to learn about opportunities for mobilizing savings.
- Learn to recognize events that are important as potential occasions for savings mobilization because large amounts of money will be transferred (land sales, rural electrification, and special opportunities such as government projects and donor disbursements in rural areas)
- The personal approach is essential Help clients (as unit staff did in providing special services to a busy midwife, in helping savers register at the Haj pilgrimage office, and in arranging the transfer of remittance funds from Saudi Arabia to the local unit)
- Remember that depositing funds in the unit desas benefits the savers as well as BRI Households, enterprises, and institutions gain better security, receive returns, and are able to improve accounting and administration and decrease misuse of funds Explain the benefits to potential savers
- There is a close relationship between institutional savings and private savings These are often mobilized together (as in our examples of the high school and the health clinic) Sometimes the institutional savings are mobilized first, and then managers and employees of the institutions open private accounts, sometimes it is the other way around If clients are provided good service in one account, they are likely to open the other
- Many people and institutions need to transfer funds either occasionally or regularly Villagers need to pay their buyers or suppliers in the cities People working in Jakarta or Saudi Arabia want to send money to their families in the villages Parents in the villages want to send funds to their children studying in the cities Government and private institutions need to meet their rural payrolls If your unit can help these people with their transfer needs, the unit is likely to capture their savings
- This casebook has no ending yet—because the last section is to be written by you! Study the examples given here Send us your best case studies of successful savings mobilization The head office is waiting with much interest to hear from you

Source CPIS Rural Savings Report 6, 1986a

As a package, the instruments would provide savers with security, convenience, confidentiality, and a choice of different ratios of liquidity and returns

from a wide range of individuals, groups, private institutions, and government offices, and drew general lessons from the examples. These cases fell into two broad categories. The first represented opportunities available throughout much of rural Indonesia: mobilizing savings from rice farmers, traders, salaried employees, food processing mills, schools, government offices, and the like. The second were locality-specific cases, such as industries based on local resources, farmers and traders of crops cultivated only in selected regions, tourist areas, and ethnic-specific organizations.

In general, the training emphasized the identification and collection of savings from the largest rural savers first. There were two reasons for this approach. First, the units needed to build savings quickly because of the rapidly increasing KUPEDES portfolio. Second, it was thought that if village and subdistrict leaders and larger farmers and rural business owners became unit desa savers first, then smaller savers—many of whom were linked in various ways with the larger ones—would follow suit. In hindsight, this generally turned out to be correct. The examples below illustrate how BRI staff were taught to mobilize savings from a wide range of potential savers.

"Service is the key: treat potential savers with respect and consideration, listen to them and learn from their experiences"

The savings casebook: mobilizing savings from households. Many cases were developed to demonstrate different types of household savings, to explore the reasons that households save, and to teach staff how to explain the unit desa savings instruments in ways that would make them attractive to households. The purpose was to teach unit staff and their branch and regional supervisors how to locate potential savers and to help them match instruments to clients' savings purposes. Cases of individual savers used in the training included people who cultivated rice, vegetables, fruit, tobacco, cloves, and coffee; who raised cattle and poultry; who engaged in home industry production (weaving, bamboo products, ceramics, woodcarving, tilemaking); who traded in agricultural commodities, textiles, construction materials, and processed foods; who provided services (small restaurant and hotel owners, mechanics, midwives, motorcycle drivers providing transportation); and who worked in factories and offices. In each case attention was drawn to seasonality, income flows, purchase of raw materials, types and locations of buyers and sellers, and periods of excess liquidity. Six examples illustrate the messages contained in the training sessions on household savings.

Learning the linkages, timing, and income flows of local industries. The training emphasized intra-industry linkages and the importance of understanding the income flows and expenses of households participating in different parts of an industry. Thus one case analyzed an example of the cattle trade in eastern Indonesia. Farmers there breed or purchase calves and fatten them; they then sell the fattened cattle to traders who live in nearby villages. These traders sell the cattle to larger traders operating in the subdistrict capital. The cattle are then sold to much larger, district-level cattle merchants. At each level these trading linkages typically involve long-term relationships.

Cattle farmers tend to have excess liquidity when they sell their fattened cattle and purchases calves; this is usually a time that many households are capable of saving. Village and subdistrict cattle traders said they wanted a SIMPEDES account in a unit desa so that, as one subdistrict trader put it, "I will not have to carry millions of rupiah in cash when I go to market to purchase cattle." The district-level trader in the case study already had a bank account at the district headquarters, but he wanted a SIMPEDES account in a rural unit that could be used for local transactions.

This case study was used to show regional, branch, and unit staff how the cattle industry works and to encourage staff to become acquainted with cat-

tle farmers and traders in their areas. These lessons were badly needed in 1986, when most unit staff did not understand their markets, did not visit potential clients, and knew little about the economic activities in the areas their units served. While visiting a number of cattle areas in eastern Indonesia that year, I asked six unit desa managers what day the weekly cattle market was held in their area. Only one knew.

The training sessions emphasized, for example, how unit staff can develop a relationship with cattle farmers and traders, and how staff can then be introduced to the trading partners of such a client. Unit staff, perhaps with the help of the branch for larger traders, would then have the potential to capture deposits from all four links in the cattle trading chain. A branch manager could show a district-level cattle trader that it would be to his advantage to have his main account at the BRI branch and to have additional accounts in the units. Funds could then easily be transferred (albeit slowly, at that time) back and forth between branch and unit.

The training emphasized understanding the income flows and expenses of households participating in different parts of an industry

Similar case studies of industry linkages were done for coffee in Nusa Tenggara Timur (in eastern Indonesia) and for cloves in Manado, North Sulawesi. These trading linkages are of the same general type as in the cattle trade, and there is savings potential at every level: the farmers want to store lump sum incomes, and the traders demand liquid accounts at convenient local units. But unlike the cattle trade, which continues throughout the year (although with peaks and troughs), timing is more critical for coffee and cloves. After harvest, most coffee and clove farmers store as much of their crop as they can afford to hold, wait for the commodity prices to rise, and then sell. In Indonesia, assuming good storage conditions (which are fairly common), coffee beans can be stored for about 2 years, while cloves can be stored up to 10 years.

These case studies emphasized that knowing the local market includes knowing the timing of income flows. The cases demonstrated that unit desa staff can mobilize significant savings if they keep abreast of the coffee and clove markets and visit farmers right after their sales. But most unit managers did not yet think in this way. On one occasion I asked the manager of a unit desa in Nusa Tenggara Timur to accompany me to a coffee-growing village in a remote part of the area served by his unit. He said there was no point in going there because there was no savings potential there. "That village [which I later discovered he had never visited] is isolated, and the people are poor and uneducated. They are not in the modern economy." When we arrived there, however, we found that a number of farmers (with considerable savings in coffee) listened regularly on their shortwave radios to London-based British Broadcasting Corporation reports of commodity prices.

The training also emphasized interindustry relationships in local markets. For example, weavers in the Nusa Tenggara Timur coffee area said that their household income flows are influenced by the coffee market. When coffee prices are high, textile prices are also high. When coffee prices are low and coffee farmers are holding their coffee, textile prices drop. Weavers said that they saved in their finished woven products, and that they sold these when they needed money.

But if a weaver needed money when coffee prices were low, she had to sell her textiles at a low price. If unit staff could be trained to learn the timing of local financial cycles, they would know that weavers in that area have excess liquidity at about the same time as coffee farmers.

Upon hearing about SIMPEDES, many weavers said they wanted accounts (which were not yet available in eastern Indonesia). They said that selling their textiles when coffee prices were high and putting their proceeds in the bank would provide them with security and returns, and they could still access their savings at any time.

Listening to—and not making assumptions about—savers' needs. Unit staff often assumed that they knew their clients' needs, a holdover from the pre-1984 unit desas. During the pilot projects numerous examples had been collected showing how a unit staff member had assumed the opposite of what a saver actually wanted.

I asked six unit desa managers what day the weekly cattle market was held in their area. Only one knew

For example, a unit manager looking for potential savers said that he had decided not to visit a woman who ran a small restaurant because it would be "natural" for her to want to put her profits back into the restaurant so that it could be expanded. "People like her are not potential savers," he explained. When he was finally persuaded to visit her and explain the features of SIMPEDES, she said, "I want to have a SIMPEDES account." When he asked about expanding the restaurant, she said. "I do not want to expand the restaurant. If it becomes larger, people will think I am rich, and then I will have to start giving credit. That will make difficulties for me as I am a widow and have no one to help me collect loans. So I want to keep the restaurant small and put my profits in the bank." She opened a SIMPEDES account.

In another example, a unit manager was talking with a carpenter about the new unit desa savings instruments. The manager assumed that the potential saver wanted a SIMPEDES account, but the carpenter kept asking questions about the time deposit account. Assuming that the carpenter could not afford to maintain a time deposit account—which requires a relatively high minimum deposit and carries penalties for early withdrawals—the manager discouraged this idea. The carpenter, however, had done his calculations carefully. In addition to a SIMPEDES account, he wanted to put some funds into a one-month time deposit account. This account would be for his savings for purchasing wood. Each month he would review wood prices and decide whether to roll over his time deposit or close the account and purchase wood. The carpenter opened both a SIMPEDES account and a one-month time deposit account.

Capturing remittances. Before 1984—and until 1986 outside the pilot project areas—BRI staff did not consider remittances a potential source of unit savings, although the opportunities were all around them.

During the first stage of the pilot project the staff of a unit desa in Sukabumi collected the names and addresses of households that had family members working in other parts of Indonesia who sent remittances home. The staff visited those households and told them how funds could be transferred from the person living elsewhere to the recipient's local unit desa. By February 1986 the unit had four savings accounts in which the account holders were receiv-

ing regular remittances from Jakarta, Sumatra, and Irian Jaya (now Papua). The aggregate balance of the four accounts was about $1,950.

In addition, this unit had three savings accounts in which the funds were derived from remittances received by households with family members working in Saudi Arabia; in February 1986 the aggregate balance of these accounts was about $1,000. The unit staff had captured these savings by visiting the households and offering assistance in arranging the transfer of the funds. At that time this was a complicated process that the recipients of the remittances would have been unlikely to undertake by themselves. Thus they were delighted when the unit and branch staff helped them receive their remittances at the unit.

These early experiments eventually led to substantial savings in the unit desa system derived from remittances to local households. Since the units do not report remittances separately from other deposits, precise data are not available. But remittances are an important part of unit savings.

Recognizing that many SIMPEDES savers deposit frequently and rarely withdraw. The savers surveyed in the second-stage pilot project had overwhelmingly cited an unlimited number of withdrawals as their top priority among the choices offered for the SIMPEDES product. Thus BRI tended to assume that SIMPEDES savers would make frequent withdrawals, adding to the cost of the product. It was not yet understood that what many savers wanted was simply the option of withdrawing whenever they wanted; they did not intend to exercise the option frequently, and in fact they did not.

The case studies emphasized that knowing the local market includes knowing the timing of income flows

Thus while some savers, especially traders, used their SIMPEDES accounts to deposit and withdraw frequently, many SIMPEDES savers deposited regularly but withdrew rarely. Case studies were developed of people engaged in a variety of economic activities, including agriculture, petty trading, home industries, and services. These savers used their accounts to build a savings balance for use in emergencies, for income smoothing, or for a variety of specific purposes. Some transferred their funds from SIMPEDES to Deposito Berjangka when their account reached a level that was beyond the amount they needed available in liquid form. Some had the interest from their time deposit account automatically transferred to their SIMPEDES account.

Unit staff were shown how these SIMPEDES accounts, which were very stable, were of advantage both to the savers (who would have funds available when they needed them) and to the units (which would have the use of the funds for long periods).

Mobilizing large savings from rural land sales. During both stages of the pilot project BRI learned that land sales in rural areas present good opportunities for mobilizing household savings, especially when large tracts are purchased from multiple small sellers by the government or by private firms. The sellers, who usually receive relatively large amounts of cash at one time, need a secure place to store some or all of their proceeds at least temporarily, and in some cases for longer periods. Whether a seller wants to use the funds from the sale to purchase other land or for other purposes, he or she is rarely ready to make the new purchases at exactly the time of the sale.

Three case studies of land sales were included in the casebook, providing both positive and negative lessons from unit desa experiences with this type of savings mobilization. In one case the government had purchased the land of an historical site in Yogyakarta. Well ahead of the sale, the local unit desa provided information about BRI products and services to the land sellers, both individually and at local meetings. BRI staff from the unit, sometimes accompanied by staff from the branch and the regional office, attended village and subdistrict meetings to explain how the sale proceeds could be saved at the local unit desa.

Numerous examples had been collected showing how a unit staff member had assumed the opposite of what a saver actually wanted

When the land sale took place in September 1985, BRI representatives from the branch and the unit were present when the transactions occurred. They advised the land sellers to open unit desa savings accounts the same day "so that your money will be safe and you can have peace of mind while you make the important decisions ahead." Because there were many sellers receiving funds at once, the unit developed a special streamlined procedure for opening accounts and collecting money at the place of the land sale; the remaining formalities were carried out later at the unit. A total of $587,328 was deposited in the unit desa from the proceeds of the land sales. Three months later in December 1985, 81 percent of these funds was still on deposit in the unit.

A second example, a smaller one that could be more frequently replicated, involved a private company that purchased land to build a shrimp hatchery in Sukabumi. The unit desa manager promoted the idea that the 13 land sellers should open savings accounts, and he discussed this with the company's representative, the village head, and the sellers. All the sellers opened SIMPEDES accounts at the local unit desa; in November 1984 these deposits totaled $63,573. Nine of the thirteen sellers then used these funds for Haj pilgrimages to Mecca,[20] and the unit desa manager helped them enroll at the district Haj office. The savers reported that this was of great help to them because they needed to go to the Haj office only once—unlike their neighbors and friends, who had to make multiple trips to accomplish the same formalities. In February 1986 (after the pilgrimages), 8 of the 13 land sellers were still SIMPEDES savers, with an average balance of about $850.

The third case study was developed to show BRI staff how not to act. In this case the Department of Public Works purchased land from villagers in Central Java in July 1985 to construct a large dam. The provincial and district governments made an agreement with BRI that payments would be made directly into TABANAS accounts in the names of the sellers. Between July 1985 and January 1986, as the sales proceeded, $2.9 million was deposited in more than 4,000 accounts in one unit desa. But the unit's staff provided almost no information to the depositors about the savings instruments, services, and options available to them.

This land sale took place in a poor area where most of the people had never seen so much money at one time. Many hastily bought inferior land, driving up local land prices. Others purchased motorcycles, televisions, and other consumer goods at rapidly rising prices. By January 1986, the last month of the

seven-month land purchase, only 30 percent of the $2.9 million remained in the unit, many of the land sellers had become landless, and unemployment in the area had risen. In conjunction with the others, this case was a useful teaching device because it emphasized the important difference that unit desa staff could make to benefit both the bank and its clients.

Recognizing the importance of word-of-mouth advertising from satisfied clients. The cases showed many examples of this lesson. A midwife and prominent member of her community in Central Java told the manager of her local unit desa that she wanted to have a savings account but, because her clinic was always filled with patients, it was difficult for her to come to the bank during the unit's working hours. The unit manager responded by offering to provide her with special mobile service; a staff member would collect her deposits and deliver funds as needed. She, in turn, agreed to promote savings to her customers. By February 1986 her savings balance was about $5,300, and many of her customers, including many low-income women, had also opened accounts at the unit.

Many SIMPEDES savers deposited regularly but withdrew rarely

Of course, this form of promotion depends on continuing good service. During one of our early research trips an elderly woman in a remote area in eastern Indonesia gave a number of reasons that people in her village would be pleased if SIMPEDES accounts were made available there. She concluded by commenting, "As you can see, this area is very rural. There is nothing to do here in the evenings except to sit and talk. So if you do something good for us—if you offer us SIMPEDES accounts—we will talk for years to come about how BRI came here and helped us." Then she looked up and added, "Of course, if you do not do this, or if you do not do it right, then that is what we will talk about for years to come!"

The savings casebook: mobilizing savings from organizations and institutions. In addition to mobilizing household savings, the casebook emphasized the many opportunities for capturing rural savings from public and private organizations and institutions. Examples included funds mobilized by the unit desas from 32 schools, 6 village associations, 20 government offices (including village, subdistrict, and district-level government offices, as well as the local offices of the departments of agriculture, archaeology, cattle breeding, education and culture, family planning, fisheries, industry, and religious affairs), 11 cooperatives, 6 agricultural estate companies, and 25 local groups (the Armed Forces Pension Association, the Bus Terminal Employees Association, the Police Wives' group, the Reformed Prostitutes Group, the Tea Factory Drivers' Welfare Group, and various local women's, sports, family planning, and religious groups).

Many such institutions and organizations had excess liquidity; in aggregate, they showed considerable potential for unit desa savings mobilization. The cases were separated into those that represented opportunities for savings mobilization throughout Indonesia and those that were locality-specific.

Nationwide opportunities for savings mobilization. The examples below are taken from cases of mobilizing savings from types of organizations and institutions

that are common throughout Indonesia. The training sessions emphasized that each unit should start immediately to identify such institutions in their service areas, to meet with the heads of the organizations, and to explain to them how the new unit savings program could benefit their organizations.

There were many opportunities for capturing rural savings from public and private organizations and institutions

- *Village funds.* Throughout Indonesia, village heads are responsible for village revenues. These include the government's annual grants to all villages, special development funds from provincial governments, rentals of village-owned land, sales of village-owned land and of produce from village-owned lands or trees, fees and taxes, and other funds from district and provincial governments. Not all villages have all of these revenue sources, but all have some of them.

  Traditionally such funds were held by the village head and other village officials. However, during the SIMPEDES pilot project some village heads had been convinced to deposit village revenues in the unit desas. The unit staff spread information widely that depositing village funds into village bank accounts at the units made the funds more secure and facilitated management of the accounts, that convenient and appropriate instruments were available for such funds, and that bank accounts could be used as aids in meeting requirements of reporting and accountability.

  As expected, not all village heads were enthusiastic about the idea. Some, however, liked it. Others became supporters when they found it difficult to oppose publicly the growing opinion that village-owned funds should be deposited in village-owned bank accounts.

  Case studies were developed to show how village funds could be mobilized. For example, a Sukabumi unit desa mobilized funds that were being saved for a $3,144 multipurpose building that was to be constructed by one of the villages served by the unit. A unit desa in Yogyakarta convinced a village to deposit $20,444 from its sale of village-owned land. One and a half hectares of land belonging to a Central Java village was sold for $19,556; it was later discovered that the village head, who had kept the funds in his house, had misused some of the money. The subdistrict head intervened and instructed the village head to return the funds and to deposit them in a unit desa account in the name of the subdistrict. Once this was done, the money stayed in the account until it was used for approved village purposes. Other cases involved village accounts opened to deposit income from rentals of village land and from collection of fees and taxes.
- *Schools.* Like land sales, savings mobilization from Indonesian schools resulted from learning that took place in the pilot project branches and from other research carried out for the Ministry of Finance. In a 1985 trip to study savings potential, I visited a government high school in Central Java. The headmaster said that the funds of most schools in the area were held by their headmasters or other school officials. He said he had observed that this approach led to leakage of school funds and that he did not approve of handling funds in this way.

Therefore, he had opened six TABANAS accounts in the local unit desa and three Deposito Berjangka accounts at the BRI branch. The TABANAS accounts were opened to overcome the limitation on withdrawals. (This was not a pilot project area and SIMPEDES was not yet available in this district.) The six TABANAS accounts were used for four purposes: the Parent-Teacher Association (with a balance of $5,155 at the end of 1985), the operating expenses of the school ($4,800), the Library Fund ($1,867), and the Student Activities Fund ($888). The Deposito Berjangka accounts at the BRI branch (these accounts were not yet available at the units) were used to deposit funds for building construction; the balance of these three accounts was $13,333. Thus by the end of 1985 this one school had $26,043 in deposits at the unit desa and its supervising branch. Many teachers, staff, and students had personal accounts in the unit as well. While this was a large high school, the general lesson was immediately apparent: every village in Indonesia has a school (some have more than one), and schools held substantial savings potential for the units.

The school headmaster said the funds of most schools were held by their headmasters and this approach led to leakage of school funds

The cases also included examples of other kinds of schools. One was a private junior high school in Yogyakarta. Since the school was private, funds could be mobilized not only from the sources mentioned above, but also from school fees (which were paid at particular times and then used over a period of months). The school, located in an area covered by a pilot branch, had opened a SIMPEDES account at the local unit; in November 1985 the average daily balance of the account was $1,277. Other cases covered funds mobilized from government and private primary, junior high, and high schools, universities, a private kindergarten, a school for retarded children, an art institute, agriculture schools, and a number of religious schools. In February 1986 balances ranged from $121 to $27,063.

The school case studies were used to emphasize the point that certain kinds of savings mobilization opportunities exist everywhere in Indonesia, and to teach methods of mobilizing the savings from these sources.

- *Religious institutions.* Case studies of mosques, churches, and temples were used to demonstrate that, as with schools, religious institutions are ubiquitous in rural areas in Indonesia and that many were potential sources of unit desa savings. There is, of course, wide variation among such institutions. Some are large and have considerable excess liquidity; others are much smaller. Some mosques may not want to open interest-bearing accounts because of religious proscriptions on receiving interest payments. But the mosque representatives interviewed for the case studies said that since they considered the payment from BRI as profit, rather than interest, this would not constitute a problem. It was also established that if a mosque did object to receiving interest payments, BRI could give the amount to the mosque as a contribution.

The three main sources of funds from religious institutions for unit savings were collections taken at weekly services, funds collected for special religious events, and building funds. Four case studies of village or subdistrict

mosques and churches were used in the training (three mosques and one Protestant church); their combined balance was $1,772 at the time of the interviews in late 1985 and early 1986.

- *Health clinics.* Every subdistrict in Indonesia has at least one government health clinic (Pusat Kesehatan Masyarakat, or PUSKESMAS), and there are also many private clinics. The case studies of health clinics, like those of schools and religious institutions, emphasized that the methods used to identify and mobilize savings could be easily replicated throughout the country. One government health clinic in Sukabumi had three SIMPEDES accounts that were used for different purposes: laboratory expenses, midwifery activities, and purchase of medicines. The clinic head said that keeping the three accounts enabled the clinic to improve its accounting and reporting, and that having the funds in the bank improved security. In addition, the clinic head had opened a personal account.

  These accounts were opened in August 1985 after visits by unit staff to the clinic head and to the staff members responsible for the various funds. In December 1985 the aggregate balance of the four accounts was $6,113.

One school had $26,043 in deposits at the unit desa and its supervising branch

Locality-specific opportunities for savings mobilization. A second set of cases was developed to teach staff how to identify regional, local, or one-time opportunities for collecting savings from groups, organizations, and institutions. A wide range of possibilities was explored, emphasizing regional specialties, development programs targeted to specific areas, and social organizations in different parts of the country with different customs (*adat*).

- *Funds held by local leaders for specific development purposes.* Two Sukabumi examples showed how to capture idle funds in villages that were awaiting electrification. In the area covered by one unit, three villages that were to be electrified had set up committees that collected funds from households that were to be electrified. Unit desa staff convinced the three committees to deposit the funds in SIMPEDES accounts until they were needed (which turned out to be more than a year later). In December 1985 and January 1986 the electrification committee account balances in the three villages totaled $7,826.

  In the second example, another Sukabumi unit desa began collecting savings from village electrification committees in July 1985; by January 1986 the balances in these accounts totaled $44,444.
- *Funds from development programs that provide assistance to households.* Another lesson from the pilot districts was that regional, national, and international rural development programs that target specific areas and populations provide an excellent opportunity for savings mobilization in banks with a network of rural outlets.

  One example was the case study developed to show how savings were mobilized from Foster Parents Plan International (FPPI), a private organization that sponsors poor children, families, and communities in many countries.

The FPPI wanted to set up a mechanism in four Yogyakarta districts for the transfer of funds to 20,000 children whose foster families would receive regular assistance from the organization.

BRI officials approached the FPPI office to suggest that these funds be deposited directly into unit desa savings accounts. The FPPI liked the idea, both because each foster family could have its own account and because the FPPI would be able to check whether the funds had reached each household. The FPPI office requested that arrangements be made for depositing the funds in the unit desas each month. But BRI said that the procedures would be too time consuming if the funds were deposited monthly because, on average, there would be more than 1,000 accounts per unit desa (the areas where the children lived were served by 19 units).

The FPPI's only other real option was to use a bank that operated at the district level, since no other bank had a network of subdistrict outlets. Because it was considered too far for the foster families to travel to district headquarters, the FPPI would have had to use an intermediary to deliver the funds to the households, and it would have been difficult to ascertain whether the funds had reached their intended destinations. The FPPI rejected this option, and BRI and the FPPI agreed that the payments to the foster families would be made through the units, that payments would be made every six months, and that each unit would not have to process more than 40 accounts a day.

Between October 1985 and February 1986 the average amount outstanding in the FPPI foster family accounts in the four unit desas examined in the case study was $50,218; the range among the units was from $7,717 to $15,423.

Case studies of health clinics, schools, and religious institutions emphasized that methods for mobilizing institutional savings could be replicated throughout the country

Many such case studies were developed. The training sessions emphasized that BRI's unit desa system has a strong comparative advantage in rural areas, that the units could negotiate with local governments and other institutions from a position of strength, and that in a number of cases, such as land sales and the FPPI, the units and the branches would need to work closely together to capture the potential savings from individuals and from organizations and institutions.

Expanding the savings program to all unit desas, April–September 1986

After the training of the trainers was completed, first in Jakarta and then in the regions, BRI decided that the new savings program was ready to be expanded to all units. A final review of the pilot projects at the end of March 1986 showed that they were doing well. In the 13 pilot branches, unit desa savings had more than doubled since July 1995 (when 11 of the 13 pilot branches began the program), and by March 1986 SIMPEDES already accounted for 46 percent of savings in the pilot branches.

The phased expansion of the new savings program began in April 1986. The modified SIMPEDES, Deposito Berjangka, and giro accounts would now join TABANAS in all unit desas. The centrally trained trainers traveled to each region in turn, and worked with BRI's regional, branch, and unit staff to train all staff who would be involved in the new savings program at the units. By September 1986 the four savings instruments were available through the unit banking system nationwide.

CPIS/BRI teams monitored the expansion of the program, studying the training, the startup processes, and the problems that occurred as the new savings instruments were introduced in different locations; assessing staff understanding of the program and its instruments; and providing the head office with early warning signals as necessary. In addition, a sample survey was conducted in 29 unit desas in 13 branches in 8 provinces from June through August 1986, while the expansion was under way (CPIS Rural Savings Report 7, 1986b). Data were collected to analyze implementation problems and the cost of funds in branches and units. Issues of BRI organization and administration as they affected the savings program were also identified (chapter 14).

There were multiple implementation problems at the start of the nationwide expansion

As expected, there were multiple implementation problems at the start of the nationwide expansion. Among many others, these included difficulties in cash management; poor distribution of bankbooks, brochures, and posters; misunderstanding of SIMPEDES regulations; restrictions placed by branch managers on units permitted to offer SIMPEDES; and confusion about lotteries and prizes.

But one major concern—that SIMPEDES accounts would generate large numbers of transactions, increasing labor costs—was allayed. The average number of monthly transactions in the sample survey was less than the two withdrawals a month permitted by TABANAS (CPIS Rural Savings Report 7, 1986b). It was not that most savers chose SIMPEDES because they wanted to withdraw and deposit frequently. Rather, they chose SIMPEDES so they would have the option to make transactions whenever they wanted to do so.

Costs were monitored carefully (CPIS Rural Savings Report 7, 1986b; and 8, 1987). There were differences in the components of the costs of funds among the different instruments—for example, SIMPEDES had higher labor costs and lower interest costs than TABANAS or Deposito Berjangka. Nevertheless, the total cost of loanable funds, including labor, in each of these three instruments was calculated to be roughly similar at about 16 percent. Giro, a low-interest current account used mainly by institutions with special requirements, had lower costs.

Despite the many implementation problems in the early stages, the nationwide expansion of the new savings program went well. The volume of deposits in the units (in U.S. dollars) increased 42 percent between the end of 1985 and the end of 1986, from $75.4 million to $107.0 million.[21] Thus the new package of unit desa savings instruments seemed to be both popular and affordable.

A branch manager in South Sulawesi faced an unusual dilemma. As SIMPEDES moved into the unit desas there, it became an instant success. Branch

customers then demanded that SIMPEDES be made available at the branch as well, since they wanted to save using SIMPEDES and the nearest unit desa was too far away. Offering SIMPEDES at the branch was clearly against BRI regulations, yet it was obvious that the demand was large.

The branch manager looked through his regulation manuals, hoping to find some guidance. Finally, he found a regulation that stated that a village post, a subunit of a unit desa, could be opened at any location where the branch manager determined there was a strong demand for unit services there. He then opened a village post of the nearest unit desa inside the branch office. This type of problem was later solved by the opening of BRI units in urban areas in 1989 and by the 1990 introduction of SIMASKOT, the urban version of SIMPEDES, in all urban units.

In some areas—especially rural ones—SIMPEDES became part of the Indonesian language, meaning "save" or "keep." Thus when a popular government official in South Sulawesi was about to be transferred, some of the villagers protested, saying, "Don't transfer him, *simpedes* him here."

Between the end of 1984 (when the first Sukabumi pilot project was two months old) and the end of 1986 (when the new savings program had become available nationwide), unit desa savings increased 174 percent, from $39 million to $107 million. By the end of 1986 SIMPEDES accounted for 47 percent of unit desa savings nationwide.

In early 1987 BRI's head office breathed a collective sigh of relief, thinking that the new savings products, now in all units, were appropriate and cost-effective, and that the hard work of establishing unit desa savings services was over. They were right on the former, but wrong on the latter.

It turned out that designing and pricing the instruments, training the managers and staff, and solving the logistical problems of expansion were necessary but insufficient conditions for mobilizing enough savings to finance the growing KUPEDES portfolio. On average, a unit desa covers about 18 villages. It soon became apparent that most of the savings was mobilized from the two or three villages that were located nearest the unit desa: their savings came to be known as "easy money." But if unit desa savings were to finance KUPEDES, the other villages would have to participate as well. This would require developing a special methodology for market penetration. Eventually it would also lead to a new incentive program that would motivate staff to get out to those villages.

BRI thought that since the new savings products were in all units, the hard work of establishing unit desa savings services was over. They were wrong

Learning market penetration, 1987–89

CPIS/BRI teams continued to monitor implementation issues even after the new savings program was established in all units. Extensive field trips to many parts of the country during 1986–87 indicated that there were still vast areas of untapped savings potential and unit staff who were doing little about it.[22] Many kinds of problems continued: with cash management (savers pointed out that a liquid account is only liquid if the unit keeps cash on hand); with units of high potential that were downgraded or closed because branch managers (and

sometimes unit staff as well) did not recognize the units' potential; with ad hoc, unsystematic funds mobilization; and with poor unit desa service in some areas.

Typically, in early 1987, unit desa X had mobilized funds from schools but not from government offices, while unit desa Y had an account from the Ministry of Industry but not from schools. Meanwhile, unit desa Q had accounts from traders and businesses but not from organizations or institutions, while unit desa Z had mobilized savings from mosques but not from schools, and from the Ministry of Agriculture but not from local businesses.

A new pilot project was established to develop a systematic approach to savings mobilization

To deepen market penetration, especially in villages that were not located near unit desas, BRI decided that the second phase of expansion of BRI's new savings program would emphasize a coordinated and systematic approach to rural funds mobilization. Accordingly, in 1987 a new pilot project was established in North and Central Sulawesi that came under BRI's Manado regional office. This project was intended to develop what became a crucial aspect of BRI's unit banking system: the systematic approach to savings mobilization.

Developing the systematic approach to savings mobilization, 1987–89. Building on the methods of locating and estimating savings potential that had been developed in the pilot projects and recorded in the casebook, unit staff and their branch supervisors under the Manado regional office were given special training on how to identify and contact potential savers systematically.

Under this approach, staff were first shown how to identify the 100 largest savers in the area covered by their unit. The idea was not to mobilize savings only from those with potentially large accounts, but rather to test the systematic approach on larger savers first so that KUPEDES could be financed quickly from unit desa savings, and the hypothesis that smaller savers would follow larger ones could be tested. Once developed and tested, the systematic approach was used to locate potential savers of all kinds, both large and small (CPIS Rural Savings Report 9, 1988b).

Potential savers were systematically identified through visits to subdistrict and village officials, heads of local institutions and government offices, local organizations, informal leaders, wealthy villagers, and other local contacts. From these interviews lists of potential savers were drawn up and marked on a large map of the area to be covered. In each unit a schedule was drawn up showing the staff members who would visit particular potential savers on particular dates. Staff were taught how to conduct these interviews, how to explain the uses and advantages of each type of savings instrument, and how to keep records of the visits and any followup actions required. The units used these interviews to further their knowledge about individual and group savings, as well as about widely available savings sources such as schools and government offices, and sources particular to the region (such as, in this case, the clove and nutmeg trade).

This training was quite successful, and many units became able to identify substantial numbers of potential savers. Through the Manado pilot project, BRI learned that, in addition to local savers, it had a comparative advantage over other banks in obtaining accounts from large urban-based corporations that conduct

substantial business in rural areas. For example, some large companies distributing soft drinks, cigarettes, cosmetics, and processed foods nationally demanded SIMPEDES accounts into which their local distributors could make deposits, and from which funds could be transferred to urban banks. Conversely, urban-based companies purchasing raw materials or goods wholly or partly produced in rural areas found SIMPEDES accounts useful for making payments to their suppliers.

BRI decided to expand the systematic approach to all unit desas. Accordingly, in May and June 1987 unit and branch staff in 12 branches under 6 BRI regional offices were trained in the systematic implementation of savings mobilization, and the method began to be widely used. By 1988 all units were implementing the new method.

By 1988 the systematic approach to savings mobilization was implemented in all units—but not well. Staff incentives were then developed

However, it soon became apparent that during training, unit staff could locate savers and mobilize deposits, but their follow-through tended to drop off as soon as the training was finished. The problem was no longer that staff could not recognize savings potential. The problem was that staff found that visiting potential savers in dispersed villages was hard work, and they observed that staff members who visited few or no prospective savers received the same salary and benefits as those who actively followed BRI's instructions for systematic savings mobilization.

As discussed in chapter 14, a staff incentive program had been introduced in 1984 in which staff received cash incentives based on the profitability of their unit desas. But by 1987, 81 percent of the units were profitable and many units had reached the maximum incentive payment allowed. As a result that program (which was later revised) no longer served as a powerful incentive for performance. Thus by 1988 the systematic approach to savings mobilization was understood but generally not well implemented.

The Unit Achievement Competition, 1988–89. Implementation of the new methods was monitored during 1988–89, leading to a number of changes. The most important of these was the development of a new staff incentive program, the Unit Achievement Competition. The program could not be based solely on performance in savings mobilization, however, because staff might then neglect KUPEDES and the unit desa portfolio could deteriorate. Rather, the main purpose of the competition was to reward staff on a semiannual basis for good performance in profitability, portfolio quality, and volume of lending and savings. The Unit Achievement Competition was first tested in Manado, and in 1989 it was implemented throughout the unit desa system.

As earlier, incentives were based on the performance of units, not individuals, and were paid for out of the profits of each unit. Under the Unit Achievement Competition the staff members of all units that met their goals received cash awards and recognition certificates awarded by the head office in a formal ceremony held in each region. Units that were judged the best in their region and best in the country received special awards, including visits to Jakarta and trips to neighboring countries to study other methods of microbanking.

The combination of the systematic approach to savings mobilization and the Unit Achievement Competition galvanized the unit desas to mobilize sav-

ings. As shown in figure 13.1, the units began to increase their savings, though on a small scale, under the first pilot project (1984–85), and savings rose during the early expansion phase (1986) and the second pilot project in Manado (1987–89). But not until 1989 were all the components of a successful large-scale savings program in place.

It was no accident that unit desa savings first financed all KUPEDES loans in 1989; this could have occurred only when the market penetration effort had become nationwide through all units. In the following years the results of the 1984–89 savings work and the continuing emphasis on market penetration became clear: unit savings more than quintupled, from $534 million at the end of 1989 to $3 billion at the end of 1996. Average annual inflation in each of these years was less than 10 percent.

Unit desa savings first financed all KUPEDES loans in 1989; this could have occurred only when the market penetration effort had become nationwide

This performance was a direct result of the combination of market research, management and staff training, product design and testing, the systematic approach to savings mobilization, and the Unit Achievement Competition. None could have been omitted. As will be discussed in chapter 14, it was also a result of the changes in unit desa organization, management, administration, and operations made during those years.

At the time of the early pilot projects in unit savings mobilization, neither the components nor the sequencing needed to build a large microsavings program was known. Each step led to the next and was guided by the underlying principles established at the time of the transformation of the units, by continuing market research among the units' present and potential clients, and—a sine qua non—by the excellent management of the unit desa system at the head office.

Unit Desa Savings Products, 1996

The savings products in the unit desas in 1996 were quite similar to those in 1986.[23] Interest rates fluctuated over time. TABANAS stopped restricting the number of withdrawals. SIMASKOT was added to all urban units in 1990. The minimum account size below which SIMPEDES interest was not paid was reduced. Operating costs were lowered by increasing efficiency. And other changes were made. In general, however, the 1986 instruments worked well.

Households and enterprises frequently hold more than one type of deposit account in the unit desa system. Some households hold a time deposit account to save for long-term goals, a SIMPEDES or SIMASKOT account for routine income deposits and withdrawals for operating expenses, and a TABANAS account for children's savings.

Deposits in all unit desa savings and deposit instruments continued to be implicitly guaranteed by BRI. Although there were no explicit guarantees for savings until 1998 (see chapter 15), it was widely believed long before then that savings were safe in the unit desas because BRI is a government bank. In addition, the government had protected small savers in banks that had failed; this reinforced the belief that unit desa savings were effectively government-guaranteed.

Table **13.6** **Annual interest rates for unit desa savings instruments, September 1996**

Account type and size (September 1996 U.S. dollars)	Interest rate (percent)
SIMPEDES	
≤$4	0
>$4–$425	10 0
>$425–$2,125	11 5
>$2,125	13 0
SIMASKOT	
≤$10	0
>$10–$425	11 0
>$425–$2,125	13.5
>$2,125	14 5
TABANAS	
≤$4	0
>$4	13 0
Time deposits (Deposito Berjangka)	
Varies with maturity	15 5–16.0

Source BRI 1996a, p 16

Unit savings more than quintupled, from $534 million in 1989 to $3 billion in 1996

SIMPEDES and SIMASKOT

SIMPEDES has accounted for more than half of unit desa deposits since 1987. In 1996 SIMPEDES and SIMASKOT together accounted for 76 percent of the units' $3 billion in deposits, and for 71 percent of the 16.1 million unit desa accounts.

Both instruments permit an unlimited number of transactions, both have lotteries, and both have tiered interest rates depending on account size. SIMASKOT requires a higher minimum account balance for payment of interest than does SIMPEDES (see below), but SIMASKOT interest rates are somewhat higher (table 13.6). In addition, SIMASKOT lotteries are held at the provincial level rather than at the district level, and lottery prizes are in cash rather than in kind. Otherwise, the instruments are basically the same. Both SIMPEDES and SIMASKOT are available in some units where there is demand for both instruments. Neither is available in BRI's branches.

TABANAS

As Indonesia's national savings program, TABANAS is available in all banks, and banks are now generally permitted to set their own terms and interest rates. In

BRI and other banks, the success of SIMPEDES resulted in some changes in TABANAS. At BRI, TABANAS has permitted savers an unlimited number of withdrawals since 1990.

Because the cost of maintaining very small accounts is high relative to their earnings, at BRI TABANAS and SIMPEDES pay no interest on accounts with minimum monthly balances of $4 or below; SIMASKOT pays no interest on accounts with minimum monthly balances of $10 or below. TABANAS pays a higher interest rate on small accounts that are above the minimum than do SIMPEDES and SIMASKOT (see table 13.6). However, the average cost of TABANAS funds is about the same as that of SIMPEDES and below that of SIMASKOT, primarily because the cash prizes awarded in the semiannual TABANAS lotteries are much smaller than the prizes awarded in the lotteries of the other two instruments.

SIMPEDES and SIMASKOT accounted for 76 percent of the units' $3 billion in deposits and 71 percent of the 16.1 million accounts

Deposito Berjangka and giro accounts

The unit desas offer BRI's standard time deposit instrument (Deposito Berjangka), with maturities ranging from 1 to 24 months. Withdrawals are permitted before maturity, but with a penalty. Because the units' time deposit accounts compete in an interest-sensitive market, they usually carry the highest interest rates of the savings products available at the units (up to 16 percent a year in 1996). The units also offer a giro account, a specialized low-interest demand deposit instrument used primarily by institutions with special requirements.

The interest rate structure

The annual interest rates of the main unit desa savings instruments are reviewed monthly by the management of the unit desa system, together with BRI's Asset and Liability Coordinating Committee. Rates are adjusted to reflect a number of factors, including changes in the money market, the liquidity needs of the units and of BRI, and the activities of the competition.

Interest is calculated on the minimum monthly balance for SIMPEDES, SIMASKOT, and TABANAS. Above the minimum account size required to receive interest, TABANAS has a single interest rate (13 percent in 1996). SIMPEDES and SIMASKOT have graduated rates that are higher on larger balances (see table 13.6). This strategy is a direct result of two lessons from the pilot project experience. First, larger depositors are usually more interest sensitive than smaller ones, so the units must keep their rates for larger accounts competitive. Second, larger accounts are generally more profitable than small accounts because operating costs represent a lower percentage of the average savings balance in large accounts than they do in smaller accounts. Interest rates for Deposito Berjangka, which is offered throughout BRI, are set for the bank as a whole and vary with the maturity of the account.

During 1984–96 the savings instruments offered in the unit desas generally provided savers with positive real interest rates, with two exceptions: very small SIMPEDES, SIMASKOT, and TABANAS accounts; and giro accounts.

Table **13.7** **Estimated cost of savings mobilization in the unit desa system, 1996** (percent)

Cost item	As share of deposit balance
Interest cost	12 4
Administrative cost	2 2
Cost of funds subtotal	14 6
Liquidity cost (cash holding 3 percent of deposits)	0 5
Cost of loanable funds subtotal I	15 1
Cost of minimum reserve requirement	
(2 percent of deposits)[a]	0 3
Cost of loanable funds subtotal II	15 4
Alternative cost of borrowing from branches	15 5

a In early 1997 Bank Indonesia increased the minimum reserve requirement in two steps to 5 percent, which is required to be held as demand deposits with Bank Indonesia, carrying little or no interest

Source Maurer 1999, p 134

The cost of unit desa savings mobilization in 1996 was estimated at 14.6 percent of the deposit balance

Cost of funds

Because the unit desa cost accounting system does not disaggregate between lending and savings activities, the administrative costs of savings mobilization cannot be precisely determined. As discussed in chapter 7, a study conducted for the Consultative Group to Assist the Poorest estimated the cost of unit desa savings mobilization in 1996 to be 14.6 percent of deposit balance (12.4 percent for interest and 2.2 percent for administrative costs),[24] and the cost of loanable funds (including the reserve requirement) to be 15.4 percent (table 13.7; for more details see Maurer 1999, p. 134). Between 1990 and 1996 the unit desas' cost of funds ranged from 9 percent in early 1994 to more than 19 percent during the tight money period of 1991 (BRI 1996a, p. 16).

Lotteries

The idea of using local lotteries as part of a financial savings product, developed in Indonesia in 1970 by Bank Dagang Bali, was adapted by the unit desas in 1984 in the Sukabumi SIMPEDES pilot project. Since 1986 BRI's unit desa system has held semiannual lotteries for SIMPEDES and SIMASKOT savers. Free lottery tickets are given to savers based on the size of their minimum monthly account balances; savers know that the higher their account balances, the higher their probability of winning a lottery prize. In 1995 the aggregate value of the prizes was about 0.7 percent of the SIMPEDES balance and 0.8 percent of the SIMASKOT balance.

As noted, SIMPEDES lotteries are held at BRI's branches at the district level. Since they occur relatively near the homes of savers, and since many participants have either won a prize in the past or know someone who has won, there is considerable local enthusiasm for the lotteries. Prizes are given in kind; the first prize in each district is usually an automobile or motorcycle. Many small-

er prizes (television sets, radios, refrigerators, clocks) are also awarded. In the June 1996 lottery, held at BRI's 324 branches, there were about 16,000 winners. The average value of the prizes was about $260.

SIMASKOT lotteries are held at BRI's 15 regional offices. Although the drawings take place at a considerable distance from the homes of many of the savers, the large cash prizes are attractive to SIMASKOT's more urban clients. In the first drawing for 1996, there were about 2,400 winners. The first prize was $65,000, and the average prize was about $435.

A semiannual lottery with much smaller prizes is held for TABANAS savers, with cash prizes in 1995 totaling less than 0.15 percent of the TABANAS balance. Since TABANAS pays the highest interest rates on small accounts, it has a low-cost lottery so that the average cost of funds of SIMPEDES and TABANAS are about the same.

In the first SIMASKOT lottery drawing for 1996, there were 2,400 winners. The first prize was $65,000, and the average prize was $435

The transfer price

As noted, the transfer price is the interest rate on funds that are deposited by a unit in its supervising branch or borrowed by the unit from the branch.[25] This rate is adjusted monthly by BRI's head office according to the overall liquidity position of the bank. The transfer price is used by BRI to indicate to the units the relative emphasis that should be placed on savings and loans. For example, a low transfer price sends a clear signal that the units should concentrate on lending. But when BRI wants to encourage savings mobilization or slow down the rate of growth of lending, the transfer price can be raised substantially—as happened during the tight money period in the early 1990s and during the crisis in 1997–98.

Generally the transfer price has been set slightly above the cost of mobilizing savings at the units, thus creating an incentive for the units to collect savings rather than borrow from the branches. Because each unit is treated as a profit center and the staff incentive programs are heavily based on each unit's profits, the transfer price has a strong, direct incentive effect on the behavior of unit employees.

CGAP's study of savings in the units in 1996 (Maurer 1999, p. 131) found:

> 95% of the units are net fund providers and maintain considerable deposit balances with the branches. As a result, more than a third of the units' interest income in 1996 originated from interest paid by the branches, while two-thirds of interest income was generated from KUPEDES lending. For 1996, the average interest yield was 15.6% on [the units'] branch deposits and 30.2% on loans (net of borrower incentives), resulting in a weighted interest yield on earning assets (branch deposits and loans combined) of 22.8%.

Box 13.3 shows lessons on cost reductions that emerged from examination of savings mobilization at BRI's unit desas. Emphasis is placed there on the institutional viability of mobilizing small savings if cost elements and incentives are set correctly, the importance of the transfer price, and the reduction of transaction costs for savers.

Box **13.3** **Excerpts from Klaus Maurer's "Bank Rakyat Indonesia (BRI) (Case Study)"**

- The general lesson learned is that the mobilization of small savings is costly, but it is a viable and profitable option for a financial institution if the various cost elements are seriously addressed and incentives are set correctly
- Taking into account the lessons of transaction cost economics, BRI has applied a differentiated interest rate structure for SIMPEDES by tying the level of deposit rates to savings account balances Thus, lower interest costs compensate, at least in part, for the higher administrative costs of small accounts
- Reducing the administrative cost associated with thousands of small accounts has been a major concern A number of innovative features have contributed to lowering these costs, e g , simplicity of design and standardization of operations, low overhead costs, increasing staff productivity, computerization, etc
- The opportunity cost of cash holding, or liquidity cost, was minimized by prudent cash management Above all, access to the BRI liquidity pool has significantly contributed to reducing liquidity costs
- The framework conditions for savings mobilization have been extremely favorable as the minimum reserve requirement has been set at a low level of 2%, allowing 98% of deposits to be employed as productive assets (Only recently, the Central Bank has raised the minimum reserve requirements to 5%)
- Most importantly, however, and probably the most essential factor for the success of SIMPEDES and the mobilization of small savings, has been BRI's policy of the transfer price of funds from the branches to the units and vice versa This artificial, yet market-based, accounting price was set at a level equal or slightly above the cost of funds for mobilizing small savings This move has effectively eliminated the opportunity cost of small savings and has created a strong incentive for the units to engage in savings mobilization rather than borrowing from the branches
- The transaction costs for savers have been limited primarily through the customers' physical proximity to the BRI units, which are located in the centers of the rural economy, the sub-district towns However, there are still many customers living in remote areas and villages who may find it costly to travel to the nearest BRI unit. The village service posts operated by some units help to bring down the costs but the number of these posts remains limited

Source Maurer 1999, pp 135–36

Probably the most essential factor for the success of small savings mobilization has been BRI's transfer price policy

Performance in Savings Mobilization, 1984–96

The unit desa system, which had mobilized only $18 million between the early 1970s and the time of the financial deregulation in June 1983, proceeded to mobilize $3 billion by 1996 (table 13.8). This spectacular change occurred primarily because after 1983, the unit desas had a strong incentive to mobilize savings. Accordingly, BRI trained unit staff and their branch supervisors to learn about the markets they served, developed savings instruments designed to meet different types of local demand, provided performance-related staff incentives, and established a pricing system for savings and loans that would permit both wide outreach and unit desa profitability.

Table **13.8** **Value of savings accounts by account type in the unit desas, 1984–96**
(millions of current U.S. dollars)

Account type	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TABANAS	36 4	56 5	47 6	48 2	51 7	63 2	80 8	109 2	146 4	194 9	242 9	273 0	330 4
	(93)	(75)	(45)	(28)	(18)	(12)	(9)	(9)	(9)	(10)	(10)	(11)	(11)
SIMPEDES	0 29	4 6	50 3	110 6	197 5	389 4	525 9	669.7	933 3	1,278 3	1,523 5	1,639 8	1,849 3
	(1)	(6)	(47)	(64)	(69)	(73)	(59)	(53)	(57)	(62)	(64)	(63)	(62)
SIMASKOT	n a	n a	n a	n a	n a	0 5	77 6	142 5	220 9	300 3	345 6	362 0	409 7
						(0)	(9)	(11)	(13)	(15)	(15)	(14)	(14)
Time deposits	0 7	1 9	2 4	7 7	25 7	65 2	169.9	284 2	250 1	189 9	191 8	264 1	325 2
(Deposito Berjangka)	(2)	(3)	(2)	(4)	(9)	(12)	(19)	(22)	(15)	(9)	(8)	(10)	(11)
Other	1 9	12.4	6 7	7 7	9.8	15 3	37 3	69 6	97 7	86 5	74 3	67 5	61 2
	(5)	(17)	(6)	(4)	(3)	(3)	(4)	(5)	(6)	(4)	(3)	(3)	(2)
Total	39 3	75 4	107 0	174 2	284 7	533 6	891 5	1,275 5	1,648 4	2,049 9	2,378 1	2,606 4	2,975 8

n a Not applicable

Note Numbers in parentheses are percentages of the total value of savings accounts Totals may not sum to 100 percent because of rounding

Source BRI unit desa monthly reports

Performance by instrument

In 1996 SIMPEDES accounted for 62 percent of the unit desas' $3 billion in savings, followed by SIMASKOT (14 percent), TABANAS and time deposits (11 percent each), and all other deposits, including giro accounts (2 percent; see table 13.8).

SIMPEDES has been the most popular account since 1990, the first year that the market penetration phase of the units' savings mobilization effort had been in full operation nationwide (table 13.9). In 1996, 63 percent of unit accounts were in SIMPEDES, followed by TABANAS (28 percent) and SIMASKOT (8 percent). Time deposits represented 1 percent of the units' accounts. All other account types, including giro, together accounted for less than 1 percent of the savings accounts in the unit desa system.

In general, the package of savings instruments did what it was designed to do. SIMPEDES mobilizes most of the funds in most of the accounts. Its tiered interest rates have helped the instrument to reach millions of low-income savers and to attract and maintain the accounts of wealthier savers—thus raising the average account size and making SIMPEDES financially viable. At the end of 1996 the average SIMPEDES account was $183.

The more than 4 million TABANAS accounts are used predominantly by smaller savers who value its present-day liquidity and want to maximize returns;

Table **13.9** **Number of savings accounts by account type in the unit desas, 1984–96** (millions)

Account type	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
TABANAS	—	—	—	—	3 29	3 51	3 33	3 34	3 48	3 68	3 97	4.22	4 55
					(66)	(56)	(46)	(39)	(35)	(32)	(30)	(29)	(28)
SIMPEDES	0	0 04	0 42	0 97	1 64	2 66	3 50	4 46	5 50	6 66	7.85	8.90	10.10
	—	—	—	(23)	(33)	(42)	(48)	(52)	(55)	(58)	(60)	(61)	(63)
SIMASKOT	n a	n a	n a	n a	n.a	0	0 27	0 54	0 75	0.93	1 10	1 21	1.33
						(0)	(4)	(6)	(8)	(8)	(8)	(8)	(8)
Time deposits	n a	—	—	—	0 01	0 04	0 10	0 18	0 15	0.10	0 08	0 09	0 11
(Deposito Berjangka)					(0)	(1)	(1)	(2)	(2)	(1)	(1)	(1)	(1)
Other	n a	—	—	—	0 05	0.05	0 06	0 07	0 07	0.06	0 06	0.06	0 06
					(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	(0)
Total	—	—	—	4 20	4 99	6 26	7.26	8.59	9 95	11 43	13 06	14 48	16.15

— Not available

n a Not applicable

Note Numbers in parentheses are percentages of the total number of savings accounts Totals may not sum to 100 percent because of rounding

Source BRI unit desa monthly reports

in 1996 the average TABANAS account was $73. SIMASKOT, which effectively began in 1990 in BRI's urban units,[26] had 8 percent of accounts and 14 percent of funds; in 1996 its average account size was $308. Time deposits (Deposito Berjangka) accounted for only 1 percent of accounts in 1996, but with an average account of $2,956 they were responsible for 11 percent of the units' savings.

SIMPEDES, SIMASKOT, and TABANAS are stable sources of funds for the units. Deposito Berjangka is more volatile because its account holders are interest sensitive and because their accounts are relatively large. Giro, used primarily by institutions, is even more volatile than Deposito Berjangka, but it accounted for less than 2 percent of unit desa deposits in 1996.

With 16.1 million savings accounts and 2.5 million outstanding loans at the end of 1996, the unit desa system provided savings services to an estimated 25 percent of Indonesia's approximately 46 million households. BRI does not record the number of individuals who have savings accounts. Since many households and some individuals have more than one savings account, since all borrowers have savings accounts, and since some accounts are in the names of institutions and organizations, the exact number of households served

by the units is not known. However, 25 percent of the country's households seems a reasonable estimate for the units' household outreach in 1996.

As BRI has learned since the mid-1980s—and Bank Dagang Bali and many People's Credit Banks (BPRs) learned earlier—in Indonesia there are more households and small and microbusinesses with demand for secure savings facilities than with demand for small loans. Thus at any one time, nearly all unit desa clients want to save, but not all want to borrow.[27]

In 1996 the units had more than six times as many savings accounts as loans, and the value of savings was nearly twice as much as that of loans. At the end of 1996 the ratio of clients who saved in the units but did not have an outstanding loan to those that borrowed and saved in the units was probably about four to one.

At any one time, nearly all unit desa clients want to save, but not all want to borrow

In addition to the ways in which the units' savings program benefits its clients (both individuals and organizations), low-income households and small and microenterprises have benefited considerably from the expanded volume of institutional credit financed by unit desa savings. However, there is still extensive unmet demand for small loans in Indonesia. And as BRI's activities now shift toward increased emphasis on micro and retail banking (chapter 15), unit savings can be expected to finance an increasing number of KUPEDES loans.

Notes

1. When referring to financial savings, the terms savings and deposits are treated synonymously here.

2. This section is based in part on CPIS Rural Savings Reports 1 (1984a) and 2 (1984b), which concern the views of potential savers and contain early work on product design and testing.

3. In 1984 CPIS, with HIID technical assistance funded by the Ministry of Finance, began a Rural Savings Group. This group, which I coordinated, worked closely with BRI on savings mobilization through 1990. Much of this chapter is based on the work of this group.

4. This research involved extensive, in-depth interviewing of men and women of different ages, with varied occupations and geographic locations. Since savings is a sensitive topic, this method was considered more useful than a formal survey in which respondents might be reluctant to answer questions or might not answer them accurately. Surveys were carried out later to learn about savers' responses to particular products.

5. The discussion here concerns primarily rural Indonesia. However, field work in the late 1980s, conducted in preparation for the opening of unit desas in cities in 1989, indicated that the savings needs of people in low- and lower-middle-income urban neighborhoods are similar in many respects to those living in villages.

6. The five years referred to both HIID/DPIS and HIID/CPIS field work with BRI carried out during 1979–84.

7. This section is based in part on CPIS Rural Savings Report 2 (1984b).

8. The Survei Sosial Ekonomi Nasional (SUSENAS) is a periodic nationwide survey that reports on consumption, income, and other socioeconomic data.

9. This was an important methodological finding. It meant that in the future, unit desa staff in West Java could obtain from these lists the names of villagers who appeared

to be potential savers, and could then contact them individually to try to collect their savings. Such lists were not kept in other parts of the country, and different methods were developed elsewhere, as discussed later in this chapter.

10. This figure excludes savings accounts with balances below 10,000 rupiah ($9).

11. Annual inflation in 1984 was 10.4 percent.

12. The TABANAS interest rate on larger accounts was 12 percent.

13. Discussion of the Sukabumi pilot project is based in part on CPIS Rural Savings Reports 3 (1985a) and 4 (1985b).

14. In 1984 the grants were 1 million rupiah ($931) per village.

15. R.C.G. Varley was the first to call attention to this important problem.

16. Richard T. Monteverde provided the technical assistance to BRI on the size distribution study of SIMPEDES accounts in Sukabumi.

17. Discussion of the second-stage pilot project is based in part on CPIS Rural Savings Report 5 (1985c). The first pilot project continued in Sukabumi, but with the original SIMPEDES instrument. In 1986, when the revised savings program was expanded nationwide, it was introduced in Sukabumi as well.

18. This method requires a skilled and locally knowledgeable person to organize and run the discussion. While the method did not always work well, in most cases it was quite effective for estimating minimum savings potential in the village. Followup was then required to identify the households in the various categories.

19. CPIS Rural Savings Report 6 (1986a). The cases were prepared by the CPIS Rural Savings Group working with BRI; James R. Kern and I served as the coordinators for CPIS work on the casebook and as the authors of the book.

20. A pilgrimage to Mecca (Saudi Arabia) during Dhu'l Hijja, made as part of the religious life of a Moslem. Haji is often used as an honorific title for one who has made such a pilgrimage.

21. The increase in rupiah terms was 107 percent (from 84.7 billion rupiah to 175.8 billion rupiah). However, the end-of-year exchange rate for $1 was 1,125 rupiah in 1985 and 1,641 rupiah in 1986.

22. Although earlier research had been conducted outside Java, all the SIMPEDES pilot branches were selected on Java to facilitate supervision and monitoring. Therefore, the 1986–87 research was concentrated on the Outer Islands to ensure that BRI would receive input on the units' new products and services from all parts of the country.

23. This section draws substantially from BRI (1996a and 1997b) and from discussions with Richard M. Hook and Patricia Markovitch. For discussion of unit desa savings, see Robinson (1992b, 1994a, 1994b, 1995a, 1995b, 1997c, 1998a); BRI (1996a, 1997b); Charitonenko, Patten, and Yaron (1998); Institute for Development of Economics and Finance and BRI (1999); Patten, Rosengard, and Johnston (1999); and Maurer (1999, forthcoming). See additional references in volume 1, chapter 2, note 16.

24. This study assumed, based on a previous transaction cost analysis at BRI units, that one-third of administrative costs is related to deposit mobilization and two-thirds to lending.

25. A change in transfer price normally does not directly affect the profitability of BRI as a whole. The transfer price can, however, affect bank profitability indirectly by influencing the behavior of unit staff. Thus if the transfer price is raised substantially during periods of liquidity shortage, unit staff will be motivated to raise additional savings; this provides the bank with a lower-cost alternative to other sources of funds.

26. Urban units were first opened in 1989 and SIMASKOT was tried on a very small scale that year It was offered in all urban units in 1990.

27. All unit desa borrowers are required to have savings accounts because the KUPEDES prompt payment incentive is paid into a savings account. It appears that a few borrowers use their savings accounts only for that purpose but that most use them for other purposes as well; the numbers are not known.

14 Institutional Development for Large-Scale Sustainable Microfinance: The Transformation of the Unit Desas, 1984–96

The principles of sustainable institutional microfinance carry with them a set of basic operational requirements.[1] Effective operations, in turn, depend on an efficient organization and management structure that are focused on microfinance. Such an organization will not arise in the absence of the underpinning principles. Yet putting the principles into operation on a large-scale, long-term basis can be done only through appropriate institutional organization. How can the sequencing work in such a situation?

This is a critical problem in microfinance, and one that is little understood. Therefore this chapter explores the dynamics of organizational development at Bank Rakyat Indonesia (BRI); its purpose is to provide an example of the sequencing process that occurred there. But the process at BRI

was long and difficult. It is hoped that other institutions will find lessons in the process, rather than replicate it.

Microfinance can operate viably in a number of quite different organizational structures, as is discussed further in volume 3. But essential features of microfinance operations and management must be incorporated into the organizational design of any self-sufficient institution. For example, a number of components must be in place to achieve the loan recovery rates above 95 percent that are needed for institutional sustainability. Included among these are effective, committed management; an efficient, accountable, labor-intensive organization; simple, transparent accounting and reporting systems; careful asset-liability management; appropriate staff training and performance-based incentives; decentralized authority for loan decisions; effective measurement and management of delinquency, including appropriate mechanisms for loan provisioning and write-off; regular and meticulous internal supervision; simple, suitable management information systems; and user-friendly instruments and services priced for institutional viability. Whatever its structure, a sustainable microfinance institution must be organized to provide these requirements.

The focus here is on how basic operating requirements of commercial microfinance drove the transformation of unit desa organization and management at BRI

When BRI's unit *desa* system changed in 1984 from a loss-making channeling agent for government credit subsidies to a commercial financial intermediary, it did not have in place an organizational structure that could provide the prerequisites of institutional sustainability. The focus here, therefore, is on how basic operating requirements of commercial microfinance drove the transformation of unit desa organization and management.

Complex organizational changes have taken place within BRI since the mid-1980s, and they are still occurring. The key elements of the unit desa organization that have emerged thus far include strong, effective leadership; the transformation of the units from branch windows to individual profit centers; the growth of the old unit desa system into a full bank division, with internal restructuring and representation at all regional and branch offices; an entirely new approach to human resources; the development of large, state-of-the-art training centers with a curriculum designed specifically for microfinance; an intensive system of supervision of the units by specially trained staff at the branch and regional offices; and—most important—in the words of BRI's President-Director Kamardy Arief,

who was appointed in 1983 to lead the reforms and served until 1992: "a new BRI culture."

These and other aspects of the restructuring of the units will be analyzed. But the transformation of the unit desa system is not comprehensible without an understanding of the role of its owner, the Ministry of Finance,[2] and of other government agencies. While no longer financing the units, the government—especially the Ministry of Finance and the coordinating minister for the economy—provided them with continuing support of other kinds, both formal and informal. This strong commitment to sustainable banking for the economically active poor was a sine qua non for the transformation of the system. Over the years, as financial policy was made and bank regulations set, the units consistently had powerful patrons who understood their needs and safeguarded their ability to provide commercial microfinance. In addition, the Ministry of Finance funded substantial foreign technical assistance for the unit desa system from 1979–90; the consultants worked directly for the minister.

The government's strong commitment to sustainable microfinance was a sine qua non for the transformation of the system

Beginning in the mid-1980s funding and technical assistance for the unit desas were also supplied by donors (after the units were already profitable). The donors and their consultants contributed to global dissemination of the best practices of Indonesian microfinance. This effort helped significantly increase awareness of sustainable microfinance abroad and buttress the position of the units at home.

But as part of a larger bank, the organization of the new unit desa division was not without its problems. Directors of other divisions of the bank did not necessarily understand the units' needs. Unit profits supported loss-making bank divisions that provided loans at lower interest rates to larger borrowers, with low repayment rates. And the managing director responsible for the unit desa system did not have the authority to make some of the basic decisions required for microbanking, nor did he control the support to his division provided by other bank divisions, such as personnel and logistics. The success of the units depended partly on an informal system of personal relationships among the directors—a system that was vulnerable to change as directors came and went at BRI. After the Indonesian crisis began in 1997, the government addressed these problems. BRI now concentrates primarily on providing commercial finance to micro, small, and medium-size retail clients (see chapter 15). This chapter considers the organizational development of the unit desas during 1984–96.

The main differences between the old and new cultures in BRI's unit desa system are shown in the box that appears in the introduction to part 3.[3] As indicated there, the emergence of the new culture was driven by the reorganization and new management of the unit system, by fundamental changes in the role of the units, by new views of staff responsibility and accountability, by a massive upgrading of human resources, and by basic changes in accounting, reporting, and information management.

Old and New Cultures

In the old culture, discussed in chapter 11, the units were branch windows for channeling government funds and their performance reports were aggregated with those of the branch. Unit staff were paid low salaries and had no career track within BRI. Staff authority and accountability were exceedingly limited. Training was poor and performance-based incentives nonexistent. And supervision of the units was weak and irregular.

In 1983 the newly appointed managers at the head office in Jakarta realized that the system was steeped in bureaucracy and seniority, suffered from inefficiency and lack of initiative, and offered many opportunities for corruption through the disbursement of credit subsidies. The unit desa system would have to be fundamentally restructured if the new culture of professionalism, transparency, efficiency, initiative, and accountability were to take root.

The new culture of professionalism, transparency, efficiency, initiative, and accountability required that the unit desa system be fundamentally restructured

When the restructuring of the unit desa system began in 1984, it soon became apparent that building the institutional capacity needed for commercial microfinance operations would require extensive reorganization within BRI. Figure 14.1 illustrates major aspects of the processes that occurred in building an organization that would meet the operating requirements of sustainable microfinance.

A loan instrument had to be developed and implemented that would enable the units to provide large-scale, profitable outreach to low-income clients. To achieve that goal, the unit desa system would have to take on major new functions, including developing a new type of borrower selection process, new methods of loan collection and delinquency measurement and management that would produce a very high on-time repayment rate, and new systems of accounting, reporting, and information management.

Similarly, a new savings program would have to be designed and implemented to meet the widespread demand for savings services and to finance the KUPEDES loan program (see chapter 13). This required generating the capacity to develop appropriately priced savings instruments with the characteristics that savers demanded, to identify potential savers in far-flung villages and to collect their savings, and to provide savers with the security, cash-flow management, and services that would induce them to open and maintain accounts at the units.

The new system had to develop the ability to design, price, and implement together these new lending and savings instruments, to create an appropriate

Figure **14.1** **Restructuring unit desa organization and management**

Element	Goal	Institutional capacity needed to reach goal	Organizational changes required to develop capacity
KUPEDES	To provide and recover small loans from low-income clients nationwide, enabling unit desa profitability and large-scale outreach	• Capacity to design and implement a commercial loan product that meets microcredit demand profitably • Specialized staff training in borrower identification, selection, and loan collection • Development of systems for tracking loan status, reporting performance, and measuring and managing delinquency • Maintenance of consistently high on-time repayment rate	• Units changed from branch windows to individual profit centers • Job descriptions of unit staff changed unit manager given loan authority and overall responsibility, manager and credit officer held responsible for their financial decisions, all staff held accountable for performance • Substantial upgrading and augmentation of unit supervisory staff at branch and regional levels • A new unit desa division established at the head office, reporting to a BRI managing director. This division develops and oversees the unit desas and coordinates their activity with other bank divisions • Establishment of training centers for unit desa staff and their supervisors, development of a training curriculum appropriate for microfinance
Savings	To mobilize public savings on a large scale in order to meet demand from small savers and to finance KUPEDES loans	• Capacity to design, test, and implement savings products that meet varied local demand and are priced for unit profitability • Specialized staff training in identifying potential savers and capturing their savings • High-quality security, cash-flow management, and customer services	
Unit desa system	A profitable, nationwide system of financial intermediation delivered locally to low-income clients	• A spread between loan and savings interest rates that enables institutional profitability • Effective asset-liability management • A simple, transparent, cash-based accounting system • A transfer price, reviewed on a regular basis, that signals to the units the relative emphasis to be placed on lending and savings mobilization • A career path, salary scales, incentives, and training program that encourage good staff performance and high productivity • Efficient operations and management information systems	

transfer price mechanism, to establish effective and efficient operating procedures, to develop a new staff training program designed for commercial microfinance, and to provide the supervisory process and performance-based incentives necessary for high staff productivity.

Fundamental organizational changes would have to be made to implement, supervise, and control such a system. At the lowest level, the structure of the units would have to be changed from branch windows to individual profit centers. Unit staff would have to be given more responsibility, provided the authority to carry out their new tasks, trained in the skills needed to achieve good performance, offered the incentives to achieve high productivity, and held accountable for their performance.

Analogous steps would have to be taken at branch and regional offices to enable the effective supervision of unit activities, and at the head office to develop appropriate information management, coordinate planning, and maintain effective control over the system. In addition, training centers designed to train unit desa staff and their supervisors in microbanking would have to be established and the trainers trained.

The cultural transformation of the unit desa system did not happen overnight. It was a long, hard process

Underlying and accompanying the process of institutional capacity building and organizational restructuring was a newly emerging unit desa philosophy—a philosophy that began to be captured in such key words and phrases as trust, simplicity, transparency, accountability, commitment, service, profitability, security, standardization with flexibility, customer convenience, market knowledge, incentives to staff and clients, specialized staff training, supervision, and the new BRI culture.

Of these the most important was the BRI culture, which integrated the others. As Kamardy Arief, BRI's president-director, said: "We are building a new culture at BRI." It was that new culture, with all its components, that converted the unit desas that no one wanted into today's preeminent international model for large-scale sustainable microfinance.

Restructuring the Unit Desas: The Transition Process

The cultural transformation of the unit desa system did not happen overnight. It was a long, hard process that experienced spurts and setbacks. The changes occurred over many years and involved interlinked innovations and reforms of multiple kinds and in different timeframes. These included the transformation in operations, human resources, organization, and management that are discussed in this chapter, as well as the transition to the new ideas and products that were analyzed in earlier chapters. While the organizational structure evolved piecemeal over time, the continuity required to change the culture was provided by its high-level management. The late Sugianto, BRI's managing director responsible for the unit desa system from 1984 until his untimely death in 1998, was especially important in this context, as he provided the long-term leadership needed for the development of the system.[4]

From branch windows to profit centers

At the beginning of 1984 all unit desas were changed from branch windows to individual profit centers. This had to be the first step of the restructuring process because it laid the foundation on which the entire system would then be built. Once the performance of individual units could be measured simply and accurately and reported regularly, staff could be held accountable, supervision could be concentrated where needed, incentives and promotions could be based on indicators of unit performance, and each unit desa could be helped to attain outreach and profitability.

To start, each unit was provided with 19 million rupiah in equity (about $19,000). Bookkeeping, reporting, and audit systems were completely transformed. Each unit was required to maintain its own balance sheet and profit and loss statement and to report these monthly to its higher-level supervisors.

Until 1984 each unit produced 32 monthly reports. Most were redundant, useless, or both. The reports were eventually reduced to 5

Units with outstanding loans above 19 million rupiah were now considered as having borrowed the remainder from their supervising branches. However, the units served as agents for the branches in collecting old loans. Unit liabilities were transferred to the supervising branches.

After the new system began, interest paid on a unit's KUPEDES loans was retained by the unit. Similarly, savings mobilized by a unit were no longer transferred to the branch but were considered a unit liability. The transfer price mechanism was introduced: a unit with excess liquidity deposited funds at its supervising branch and earned interest on the deposits, while a unit with outstanding loans higher than total deposits borrowed from the branch. The interest rate for liquidity credit from branches to units was set higher than the highest deposit interest rate to encourage units to mobilize savings by making it less expensive to do so than to borrow from the branch.

Accounting standards and procedures were fundamentally changed. The previous system of accrual of income earned but not yet paid was ended; only paid interest was now posted as income. Reserves for bad debt were instituted based on unit arrears, and reserves for payment of interest on unit savings were required.

Until 1984 each unit produced 32 monthly reports. Most were redundant, useless, or both, and they were often submitted too late to be of use for management purposes. Yet preparing the reports occupied a large amount of staff time. The monthly reports required from units were eventually reduced to 5—which provide far better information than the 32 earlier reports.

Since the profit and loss position of each unit was now available monthly, unit staff were able to take timely actions to help the unit widen outreach and achieve, or increase, profitability. In addition, the supervisors of the units at the branch and regional offices could review the performance of the units each month, and could take immediate action as necessary. Head office managers could review overall monthly progress by unit, branch, and region. This meant that poorly performing units and their supervisors could be visited quickly to identify problems and to institute corrections, while unusually well-performing units could be visited to learn successful techniques that might be replicated or adapted by other units.

These components of the new management information system were essential for the development of the new culture. In contrast, while computerization ultimately played an important role in the development of the unit desas, it was not an integral part of the cultural transformation. The units were computerized gradually; most became profitable under manual accounting and reporting systems. Only by 1997—long after the success of the unit desa system—did every unit have a computer.

Changes in organization and management

As the basic changes that would be required to transform the units into profitable microfinance intermediaries began to become clear, and as the implications of these changes for organizational restructuring began to be understood, the process of reorganizing the system began.[5] It took place at all levels—units, branches, regional offices, and the head office.

Most units became profitable under manual accounting and reporting systems. It was long after their success that every unit had a computer

In 1984 BRI's head office accorded high priority to effective management of the unit desa system. This was, of course, the first year that the system was designed so that it could be managed effectively.

Until then BRI's management of unit staff was deeply flawed. Kept outside the "BRI family," unit staff were essentially treated as outcastes. On a substantially lower salary and benefit scale than other BRI staff, they were not trained in the skills needed for local banking. They were responsible for operating credit and savings programs that were impossible to implement profitably. They had no career track and could not be promoted to positions in the rest of the bank. And they were excluded from participating in BRI corporate events.

As a first order of priority, therefore, unit desa management at the head office turned its attention to bringing unit salary scales in line with those of the rest of the bank. After that the head office established a system of promotion that incorporated the unit staff into the wider BRI personnel system and developed performance-based promotion criteria. Skill development was carried out concurrently, with unit staff beginning to be trained in basic knowledge of local financial markets, in the implementation of the new credit and savings instruments, and in the operations required for sustainable microfinance.

The head office. BRI's president-director and its managing director responsible for the unit desas changed—gradually but radically—the internal supervision of the unit desa system. Unlike the reorganization of the system at the unit and branch levels, which happened quickly, head office restructuring took considerable time. Misunderstanding of the new role of the unit desas within BRI, combined with internal vested interests, made it difficult and time-consuming to make changes at the head office. As a result implementation of head office reorganization took place in stages, driven at each stage by the needs of the unit desa system—but more to the point, by its growing influence within BRI, a result of the units' increasing contribution to bank profits and liquidity.

Until 1984 BRI's Cooperative and Program Credit Division, which was responsible for subsidized rural credit at BRI, also provided national and re-

gional supervision of the units. This arrangement was appropriate because the units had been established to administer the division's loans. But the units' new credit and savings products were based on commercial principles that were fundamentally different from those underlying the bank's ongoing government-subsidized loans. Thus it was no longer appropriate for the unit desas to be supervised by the Cooperative and Program Credit Division.

Where did the reformed unit desas belong organizationally? Nowhere. In 1984 three BRI divisions (*urusan*) were responsible for the bank's loans: the Cooperative and Program Credit Division, the Commercial Credit Division (for credit much larger than KUPEDES loans), and the Corporate Credit Division. Each division reported to a different managing director. It was clear, however, that the KUPEDES credit program did not fit into any of these divisions.

The unit desa system was a success in search of a home in the BRI organizational structure

Therefore, when KUPEDES began, a team headed by BRI's Division for Organization was assigned responsibility for the units. But since KUPEDES grew rapidly, it was soon decided that the units needed to be placed in a division responsible for supervising credit. Once again, the Cooperative and Program Credit Division assumed responsibility for the units. This time, however, a new section (*bagian*) called Business Unit Desa (BUD) was created within that division.

Primarily because of the personal commitments and leadership of BRI's president-director and the managing director responsible for the unit desas, BUD was well managed—even during the years when an appropriate place for the system within BRI's organizational structure had not yet been established. During much of the second half of the 1980s, the unit desa system was a success in search of a home in the overall BRI structure. Although hardly a textbook example of good management, it worked as a temporary measure.

Then, as the business of the units continued to expand rapidly, BUD outgrew its status as a section. In addition, it clearly no longer belonged in the division to which it was assigned. But BUD could not reasonably be put into any other division. The solution eventually reached was to upgrade the BUD section to the BUD Division; the head of the new division reported directly to the managing director responsible for the unit desa system.

This process of reorganization—driven directly by the performance of the new unit desa products and services, and indirectly by the broader strategy that guided the units' extraordinary performance—created a major shift in organizational structure at the bank. The change engendered considerable controversy. But as the units continued to earn more and more of the bank's profits, it was not possible to reverse direction. Instead, the BUD Division continued to increase its role within BRI.

The regional and branch offices. At the regional offices new BUD sections (*bagian*) were created to oversee and support unit activities. These sections were charged with reviewing and correcting branch supervision of unit desa activities.

At the branch level much more rigorous supervision was instituted than had been present before 1984. Previously there had been one branch supervisor for every 6 unit desas and one higher-level unit development officer for 24

or more units.[6] But neither the number of supervisors nor the usual quality of the BIMAS-era incumbents was adequate for the new system. Therefore, as discussed later in this chapter, high priority was given to developing an intensive supervision system with fewer unit desas per supervisor; these supervisors, called unit business managers, were given special training specifically related to their new job descriptions. Each branch supervisor is assigned a maximum of four unit desas; branches with nine or more units also have a coordinating and supervising unit development officer, and branches with many units may have an additional unit development officer.

Supervisors of the unit desa system at the branch and regional offices were now held directly accountable for the financial performance of the units they supervised.

Unit staff were now given responsibility, authority, training, and performance-based incentives—along with accountability and supervision

The unit desas. Incorporating unit staff into the BRI corporate structure was an essential first step in building the human resources of the unit desa system. As BRI's salary structure, promotion criteria, and career track opportunities were revised to include the units, the responsibilities of unit staff were changed dramatically. Until 1984 unit staff had little authority and even less accountability. They were now given responsibility, authority, training, and performance-based incentives—along with accountability and supervision. The minimum staff for a unit continued at four: manager, credit officer, bookkeeper, and teller. But new staffing standards were established so that staff could be added based on a unit's workload.

When the accounting mechanisms needed to evaluate each unit as an independent profit center were instituted in 1984, it became possible to require and enforce staff accountability. Until then, except for legally proven fraud cases, staff could not be held accountable for their performance because in most cases performance could not be evaluated. At best, unproductive or dishonest staff could be transferred. I was told of an instance during the 1970s when a unit manager was found to have stolen money from his unit. Since the case was not taken to court, he could not be dismissed. However, the unit manager was demoted—to teller!

The restructuring of the unit desa system incorporated basic changes in the allocation of staff responsibilities. Within BRI's overall rules, each unit manager was given authority to approve loans up to a maximum amount that was based on the manager's experience and performance. The unit manager and the credit officer were accountable for the quality of the loans they made, and unit staff were evaluated on the basis of the financial performance of their unit. Staff promotions and incentives were allocated accordingly. For the first time, women were recruited as unit staff.

Staff training and incentives. In the BIMAS era unit staff had been given little training, and certainly none that would enable them to implement a sustainable system of microfinance. However, the goals of the new system required the development of a new kind of training.

The focus was on teaching unit staff the elements of the new banking system, including accounting, bookkeeping, operations, and financial analysis; on studying local financial markets, business networks, and household income flows; and on developing staff capability in customer relations and publicity. The trainers were an ad hoc assortment of BRI directors, trainers, regional and branch staff, CPIS staff, and HIID consultants. One of the most important shifts from old to new cultures occurred when head office managers began visiting units, not only to give instructions but also to listen to unit staff. And unit staff had begun to listen to their customers. Unheard of in BIMAS times, substantial information flowed from unit staff to the head office and was incorporated into training materials.

An important cultural shift occurred when head office managers visited units not only to instruct, but to listen

In 1986–87 a systematic retraining of all unit desa staff began; the purpose was both to upgrade the staff and to ensure that new unit procedures became standardized throughout the system. As discussed later in this chapter, five large training centers for unit desa staff and their branch supervisors were built in different parts of the country. An excellent example of how donor funds can be used well in developing sustainable microfinance, the training centers were constructed in large part with funding from the U.S. Agency for International Development.

Under the old culture subsidized loans were provided at a below-market effective interest rate of 12 percent a year and were rationed. As a result staff—poorly paid and poorly supervised—had an incentive to allocate loans to applicants wealthy enough to pay bribes or influential enough to provide staff with other benefits. The new reforms addressed the incentive problems directly. First, widely available KUPEDES credit at a 32 percent annual effective interest rate provided far less opportunity for staff corruption.

Second, a special incentive system based on unit profitability was instituted for unit staff. Ten percent of each unit's annual profits was given as a bonus to all the unit's employees, up to 1.5 percent of an employee's monthly salary. However, no incentives were provided to the units' supervisory staff at branch level; it was thought that it could prove counterproductive to offer incentives to some branch staff (those supervising the units) and not to others (those working on retail, commercial, or corporate banking). The lack of incentives for supervising staff became a long-standing source of difficulty. But for unit staff the profitability bonus provided a strong incentive for good performance.

Other performance-based incentives for unit staff and their branch supervisors were developed in stages; these are discussed later in this chapter. In the early years of the transition, however, the most powerful incentive for productivity was that the new system had only two years to prove itself, that the government would not bail it out if it did not do so, and that unit staff would lose their jobs if the unit desa system failed to attain outreach and profitability.

Unit desa location

Rural units. Because the unit desas had been developed primarily to channel BIMAS credit to rice farmers, they were originally located near irrigated ricefields (*sawah*). Units were opened in proportion to the extent of the sawah

to be covered: one unit desa per 600–1,000 hectares of sawah on Java, and one unit per 1,200–2,000 hectares off Java.

With the advent of KUPEDES and the new savings instruments, however, the situation changed. Since these products were designed to appeal to a broad base of small borrowers and savers, the units would now have to be located near local market centers where they would be easily accessible to all kinds of potential clients. In addition, the widely differing productive activities in different parts of the country made a uniform approach to the location of unit desas inappropriate. Thus a more flexible method of relocating units and opening new ones was initiated.

At that time nearly all unit buildings were rented. Thus, in theory, it would not be difficult to move those that were unsuitably located to sites with more potential for microfinance. But the realities were more complex.

10 percent of each unit's annual profits was given as a bonus to all the unit's employees

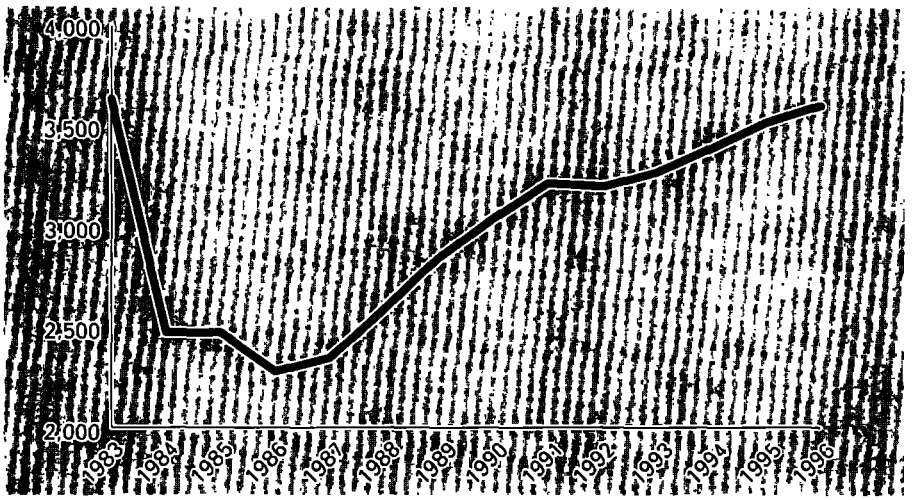
In 1984 the head office instructed branch managers to divide all unit desas into two categories: "potential" and "nonpotential." Potential units were defined as those estimated to have the capacity to cover the cost of a four-person unit. Nonpotential units were those believed not to have the possibility of covering these costs. Branch managers were instructed to relocate nonpotential units or to combine them with nearby potential units. Most nonpotential units would then be designated as village service posts (*pos pelayanan desa,* or PPDs); these were to be kept open for limited transactions during restricted periods.

In most cases, however, branches were instructed to classify the potential of the units under their supervision before their managers and staff had been trained to assess rural banking potential. Many branch and unit managers knew little about local productive activities, financial markets, business networks, and income flows—or how to identify creditworthy borrowers. Virtually none knew anything about savings potential.

As a result branch managers steeped in the old culture assumed that a unit desa that had not been active in the past would not be active in the future, or that one with high loan delinquency in the past would have high delinquency in the future. Many branch managers interpreted the instructions to relocate units as a license to close them—since there were, they thought, no locations with banking potential in their service areas. The potential of units that served areas with significant nonrice economic activities, or those with substantial savings possibilities, went unrecognized. In addition, areas considered to be economically below average or poor were ruled out as unit sites by nearly all branch managers. Later it was discovered that even in quite poor areas there can be considerable banking potential—primarily for savings mobilization. The reason is that many people in poor regions leave to find work elsewhere; often they then send remittances home to their families.

At the end of 1983 there were 3,626 unit banks; the number dropped by nearly one-third (to 2,469) by the end of 1984 and to 2,273 by 1986 (figure 14.2). On paper there were nearly 1,200 village service posts, a result of the relocation of unit desas. But many of these posts existed only on paper. Worse, some that were announced as being open on certain days were

Figure **14.2** **Number of unit desas, 1983–96**



Source BRI unit desa monthly reports

Many branch managers interpreted the instructions to relocate units as a license to close them since they saw no locations with banking potential

often closed on those days. Customers who traveled long distances to service posts and found them closed when they were supposed to be open rapidly became disillusioned about the prospects of banking at their local unit desa post.

The closing of more than a thousand units in 1984 happened so quickly that it took until mid-1985 for the head office to realize fully the extent of the decrease in units. By 1986, however, high priority had been placed on training local staff in recognizing and assessing banking potential in rural areas, and in appropriate methods of relocating unit desas. The number of unit desas increased steadily after 1986, reaching 3,595 by the end of 1996, with 392 additional village service posts—which have been consistently open on the dates and at the hours specified.

In the late 1980s BRI began committing substantial resources for the opening of new units in areas with good banking potential and for significant improvements in buildings, communications, and equipment. In some areas BRI purchased the buildings in which the units are located.

Urban units. Because the unit desas were established as part of the government's rice intensification program, at first they were located entirely in rural areas. But by the 1980s substantial rural-urban migration, extensive circular migration (in which a household or some of its members moves for part of the year to work elsewhere and returns home for part of the year), and widespread urban-rural remittances[7] and other financial transfers had created an environment in which considerable opportunity existed for financial intermediation between rural and urban areas.

A few years after the units' new products had been introduced in rural areas, BUD managers at the head office began to believe that much of what had been learned about rural microfinance might also apply in low-income urban neighborhoods. Market research confirmed that the demand for financial instruments and services appeared to be similar in many respects. Therefore, in 1989 urban units (unit *kotas*) began to be opened in low-income urban neighborhoods, with rapid and positive results.

By the end of 1990 urban units accounted for 622 (20 percent) of the 3,040 unit banks then in the system. The urban units had $182 million in KUPEDES loans outstanding, about a quarter of the 1990 outstanding loan balance of $727 million. In addition, they had $284 million in deposits, about 32 percent of the $892 million in the unit desa system. The urban units accounted for 26 percent of unit bank profits in 1990.

In 1983 there were 3,626 unit banks; the number dropped to 2,273 by 1986

After the urban units had been in place for a few years, BRI stopped recording unit performance by whether the units were rural or urban. In addition, some units came to be treated as semiurban; for example, they offer both SIMPEDES (rural savings) and SIMASKOT (urban savings). Thus more recent data differentiating urban and rural units are not available. However, in 1996 urban units probably accounted for about one-quarter of unit desas.

The urban units started with the same products as the rural ones. Over time these instruments were modified somewhat to suit the urban demand for small loans and savings and to enable the units to operate successfully in a more competitive environment. Overall, however, BUD learned that low-income urban clients are much like their counterparts in rural areas: they respond positively to security, convenience, liquidity, products appropriate for their needs, good service, and a friendly environment.

Critics have sometimes suggested that the unit desa system draws funds from rural to urban areas, thus contributing to urban bias.[8] This is a complex issue. The urban units have been net savers from the first year they were opened. In 1990 the rural units were still net borrowers, but shortly afterward they became net savers as well. Much of the excess liquidity of the unit desas is lent to the branches, which are mostly rural. In addition, the prevalence of remittances from urban workers to their rural families suggests that some deposits in rural units originate from urban sources.

However, in 1996, 42 percent of BRI's funds came from the units, while only 15 percent of the value of outstanding loans were from the units. Throughout the 1990s more than half of the units' savings were deposited in the branches, a trend that accelerated during the crisis (chapter 15). For many years much of the units' excess liquidity was channeled into large corporate loans. And since large borrowers have a history of poor repayment at BRI (and at many other Indonesian banks), unit profits were used to cross-subsidize the losses of other BRI divisions.

Marketing and public relations

When the main business of the units was disbursing subsidized credit, there was little interest in public relations. Borrower targets were set and filled by gov-

ernment committees; given the interest rate regulations of the time, the units did not encourage savers. Customers, it was thought, needed instructions, not public relations.

The situation changed in 1984 with the advent of KUPEDES, and even more in 1986 when the new savings program began nationwide. First, KUPEDES had to be introduced to the public. Unsubsidized, and unlike the institutional loans with which most villagers were familiar, KUPEDES brought with it the need for unit staff to sell a product to potential borrowers. KUPEDES customers came to be called (and treated as) clients, not as beneficiaries—a milestone in the history of the unit desa system. Savings mobilization accelerated this transition because, to capture savings, unit staff had to visit clients and convince them that the bank was trustworthy and its services helpful.

KUPEDES customers came to be called (and treated as) clients, not as beneficiaries—a milestone in the history of the unit desa system

Early publicity took several forms: posters, advertising in newspapers and on the radio, and personal visits. Following the example of Bank Dagang Bali, the SIMPEDES lottery drawings were used to publicize unit products and services.

There were setbacks. At all levels in the unit system, BRI staff were unfamiliar with how to advertise unit products. The head office hired a large Jakarta advertising firm to publicize unit products in the villages; the results were somewhere between disastrous and ludicrous. The posters first showed urban youth in the latest fashions waxing ecstatic over KUPEDES and SIMPEDES. When these were rejected, the next set of posters featured pictures of the agency's perception of farmers—poor, bent, and clad in ragged clothes. No one from the advertising agency thought of visiting a village or looking for messages that might appeal to real villagers. The bank terminated its relationship with the advertising firm and looked for another. It soon became apparent that at that time no Jakarta agency would know how to advertise unit desa products to rural households. The head office then took over the job of advertising unit products; after an initial learning period, BRI did very well at this.

Similar problems arose at all levels in the system. When selecting prizes for the SIMPEDES lotteries, branch managers had little idea what local people would consider attractive prizes. Farming tools and sewing machines were the first attempt. But SIMPEDES savers said they wanted consumer goods as prizes—motorcycles, televisions, and refrigerators. The prizes were changed accordingly and were later increased so that cars could be included as well. Branch staff also learned how to adapt to their local environments the advertising materials generated by the head office.

As noted in chapter 13, however, the best advertising remained word of mouth from satisfied clients. As the new products were introduced, the staff trained, and the incentives implemented, unit service improved dramatically. So did word-of-mouth advertising.

By the late 1980s, when the units were beginning to face competition from other banks, they had become public relations experts. The units had developed advertising messages that appealed to their client base and could be spread in multiple ways: through BRI calendars (finally given to savers as well as bor-

rowers), t-shirts, posters, decals, newspaper advertisements, and television dramas showing the role of unit products in family sagas.[9]

The development of public relations provides another example of how the units were driven by the nature of the new instruments. These were products that had to be sold; by trial and error, the units learned marketing.

Learning from mistakes

While moving from the old culture to the new, many mistakes were made. But BRI usually learned from these mistakes. As the unit desas learned from the problems that arose in relocating units, in advertising, and in other areas, some underlying issues began to emerge. One example was the critical role of sequencing. Asking branch managers to distinguish potential from nonpotential units before they were trained in identifying potential was a classic example.

While moving from the old culture to the new, many mistakes were made. But BRI usually learned from these mistakes

Another example illustrates a related problem. At the time of the transition, branch managers were evaluated annually on a set of criteria that placed considerable weight on low unit arrears but relatively little weight on the value of outstanding loans; the criteria did not include an increase in the number of borrowers. Thus managers had an incentive to give few loans. After KUPEDES was introduced, the evaluation criteria continued unchanged for some time. Not surprisingly, many branch managers instructed unit staff to go slow on KUPEDES. One branch manager refused to allow any KUPEDES loans because, he said, the surest way to have no arrears is to have no loans! When these difficulties were uncovered, the evaluation criteria were changed, and the number of KUPEDES borrowers increased.

Effective branch management of the new microfinance turned out to be far more difficult than had been anticipated. Some branch managers learned quickly and took great interest in the new system, but at first these were in the minority. Supervising officers at branch and regional offices tended to find it more difficult to accept the far-reaching changes being made in the unit desa system than did the unit staff. The middle managers had grown up under BIMAS and had been promoted because they were experts at implementing the old BRI culture. Some were able to change quickly, but many were unable or unwilling to do so.

By contrast, many unit staff serving under these managers were eager to implement the new products, both KUPEDES and savings. They were younger, less set in the old ways, and closer to the unit customers. They were also motivated by the changes in their salaries, benefits, incentives, and training.

This situation led to difficulties; in some cases units tried to implement head office instructions but were blocked by their branch managers. The situation was partly alleviated by frequent visits to the branches and units by representatives of the head office. In particular, the president-director and the managing director responsible for the units traveled constantly, visiting branches and units, often unexpectedly. Their visits had three purposes: to check whether the new instruments and procedures were being appropriately implemented; to teach the new BRI culture at the regions, branches, and units; and to learn from local staff—a hallmark of the changed culture at BRI. Unit staff were encouraged

to discuss their ideas with the president-director and the managing director in front of their branch managers, hitherto an unimaginable event.

Over time, and with training, incentives, and encouragement, many middle managers changed their attitudes (to varying degrees). With others the problem was solved only by their eventual retirement.

Organization and Management of the Unit Desas, 1996

In some cases units tried to implement head office instructions but were blocked by their branch managers

Fully owned by the government of Indonesia, BRI is managed by a president-director and six managing directors appointed by the Ministry of Finance; the appointment of the president-director must be approved by the president of Indonesia.[10] The managing directors are operating officers of the bank; each was responsible for at least 3 of BRI's 23 operating divisions (figure 14.3). A three-person Board of Commissioners appointed by the Ministry of Finance holds general supervisory authority on behalf of the ministry but does not play an active role in direct bank management.

At the end of 1996 BRI's assets totaled $14.4 billion, outstanding loans were $11.2 billion, and deposits were $8.1 billion. There were more than 45,000 employees. In addition to its divisional structure, BRI was organized into strategic business units. In 1996 there were three such units: corporate and international banking, commercial and retail banking, and the unit microbanking system.

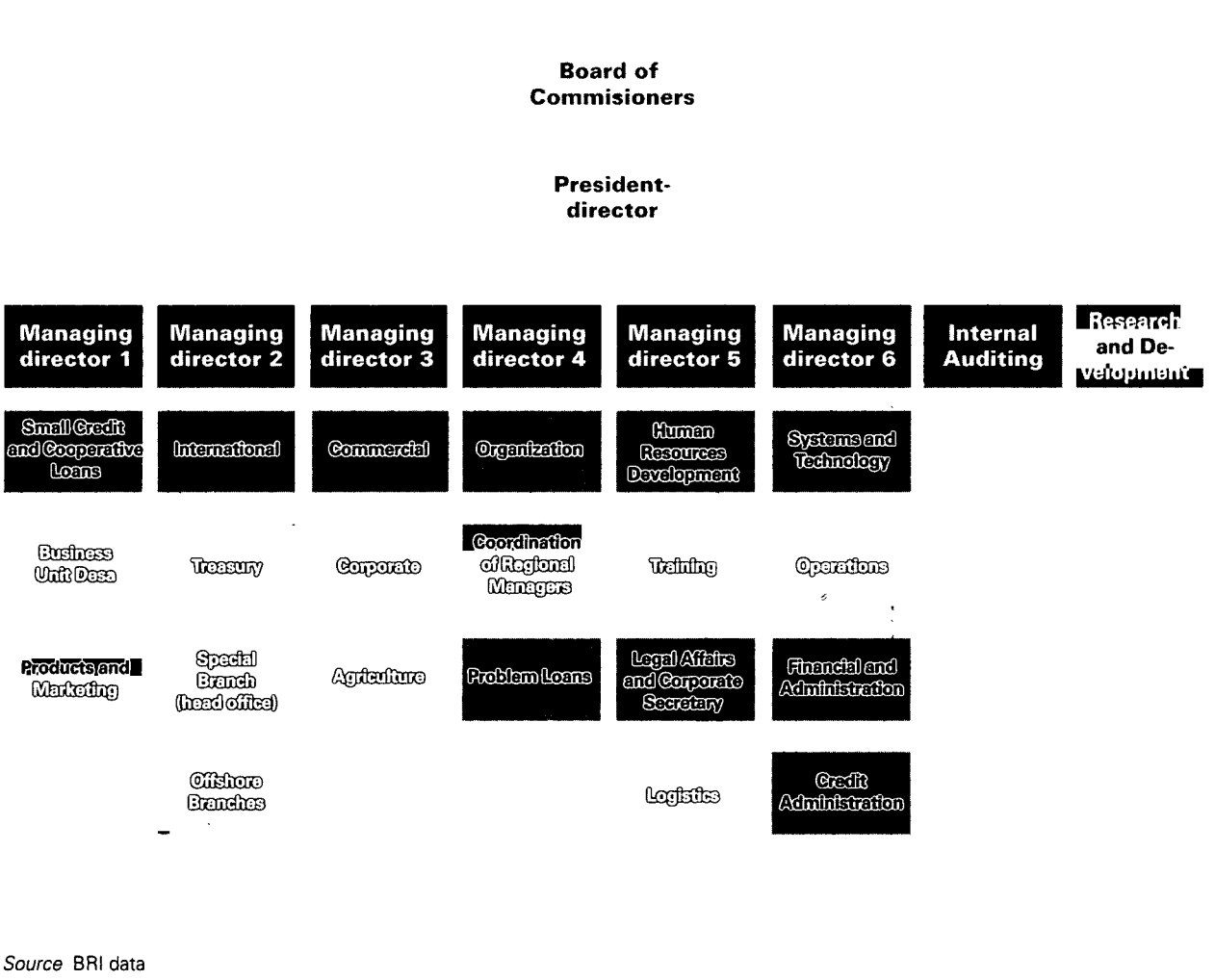
BRI maintains offices at all the government's administrative levels from its head office in Jakarta to its unit posts in villages (figure 14.4). The Business Unit Desa (BUD) Division was one of BRI's 23 divisions; only this division and its managing director were directly responsible for the unit desa system (see figure 14.3). However, other divisions in the bank—such as Systems and Technology, Logistics, Human Resources Development, Training, and Legal Affairs—provided services to the BUD Division.

At the end of 1996 the BUD Division had assets of $3.4 billion (24 percent of BRI's assets). KUPEDES had $1.7 billion in outstanding loans (15 percent of BRI's loans). And unit deposits were $3.0 billion (42 percent of BRI's deposits). The BUD Division was responsible for the large majority of BRI's clients—and all its profits.

Lending and deposit taking are the units' main activities. However, other services are profitably provided on a fee basis. Thus all units handle transfer payments for both clients and nonclients. Many units act as payment points for telephone and electric bills and for the payment of property taxes. Some act as paymasters for government teachers and army staff and for pension plan payments.

Table 14.1 shows BUD employment at the different BRI organizational levels illustrated in figure 14.3. Although it was only 1 of BRI's 23 divisions, the BUD Division employed 23,115 staff in 1996—just over half the bank's total employment—indicating just how labor-intensive microfinance is compared with conventional commercial banking. The proportion of female em-

Figure **14.3** **Bank Rakyat Indonesia's organizational structure, 1996**



Source BRI data

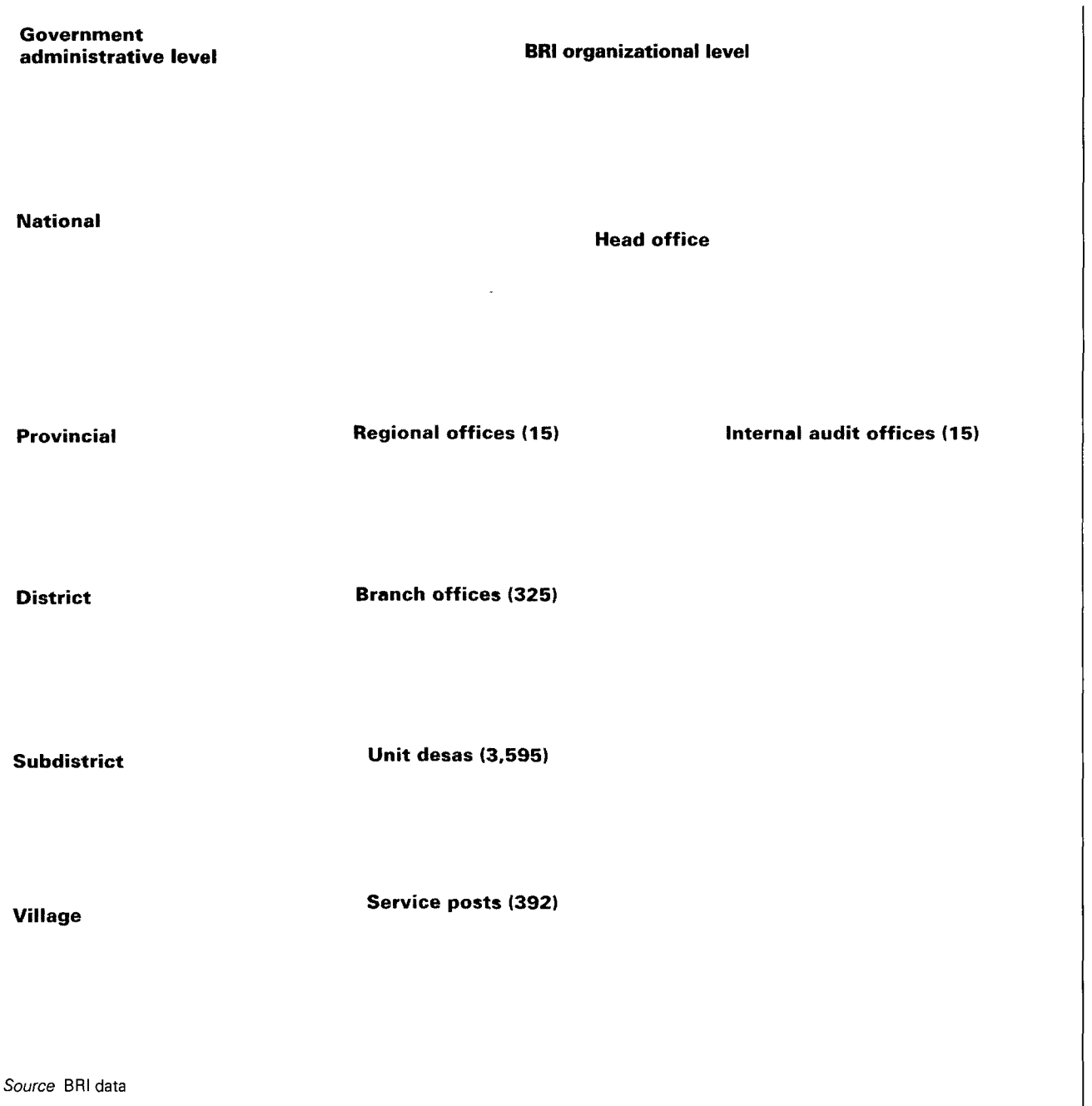
ployees in the unit system, which had been rising gradually, approached 25 percent by the end of 1996.

The following sections provide a detailed discussion of BUD organization and management, reporting, staff incentives, and training in 1996. The purpose is to illustrate their relationships to unit desa performance. Beginning in 1997 further bank reorganization took place; the changes that affected microbanking are discussed in chapter 15.

At the head office

At BRI's head office the managing director responsible for the BUD Division is charged with overseeing the unit desa system; he also plays the predominant role in setting overall policy for the units. However, major policies are decided by BRI's board of directors (its six managing directors and its president-director).

Figure **14.4** **Government administrative levels and Bank Rakyat Indonesia's organizational levels, 1996**



Source BRI data

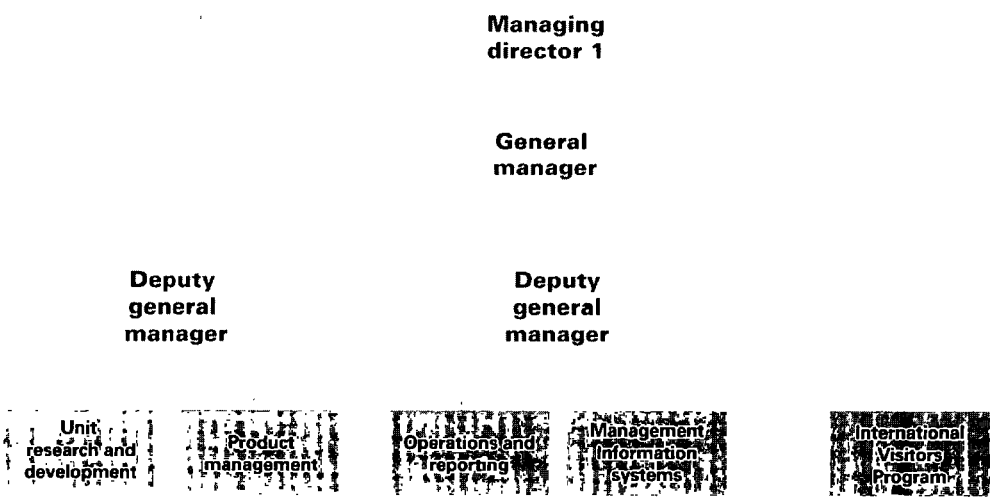
At the head office the BUD Division is responsible for the development, management, supervision, and reporting of the unit desa system. Consisting of 69 people in 1996, it was headed by a general manager (*kepala urusan*) and two deputy managers; the general manager reports to the responsible managing director (figure 14.5). The BUD general manager also coordinates unit desa activities with divisions (such as Logistics and Human Resources Development) that provide support to BUD.

Table **14.1** **Employment in the unit desa system by organizational level, 1996**

Organizational level	Number of offices	Number of employees
Head office	1	69
Regional offices	15	196
Branches	325	1,612
Units	3,595	21,238
Unit staff		17,156
Guards and contract staff		4,082
Village posts	392	0
Total	4,327	23,115

Source BRI 1997b

Figure **14.5** **Organizational structure of the Business Unit Desa Division at Bank Rakyat Indonesia's head office, 1996**



Source BRI data

BUD's four sections. The BUD Division was organized into four sections (*bagian*). The Product Management Section, with a staff of 10 in 1996, was responsible for developing new products, marketing and promoting those unit products, and analyzing product profitability; this section also provided training in these areas. The Operations and Reporting Section, with a staff of 18, was charged with developing BUD operating standards, producing operations manuals, and monitoring the use of the standards that had been set. This sec-

tion also analyzed the data reported from the units, produced regular reports on unit development, and generated reports for management on special topics affecting the units. Among its other responsibilities were monitoring and reporting on unit staffing and supervision.

The Unit Research and Development Section, with a staff of 10, conducted research on products, markets, customers, and on unit staffing, operations, and organization. This section also evaluated unit development and provided input to BUD on its criteria for the location of units. The Management Information Systems Section had a staff of 23, of whom 10 were appointed to the computer workshop. This section was responsible for evaluating and recommending equipment; installing, testing, and repairing hardware; and developing, installing, maintaining, and improving software. It was also responsible for research and development for BUD's computer network.

The BUD (microbanking) Division was responsible for the large majority of BRI's clients—and all its profits

BUD also maintains an International Visitors Program; in 1996 it had a staff of 5, plus a part-time director who reported to the BUD general manager.[11] Program staff accompany BUD's many international visitors on field visits, prepare instructional materials for the program, give presentations on various aspects of unit activity, and conduct workshops and conferences on commercial microfinance. During 1991–96, BUD hosted nearly 500 visitors from more than 30 countries in Asia, Africa, Latin America, Europe, the Middle East, and North America.

Management issues. As a large commercial bank, BRI follows a generalist management model that results in frequent personnel changes among the bank's divisions. Among divisional general managers and section heads, for example, the average appointment lasts three to four years. While this method enables managers to gain broad banking experience, it limits continuity and institutional memory within divisions.

This management model presents particularly difficult problems for the BUD Division since the units' clients, products, services, procedures, pricing, and staffing differ significantly from those of the rest of the bank. For BUD, as for any commercial microfinance institution, it is important to develop a group of long-term managers who are experienced in and committed to the profitable operation of a commercial microfinance system. This was not possible under BRI's management model.

With the exception of the late Sugianto, the long-term incumbent of the managing director 1 position shown in figure 14.3, there has been little continuity at BUD. As soon as BUD managers gained several years of microfinance experience, they were transferred to other divisions and replaced by microfinance neophytes. A related problem is that many of BRI's middle managers did not consider BUD a desirable posting. The idea that "real" bankers are in corporate and international banking was widespread. Despite the fact that BRI's profits came from BUD, microbanking was generally considered a low-status activity within BRI—and by the banking sector in Indonesia generally. The BRI

management model illustrates one of the problems that can arise when commercial banks operate microfinance through a division; other difficulties that can result from this structure will be discussed later in this chapter.

At the regional offices

BRI's 15 regional offices are located in provincial capitals. Their role is administrative and supervisory; regional offices do not make loans or accept deposits. They coordinate and supervise the branches in their regions. They collect and analyze data about the unit desas of the region and report this information to the head office. And they communicate messages and instructions from the head office, helping the branches to understand and implement these. In addition, staff recruitment for the units is centered at the regional offices.

Although it was only 1 of BRI's 23 divisions, BUD employed over half the bank's staff

As with many of BRI's other operating divisions, BUD is represented at each regional office through a BUD Department, divided into two groups: Administration and Reporting, and Automation. In addition, some BUD Department staff work directly with the BUD department manager. Other BRI divisions represented at the regional offices—Logistics, Human Resources Development, and Systems and Technology—are also involved with BUD activities; the regional BUD Department is not responsible for most of the support functions used by the unit desa system at the regional level. BUD's function in this regard is to coordinate with the relevant departments at the regional offices to ensure that such support is adequately provided.

The BUD Department in each regional office has overall responsibility for the units in its region. Department staff analyze unit performance, profitability, and portfolio quality; help estimate employment and recruitment needs; collect information in fraud cases; install and maintain computers; and generally supervise and promote unit development throughout the region. The number of BUD staff at a regional office depends on the number of units in the region. In 1996 there were an average of 13 BUD staff per regional office, of whom 7 were responsible for computers and automation. During 1993–96 total supervision costs at all levels for the unit desa system averaged 1.2 percent of loans outstanding or 17.8 percent of unit staff costs. BRI management considered this substantial expenditure on supervision essential for the strong performance of the units.

At the branches

BRI's 325 branches, located in district capitals, are responsible for the bank's commercial and retail banking activities; some branches are also engaged in corporate banking. In addition, the branches supervise the unit desas that operate in their service areas.

The average branch supervises about 10 units, but there is a wide range—from a few units in densely populated small districts to more than 35 units in large, more sparsely populated districts.

The branch manager is responsible for all the banking activities of the branch and its units. Unit business managers, most of whom are former unit desa man-

agers, are based at the branch and carry out the daily supervision and monitoring of the units. Each unit business manager is supposed to supervise a maximum of four units, although in practice these managers are sometimes responsible for additional units because of understaffing at the branch level.

Unit business managers play a key role in the supervision process, working closely with unit desa managers, monitoring all aspects of each unit's business, conducting a running audit, and educating unit staff about new policies and instructions.[12] Responsibilities also include visiting borrowers and savers and cross-checking the units' loan and deposit records with clients. Unit business managers are required to talk with all borrowers whose loans are in arrears; this serves the dual purpose of assisting in loan collection and identifying cases of collusion between unit staff and borrowers.

As soon as BUD managers gained several years of microfinance experience, they were transferred to other BRI divisions

A unit development officer directs and supervises unit business managers in branches with nine or more units; branches with many units may have an additional unit development officer. The unit development officer, who reports directly to the branch manager, also participates in unit supervision and in the ongoing evaluation of unit performance. The number of branch staff carrying out unit-related work depends on the number of units the branch supervises; in 1996 the average was about six such employees per branch.[13]

At the unit desas

Most unit desas are located at subdistrict capitals and report to supervising branches at district headquarters. The decentralized nature of BUD can be seen from table 14.1: in 1996 only 1.1 percent of the division's 23,115 staff members were located above the branch level.

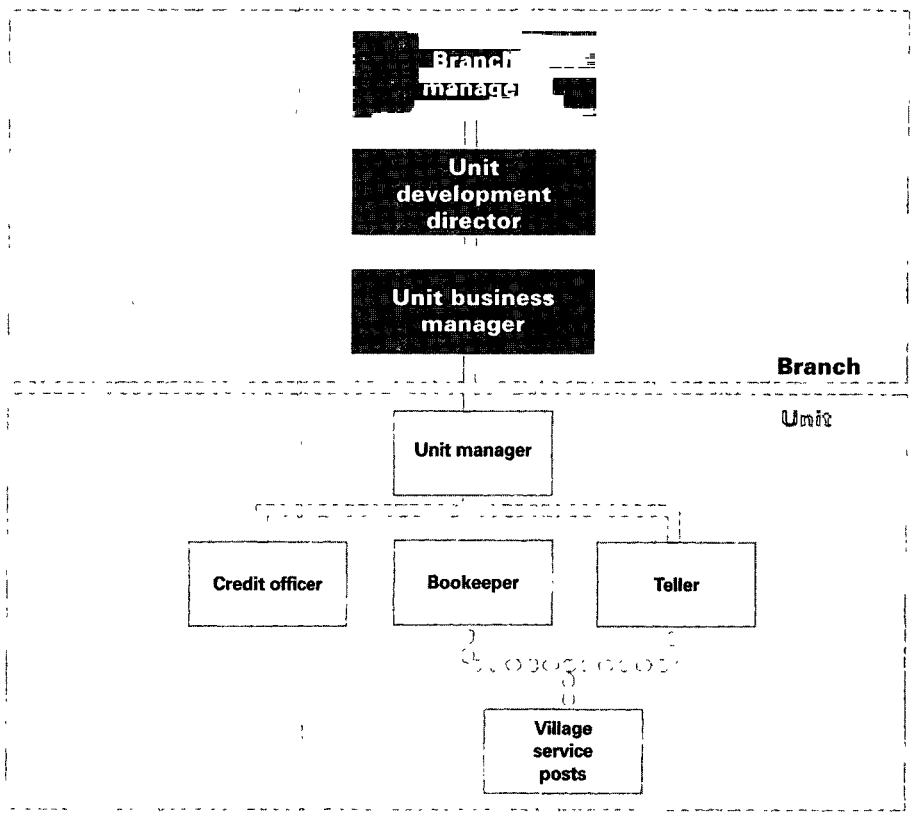
The physical plants of the units have changed significantly since the 1970s. At that time many units were located in run-down, dilapidated buildings; the units themselves were often dark and dirty, with peeling walls and broken furniture. Many units did not even have hand calculators; calculations were made on paper or on an abacus.

Today the units are still small, but typically they are light, clean, and attractive. The manager has a small private office that is often used for discussions and transactions with clients who request privacy. The use of space at the units is carefully designed for efficiency and for the convenience of customers and staff. Color posters showing unit clients using unit products line the walls. The staff wear attractive uniforms. An increasing number of the buildings that house unit desas are owned by BRI, but most are still rented. The atmosphere of today's units is one of professionalism and service in a small, familiar, comfortable place of business.

In 1996 each unit had at least one stand-alone, multiuser, personal computer–based system. Urban units were moving toward a system in which the units within a branch are networked with one another. Although the software systems of units and branches are not directly compatible, BUD was developing plans to network units with their supervising branch.

Figure 14.6 shows the structure of a unit desa and its relationship to unit supervisors at the branch level. As noted, each unit has at least four staff mem-

Figure **14.6** **Organizational structure of a unit desa and its supervising branch, 1996**



Source BRI data

The idea that "real" bankers are in corporate and international banking was widespread

bers: manager, credit officer, bookkeeper, and teller. The latter two are entry-level positions. The bookkeeper, who posts transactions and keeps the unit's books, also helps customers fill out forms and perform transactions. The teller is responsible for all cash transactions. Cash is kept in a safe at the unit; excess cash above the specified overnight limit—which varies by unit—is moved to the branch by BRI staff.

Credit officers, most of whom have worked as unit desa bookkeepers and tellers, are expected to spend most of their time visiting customers. They inform potential borrowers about KUPEDES loans, assess the creditworthiness of loan applicants, and collect overdue loan payments. They also visit present and potential savers, and they serve as general representatives of the unit in the community.

When appointed, unit managers have typically had 7–10 years of service as bookkeeper, teller, and credit officer. The unit manager, who signs officially on behalf of the unit, is responsible for the decisions about loans that fall within his or her loan authority, for the unit's savings, for its administration and security, and for its profitability. Unit managers split their time between the

office (where they supervise staff, meet with customers, prepare reports, and work closely with the unit business manager from the branch) and the field (where they visit clients, join the credit officer for some field appraisals, and follow up on overdue loans). The unit manager plays a key role in promoting unit business by developing and maintaining contacts within the community.

Staff are added based on a unit's activity. For example, when a unit reaches 400 borrowers, BRI regulations permit a second credit officer. Similarly, when a unit's daily cash transactions average 200 for a six-month period, an additional teller can be added. When the average daily number of transactions posted, excluding posting of interest, reaches 150, another bookkeeper can be added. In practice, however, these arrangements do not always work so precisely, and some understaffing is common. This occurs for two main reasons.

During 1993–96 total supervision costs at all levels for the unit desa system averaged 1.2 percent of loans outstanding

First, recruiting and authorization may be delayed because these involve bank divisions outside BUD, and the labor-intensive nature of the units' activities is often not fully understood elsewhere in the bank. Second, a unit manager and the unit's supervisors at the branch, fearing an immediate decrease in unit profits (and in their incentive payments), may wait until there are perhaps 600 or more borrowers before requesting an additional credit officer. When a unit reaches 11 staff members by adding staff under this process, it must split into two units in order to move its services closer to customers' homes and places of work.

The staff of each unit produce a monthly balance sheet, profit and loss statement, credit report (which details loan arrears over time), achievement of targets report, and unit development report. The unit development report, which uses 27 indicators to assess the condition of the unit, provides the basic information used by unit and branch managers to review the performance of their units. These reports, aggregated monthly at the branch, regional, and head office levels, serve as the main indicator of unit desa performance over time. In addition, the head office conducts periodic sample surveys to obtain information that is not collected on a regular basis, but that is useful for decisionmaking. Examples of such studies are those on trends in loan size distribution and on delinquency by length of loan maturity.

Unit staff are normally local high school graduates. Because jobs at a unit are well paid by local standards, especially in rural areas, BRI can usually select unit staff from a large pool of applicants. BRI has found that, for unit desas, it is more efficient to invest in comprehensive in-house training for recruits who are high school graduates (and who often have some additional training in banking, accounting, or computers) than it is to hire university graduates; however, some unit staff hold university degrees. In general, experience has shown that while university graduates demand higher salaries, much of their previous training is irrelevant, their expectations tend to be higher than can be met at an entry-level unit position, they typically do not want to live near the units, and they often find it difficult to treat poor clients with the respect and friendliness that are the hallmark of the units.

In sharp contrast to the staff regulations that prevailed during 1970–83, there was now a flow of staff between units and branches. A career path was estab-

lished for unit staff who perform well: unit managers can be promoted to serve at the branch as the unit business manager or unit development officer; they can then be promoted to other positions within the bank. In addition, lower-level branch staff can be promoted to serve in the units.

However, given that in 1996 there were 3,595 unit managers, about 1,000 unit business managers, and only about 250 unit development officers, promotion beyond unit manager is highly competitive. In practice, promotion for unit staff beyond the level of unit development officer is very limited. In 1996 only 4 percent of the BUD staff at the head office (3 people) had had experience working at the units.

In addition to the unit banking staff, each unit employs a night guard. Since rural Indonesia generally has a low crime rate, most units do not have guards during the day.

Staff are added based on a unit's activity. Thus when a unit reaches 400 borrowers, regulations permit a second credit officer

At the village posts

Some units operate village service posts (*pos pelayanan desa,* or PPDs); in 1996 there were 392 such posts. These posts are established when there is substantial demand for financial services at a location that is within the unit's service area but too far from the unit for clients to receive convenient service. Service posts, which do not have their own staff, are typically served by two unit staff members: a teller and a bookkeeper. Depending on demand, the posts are open from one to five days a week; they accept loan payments and deposits and provide information about unit products. Units with a post open on most days have two tellers and bookkeepers on their staff. Loans are not made at the posts, but credit applications are received there on behalf of the unit. These applications are then reviewed and processed at the unit, where decisions are made and overdue payments managed in the same way as with all unit loans. Each post is part of a specific unit, and its performance is aggregated with that of its unit in the reporting system.

The village posts are a good example of the unit desa system's creed of standardization with flexibility. All posts carry out the same activities, but their days of operation depend on client demand. Moreover, a post with a large and growing volume of business may be upgraded to a unit, while a unit with insufficient business may become a post.

The unit desa system and other bank divisions

Because BUD is a division of a larger bank, it receives services from other divisions that are not reflected in BUD staffing. These services include liquidity management and portfolio investment for the deposits the units keep at the branches; some personnel, logistics, and automation functions; legal assistance; internal audit; and prudential reporting to the government.

The branches also provide unofficial services to the units. The most important is to shield the units from administering the government's subsidized credit programs (which are provided through the branches). In addition, the branches tend to act as a safety valve for unit staffing problems. Established BRI

staff can be fired only for proven fraud; this regulation creates a serious problem for the units because they operate with only a few staff members, and their staff cannot be removed for poor performance or low productivity. The problem is often solved by "parking the bad unit staff at the branch," as it is sometimes called at BRI. A staff member thus parked carries out minor clerical tasks at the branch while another staff member is appointed to the unit.

The relationship between the units and their supervising branches is complex, with many ambiguities. The units offer only microfinance, a different business from the retail and commercial banking offered at the branches; the branches supervise commercial microfinance but do not provide such services themselves. But the branches administer government- and donor-subsidized credit programs. Unit supervision generally account for a fairly small portion of branch activity and involve relatively few branch staff. But in 1996 the units were very profitable, while the branches were loss-making. Given these circumstances, branch managers were often uncertain about how to order their priorities.

The tensions and complementarities between commercial microfinance and conventional banking converge at the branch, where the two systems interact on a daily basis

The problems caused by the provision of incentives to unit staff but not to their branch supervisors were addressed in 1996. A revised Unit Achievement Competition program provided semiannual cash bonuses for unit business managers, unit development officers, and branch managers, up to 1.6 times their monthly salaries (see chapter 13 and below). The bonus is based on the performance of the units supervised by these branch staff. This change helped considerably, but underlying structural problems remained at the branch level. The tensions and complementarities between commercial microfinance and conventional banking converge at the branch, the only level at BRI where the two systems interact directly on a daily basis. Also converging at the branch level are the longstanding tensions between commercial and subsidized rural credit. The dynamics of these overlapping but sometimes conflicting approaches, as they interact at BRI's head office, are discussed later in this chapter.

Reporting Unit Desa Performance at the Unit, Branch, and Regional Levels

As noted, the unit development report is the basic unit progress report generated monthly at each unit; it is aggregated at the branch, regional, and head office levels, also monthly. The first section of the report summarizes income, expenses, profits, portfolio quality, and trends in loan and savings volume. The remaining sections provide additional details on loans, savings, unit staffing, and the average daily activity levels of the unit. Time series for each of the indicators reported in the unit development report are available for use by unit managers and their supervisors. This reporting system at each level—from the unit desa to the head office—and its use by unit supervisors at the branch and regional levels are crucial factors in the success of the system.

Examples of unit development reports for two units located in different parts of Java (called here units A and B), their supervising branches (branches A and

B), and their regional offices (regional offices A and B) are provided below to show how the reporting system works and how it is used in the management of the unit desa system.

Regional office A, one of BRI's largest regional offices located in one of Indonesia's largest cities, is responsible for 35 branches (including branch A) and 600 units. Branch A is responsible for 16 unit desas, including unit A. In 1996 the district in which branch A is located had a population of 1.1 million people. Regional office B, smaller and more typical in size (although still larger than average), oversees 21 branches and 345 units. In 1996 about 730,000 people lived in the district served by branch B. This branch supervises 18 unit desas, including unit B. Unit desas A and B both serve relatively poor rural regions characterized by mixed agriculture, local industry, and retail trade. Unit desa A is located in a district capital, while unit desa B is in a subdistrict capital.

Also converging at the branch level are the longstanding tensions between commercial and subsidized rural credit

The unit development reports of two unit desas

The December 1996 unit development reports of units A and B are provided in table 14.2 as examples of the unit reporting system. These are simply two examples of reported unit performance, and these units cannot be considered representative of the system. However, the reports are useful as examples of the performance of individual units and as examples of what can be learned from these reports. Both units were understaffed in 1996. Unit A was authorized for six employees and unit B for seven. Both, however, had only five employees.

The cumulative amounts of KUPEDES loans lent by the two units were nearly identical at $3.2 million (in 1996 dollars).[14] The value of their outstanding loan balances was also quite similar. Yet at the end of 1996 unit A had only 54 percent of the number of unit B's outstanding loans. Thus unit A's average outstanding loan balance ($684) was larger than that of unit B ($410).

There were several other important differences between the two units. First, unit A had nearly $2 million in deposits, more than twice as much as unit B. Second, unit B had a far better repayment record than unit A. The cumulative amount written off by unit A ($49,098) was more than 10 times that of unit B ($4,565); as a result the manager of unit A had a substantially lower loan authority than the manager of unit B. In 1996 unit A's long-term loss ratio (2.33 percent), although not high, was more than four times that of unit B (0.50 percent).

Third, unit A's 1996 profits ($139,320) were 79 percent greater than those of unit B ($77,962). The primary reason for unit A's higher profits was its greater income from interest on deposits at the branch. While both units supplemented their KUPEDES income with interest income from their deposits at the branch, unit A had more than four times the amount of funds deposited at its branch as did unit B. Fourth, unit B also provided other services (such as payments of taxes and electricity bills) that unit A did not. Overall, unit B has a more typical rural profile—more and smaller loans, more service, more trans-

Table **14.2** **Unit development reports of two unit desas, December 1996**
(U.S. dollars unless otherwise noted)

Indicator	Unit desa A	Unit desa B
Summary indicators		
Total income	460,763	280,005
Total expense	321,443	202,051
Profit or loss	139,320	77,962
Value of total loans outstanding	508,183	561,416
Principal collected (percent)	99 51	99 41
Portfolio status (percent overdue)[a]	2.92	1 56
Value of total savings	1,952,581	866,858
Loans		
Cumulative amount lent (1996 dollars)[b]	3,244,300	3,241,125
Amount lent current month	52,875	47,230
Total arrears	14,687	8,785
Cumulative amount charged off	49,098	4,565
Long-term loss ratio (percent)[a]	2 33	0 50
Short-term loss ratio (percent)[a]	4 36	–1.64
Interest collected (percent)	99 57	99 90
Manager's loan authority[c]	1,259	3,147
Number of loans outstanding	743	1,369
Deposits		
Current account (giro)	419	2,067
National savings (TABANAS)	54,973	65,216
BRI rural savings (SIMPEDES)	1,780,109	802,682
BRI urban savings (SIMASKOT)	57,910	0
Time deposits	59,169	16,471
Other deposits	0	0
Employees		
Number of employees (actual)	5	5
Number of employees (authorized)	6	7
Daily activities		
Average number of daily cash transactions	200	260
Average number of daily service transactions[d]	0	25

a See box 12 3 for definitions of loss ratios The short-term loss ratio measures changes in the past month It can be negative if, for example, substantial collection of old loans previously charged off occurred during the month being reported

b Amounts lent were not available by year, so this figure is not adjusted for inflation

c This row normally provides the amount of loan authority for loans to both new and old customers, the authority for loans to old borrowers being higher than the authority for loans to new borrowers However, only the authority for loans to new borrowers was reported in these unit development reports

d For example, facilitation of payments for taxes and electricity bills, and disbursement of pension fund payments

Source BRI data

actions, and higher repayment—than unit A, which serves its district capital and is somewhat more urbanized than unit B.

The aggregated unit development reports of two branches

Table 14.3 shows the December 1995 and December 1996 unit development reports of branch A (the supervising branch of unit A) and branch B (the supervising branch of unit B).

These two unit development reports aggregate the performance of the 16 units that report to branch A, and the 18 units that report to branch B. The unit system in both branches was profitable in both years, although the units of branch A saw profits fall from 1995 to 1996, while in branch B profits increased. In both branches all KUPEDES loans were funded from unit desa savings. Ninety-five percent of the value of savings in 1996 in both branches was in fully liquid savings accounts (SIMPEDES, SIMASKOT, and TABANAS).

The reporting system at each level and its use by unit supervisors are crucial factors in the success of the system

The aggregated unit development report of Branch A for both 1995 and 1996 alerted the branch manager, the unit business managers, the unit development officer, and the BUD section at the regional office that the units of this branch were incurring high arrears. As soon as they receive a monthly unit development report that shows increasing arrears or continuing high arrears, the unit business managers and the unit development officer would be expected to work with the unit managers and credit officers of the units where the problems were located. Branch A's improved short-term loss ratio for December 1996 suggests that such an effort was made.

The branch and regional managers should also have noted from branch A's unit development reports that the units of branch A are understaffed, that understaffing was a growing problem, and that this may have been contributing to the repayment problem. The reports signal that the managers should check whether the understaffed units are the ones with repayment problems—as turned out to be the case at unit A.

The aggregated unit development report of branch B shows an excellent record. Branch B units show increasing profits, low arrears, increasing value of loans outstanding, a growing number of loans outstanding, and increased savings.

Unit performance in two regional offices

The performance of the unit desas in the two regional offices is shown in table 14.4. Both regions are largely rural but also contain urban units. Regional office A is responsible for branch A and unit A, while regional office B is responsible for branch B and unit B.

With long-term loss ratios of 1–2 percent, outstanding loans and savings in the hundreds of millions of dollars, and more than 2 million clients in regional office A and more than 1 million in regional office B, the unit system has been successful in both regions. In 1996 both regional offices had about six times as many savings accounts as loans, and all loans were financed by savings. In 1996 unit profits were $28.7 million at regional office A and $14.2 million at regional office B.

Table **14.3** **Aggregated unit development reports of two branches, 1995–96**
(U.S. dollars unless otherwise noted)

	Branch A		Branch B	
Indicator	**1995**	**1996**	**1995**	**1996**
Summary indicators				
Total income	3,214,471	3,617,771	2,615,090	3,155,377
Total expense	2,429,809	2,889,215	2,023,710	2,461,854
Profit or loss	785,095	725,556	591,380	693,523
Value of total loans outstanding	6,740,035	8,284,096	5,654,274	7,026,152
Principal collected (percent)	96 24	97 19	99 15	99 30
Portfolio status (percent overdue)[a]	5 86	5 95	2 39	2 80
Value of total savings	9,616,551	10,815,359	8,279,064	8,932,376
Loans				
Cumulative amount lent (1996 dollars)[b]	45,619,151	55,760,386	32,629,895	48,574,036
Amount lent current month	854,863	1,063,365	636,666	727,024
Total arrears	395,147	492,666	135,155	196,638
Cumulative amount charged off	1,396,013	1,431,809	94,686	95,462
Long-term loss ratio (percent)[a]	4 56	4 01	0 84	0 70
Short-term loss ratio (percent)[a]	6 67	2 83	0.69	1 89
Interest collected (percent)	97 52	98 18	99 37	99 87
Manager's loan authority[c]	—	—	—	—
Number of loans outstanding	10,905	12,204	15,431	16,684
Deposits				
Current account (giro)	81,889	92,740	142,125	46,069
National savings (TABANAS)	826,256	992,866	811,525	909,534
BRI rural savings (SIMPEDES)	8,151,213	9,103,651	6,890,642	7,431,685
BRI urban savings (SIMASKOT)	99,220	91,062	69,165	88,214
Time deposits	457,972	528,327	365,537	456,752
Other deposits	6,499	6,294	0	0
Employees				
Number of employees (actual)	91	91	82	85
Number of employees (authorized)	94	96	82	87
Daily activities				
Average number of daily cash transactions	1,705	1,729	2,431	2,314
Average number of daily service transactions[d]	440	545	50	114
Memorandum item				
Number of unit desas		16		18

a See box 12 3 for definitions of loss ratios

b Amounts lent were not available by year, so this figure is not adjusted for inflation

c Varies by unit

d For example, facilitation of payments for taxes and electricity bills, and disbursement of pension fund payments

Source BRI data

Table **14.4** **Performance indicators for the unit desas of two regional offices, 1995–96**

Indicator	Regional office A		Regional office B	
	1995	1996	1995	1996
Value of KUPEDES loans outstanding (millions of U S dollars)	238 2	288 3	106 6	130.7
Number of KUPEDES loans outstanding	412,000	445,000	236,235	242,392
Value of savings (millions of U S dollars)	415.6	479 0	218 7	250 0
Number of savings accounts	2,430,000	2,646,000	1,450,401	1,527,717
Portfolio status (percent)[a]	4 08	4 06	2 87	3.06
Long-term loss ratio (percent)[a]	2 15	2 03	1 20	1 18
Twelve-month loss ratio (percent)[a]	1 13	1 47	0 71	1 10
Short-term loss ratio (percent)[a]	1 31	2.00	0.09	–1.44[a]
Profit (millions of U S dollars)	30 7	28 7	14 1[a]	14 2
Memorandum items				
Number of branches	35		21	
Number of unit desas	600		345	

a See box 12 3 for definitions of loss ratios See note a in table 14 2 for explanation of negative short-term loss ratios

Source BRI data

The aggregate unit business for which the regional offices are responsible is of considerable magnitude. Efficient operation of the units on this scale depends heavily on the reporting system and on its effective use by branch and regional supervisors.

Staff Incentives and Training

Successful management of a large microfinance system depends on well-trained and highly motivated staff. The BUD Division implements carefully planned staff incentives and carries out specially designed microfinance training programs for all unit staff and their supervisors. These investments in human resources—which contribute significantly to the relatively high overhead costs of the BUD Division—are crucial to the unit desa system's scale of outreach, high repayment rate, high savings, and continued profitability.

Incentives

Beginning in 1984, 10 percent of each unit's annual profits was distributed to all the employees of that unit as an incentive bonus, up to 1.5 times an em-

ployee's monthly salary. This system continued for more than a decade; it was revised in 1996. At that time the percentage of unit profits available for the incentive bonus was reduced to 6 percent, but the maximum bonuses were increased to 2.5 times the base monthly salary of the unit desa manager, 2.3 times the salary of the credit officer, and twice that of the other unit staff. The new system was implemented in 1997.

As noted, a second incentive system, the Unit Achievement Competition, was developed in 1989 to encourage staff to move to the stage of market penetration in savings mobilization (chapter 13). By 1989 about 80 percent of the units were profitable; most staff had reached their maximum incentive level and had come to expect the profitability bonus as a matter of course. Thus the semiannual Unit Achievement Competition was added because the unit profitability bonus no longer provided a strong incentive for many unit staff.

In 1996 both regional offices had about six times as many savings accounts as loans, and all loans were financed by savings

Unlike the profitability bonus, which rewards only profitability, the Unit Achievement Competition scores each unit on a range of weighted criteria. The weights, set by the head office, are changed according to BUD's needs. Thus when the competition was introduced, funds mobilization was the units' highest priority; accordingly, the weighting emphasized increases in savings. But during the tight money period of the early 1990s, when the loan portfolio was declining, portfolio quality was also given a high weight in the competition. In 1996 the criteria used in the competition, and their weightings, were profitability (30 percent), portfolio quality (20 percent), management effectiveness (20 percent), increase in the number of borrowers (10 percent), increase in the value of outstanding loans (10 percent), and increase in the value of savings (10 percent).

All staff members of a unit that meets its goals are given cash awards as well as certificates of appreciation presented in a formal ceremony. Typically between one-third and one-half of the units meet the criteria to win the semiannual competition. In each competition the staff of the units that are judged to be best in the region and best in the country are given additional rewards, which have included visits to observe rural banking systems in neighboring countries.

In 1996 awards for a successful unit manager under the semiannual Unit Achievement Competition reached about $130, representing 30–45 percent of the manager's monthly salary. Awards were also given to other unit staff in proportion to their salaries.

The combination of bonuses and awards provides a strong incentive for good performance. Including profitability incentive bonuses and competition awards, unit staff in 1996 could earn from three to six times the annual per capita GNP of $1,073. Thus an experienced unit manager with an annual salary of $4,800 (4.5 times the 1996 per capita GNP) who managed a unit that earned good profits and met the criteria for the competition could earn additional incentive pay of up to $1,260 a year. This would be composed of $1,000 from the profitability bonus and $260 from meeting the criteria in both semiannual competitions. Managers whose units were judged best in the region or nation could

earn additional incentives. Another important incentive is that highly rated staff know that they have an increased probability of promotion.

As noted, problems had resulted earlier from providing incentives to unit staff but not to their branch-level supervisors. Therefore the profitability bonus and Unit Achievement Competition rules were changed in 1996 to include unit business managers, unit development officers, and branch managers. Starting in 1997 these staff became eligible for an annual bonus for unit profitability of up to 1.6 times their monthly salary.

Training

BRI operates five large training centers for unit desa staff and their supervisors. Located in Bandung in West Java, Yogyakarta in the central part of Java, Surabaya in East Java, Padang in West Sumatra, and Ujung Pandang in South Sulawesi, these centers are responsible for training the staff from all units as well as the unit business managers and unit development officers from all branches.

BUD provides specially designed staff incentives and microfinance training programs for all unit staff and their supervisors

The five training center managers report to the manager of BRI's Training Division, who reports to managing director 5 (see figure 14.3). But BUD, under managing director 1, bears the operating costs of the unit desa training centers as well as the expenses of the trainees; BUD also sets the content of the curriculum.

The centers, which operate throughout the year with about 80 full-time instructors, have a combined capacity at any one time of 780 trainees. Instructors, who are drawn from the unit desa system, provide courses for new staff, courses for staff being promoted to new positions, and refresher courses for all staff at least every 18 months. The refresher courses have two purposes: to provide a continuing opportunity for long-term staff training, and to update employees on new policies and operations. Between 13,000 and 18,000 unit and supervisory staff are trained each year. Thus between 50 and 75 percent of the staff concerned with operating and supervising units receive some form of training each year.

Considerable thought and care have been put into selecting instructors, designing the curriculum, and developing the facilities available and teaching methods used at the centers. Instructors are selected in a competitive process: they must have unit desa experience, they must be good teachers, and they must be able to carry out multiple teaching methods, including lecturing, leading discussions, role playing, brainstorming with trainees, observing trainees practicing in the center's dummy unit desa, supervising field practice, and other techniques that emphasize creative teaching and encourage input from trainees. Guest lecturers visit the centers to provide training in special topics such as law, business, and marketing.

The training centers have excellent facilities. In addition to classrooms, offices, discussion rooms, sports facilities, dormitories for trainees, housing for the instructors and the manager of the center, and a guest house, each training center is equipped with a computer room, a well-stocked library containing ex-

Table **14.5** **Curriculum of training centers for unit desa staff, 1996**
(number of required 90-minute sessions)

	Bookkeeper/teller		Credit officer			Unit manager		
Subject/instruction	**Recruitment**	**Refresher**	**Recruitment**	**Promotion**	**Refresher**	**Recruitment**	**Promotion**	**Refresher**
Bookkeeping	19 5	10	11 5	3 5	0	19 5	11	0
Logistics	4 5	0	4 5	0	0	4 5	0	0
Computer applications	11	10	11	0	0	16	11	0
Human resources	11	0	11	0	0	17	0	0
KUPEDES regulations and procedures	24	5	18 5	11 5	0	22 5	16 5	0
Credit investigation methods	0	0	7 5	7.5	7	7 5	7 5	7
Customer relations and supervision	0	0	5 5	5 5	5	5 5	5 5	0
Assessment of customers' businesses	0	0	5 5	5 5	7	7 5	7 5	7
Loan decisions	0	0	0	0	0	5.5	5 5	5
Funding and bank services	16	5	16	6	0	21 5	11 5	0
Civil law	9	0	11	5 5	5	13	7	5
Analysis of unit performance	0	0	0	0	0	11	14	0
Planning and budgeting	0	0	0	0	0	12	12	0
Planning KUPEDES development	0	0	0	0	0	8	7 5	7
Interview techniques	7	5	4 5	0	0	4 5	0	0
Loan collection methods	0	0	12	12	11	12	11 5	12
Personal selling	0	0	5.5	5 5	5	5 5	5 5	0
Marketing methods	0	0	5 5	5 5	0	5 5	5 5	0
Marketing strategy	0	0	0	0	0	6.5	5 5	5
Preparation of area monographs	0	0	4.5	4 5	4	4 5	4.5	4
Leadership	0	0	0	0	0	4 5	4 5	0
Presentation techniques	0	0	0	0	0	0		
Supervision	6	2	7	5.5	0	16	11	8
Lectures	2	2	2	2	2	2	2	2
Opening and closing ceremonies	2	0	2	2	2	2	2	2
Total classroom sessions and examinations	112	39	145	82	48	234	168 5	64
Field trips and discussions	0	0	10	0	0	10	0	0
Total sessions	112	39	155	82	48	244	168 5	64

Source BRI data

tensive training materials developed specifically for microfinance operations at the units, and a dummy unit desa. The curriculum of the training centers at the end of 1996 is shown in tables 14.5 and 14.6.

All 23 courses in the curriculum are specific to microfinance. Even such standard courses as bookkeeping and computer applications are taught differently at these centers than they are at BRI's training programs for other bank staff. The material for many of the unit desa courses—such as credit investigation, loan collection methods, and knowledge of customers' businesses—have

Table **14.6** **Curriculum of training centers for unit desa branch supervisors, 1996**
(number of required 90-minute sessions)

	Unit business manager			Unit desa officer		
Subject/instruction	**Recruitment**	**Promotion**	**Refresher**	**Recruitment**	**Promotion**	**Refresher**
Bookkeeping	19 5	5 5	0	19	6	0
Logistics	4 5	0	0	4 5	0	0
Computer applications	11	10 5	0	11	11	
Human resources	17	6 5	0	17	5.5	0
KUPEDES regulations and procedures	23	10 5	0	23	8	0
Credit investigation methods	7 5	7 5	0	7 5	5 5	0
Customer relations and supervision	5 5	5 5	0	5 5	5 5	0
Assessment of customers' businesses	7 5	7 5	0	7 5	8	0
Loan decisions	5.5	5.5	0	5 5	5 5	0
Funding and bank services	21 5	5 5	0	21 5	5.5	0
Civil law	19	5 5	0	19	0	0
Analysis of unit performance	14	14	13	14	14	13
Planning and budgeting	12	12	0	12	0	0
Planning KUPEDES development	8	7 5	7	7 5	8	7
Interview techniques	4 5	0	0	4.5	0	0
Loan collection methods	12	12 5	12	11 5	11	0
Personal selling	5 5	0	0	5 5	0	0
Marketing methods	5 5	0	0	5 5	0	0
Marketing strategy	6 5	6 5	6	7	7	6
Preparation of area monographs	0	0	0	4 5	4 5	0
Leadership	4 5	4 5	0	9	9	0
Presentation techniques	8	8	0	8	8	7
Supervision	23	16	8	22	16	8
Lectures	2	2	2	2	2	2
Opening and closing ceremonies	2	2	2	2	2	2
Total classroom sessions and examinations	249	155	50	256	142	45
Field trips and discussions	15	0	0	15	0	0
Total sessions	264	155	50	271	142	45

Source BRI data

been drawn directly from unit experience since 1984. Training for credit officers and unit desa managers includes sessions in the field as well as in the classroom.

Credit officers are taught to prepare simple balance sheets and income statements for micro and small businesses of many kinds in agriculture, trade, industry, and services. In the sessions on credit investigation the trainees are asked to discuss and compare their experiences and to suggest methods suitable for general use. Thus the class may learn from one of its participants about

assessing a tilemaking business, from another about shrimp farming, from a third about shoemaking. General issues are also discussed. For example, how can the inventory of a small shop be investigated efficiently so that each item need not be counted? One method taught is to ask the shopowner the price for which he or she would sell all the stock presently on hand.

Both the curriculum and the teaching methods follow the BUD strategy of standardization with flexibility. While all five training centers provide the same courses and use the same training materials, the courses change according to unit desa needs.[15] Instructors and BUD staff provide regular input into the design of new courses, which can cover any topic considered important to BUD performance. For example, by late 1996 it was thought that competition from other banks entering the microfinance market had accelerated, and that many unit managers and credit officers did not have sufficient self-confidence to manage the more competitive situation. As a result a new course on building self-confidence was designed and introduced into the training curriculum in 1997.

Including profitability incentive bonuses and competition awards, unit staff can earn from three to six times annual per capita GNP

International visitors to the training centers often ask whether the trainers are the same ones that train the rest of BRI's staff, and whether the trainers come from universities or banking institutes. They are usually quite surprised to learn that university or institute faculty would not be qualified to teach microfinance to unit staff, and that all trainers for these centers are drawn from the unit desa system.

Instructors are appointed for a four-year term, with possible renewal for a second four-year term. After a maximum of eight years, a BUD trainer returns to the bank in another capacity. This arrangement was developed because it is believed that rotating trainers helps maintain the quality of the training.[16]

Retention

Government service in Indonesia, as in many developing countries, is seen as a sinecure. Once appointed, employees tend to stay and turnover is relatively low. BRI staff turnover figures are not available by division, but BUD staff retention is known to be high. BUD managers at the regional and head office levels are subject to the bank's internal transfer rules, but a large portion remains at BRI. In part, the continuity of unit and BUD branch staff is due to the fact that it is difficult for BRI to lay off staff and almost impossible to fire employees in the absence of proven fraud.

However, there is also high retention of good BUD staff at the units and branches. This is partly due to the difficulty of being promoted beyond the unit development officer position at the branch; within BRI there are not many alternatives for most unit staff and their BUD supervisors. But retention of good staff is also due to a number of positive factors: the hiring of local high school graduates for entry-level positions, the heavy investment in high-quality in-house training, the provision of good salaries (by local standards), the considerable responsibility given to staff, and the substantial cash incentives and institutional recognition provided for good performance. And as with staff at Bank Dagang Bali (BDB), many BUD unit and branch staff mention their relationships with clients as an important component of job satisfaction.

Bank Rakyat Indonesia: Microfinance Outside the Unit Desa System

In addition to its unit desa system, which is discussed further later in the chapter, BRI engages in various kinds of microfinance activities through its branches. Two contrasting examples—with different lessons for microfinance—are discussed here. Both provide loans that are on average smaller than KUPEDES loans, and both reach borrowers who are poorer than most unit desa borrowers. One is commercially financed and charges higher interest rates than KUPEDES; the other provides donor- and government-subsidized loans. In different ways, both are administered for the government at BRI's branches, but not at the unit desas.

The BKDs (Village Credit Organizations), administered at BRI's branches, are more than a hundred years old. From the start, they were set up to be sustainable

The Badan Kredit Desa

More than 100 years old, the Badan Kredit Desa (BKDs, or village credit organizations) were among the first microcredit institutions in Indonesia. They are located on Java and the neighboring island of Madura; each BKD is owned by its village government.[17]

BKD history. The BKDs were an outgrowth of the *lumbung desa* (village granaries) established by the Dutch colonial authorities in the late 19th century[18] and the slightly later bank desas, which operated on a currency—instead of a paddy—basis (see chapter 9). The lumbung desas were originally conceived as the start of a Raiffeisen-type cooperative rural banking system, while the bank desas were government-initiated and funded by external sources. Initial capital for the bank desas was provided by loans from the government, the district, and the local lumbung desa, as well as repayable shares belonging to villagers. Over time a growing portion of the bank desas' loan portfolios came to be funded by retained earnings.

As discussed in chapter 9, the first government decree regulating BKDs (bank desas and lumbung desas) was issued in 1907. Modified several times, it was revised in 1929 under the Ordonasi Staatsblad 1929 No 257, which regulated BKD ownership, management, business activities, and supervision.

The idea of the lumbung desas as the lowest tier of a cooperative rural banking system was never implemented. BKDs are owned by village governments; the BKDs are not cooperatives or member-owned institutions. During the colonial period BKDs operated in all parts of the colony, but they generally did not work well in the Outer Islands. Today BKDs exist only on Java and Madura (an island off the eastern coast of Java).

From the beginning, the BKDs were set up to be sustainable.

> Interest rates had been set high enough not only to cover costs but to increase the institutions' equity base through retained earnings . . . Subsidies were limited to initial start-up support after which the institutions had to become viable. Maturities and repayment schedules of the loan products were designed according to the needs of the customers. Unsecured, "character-

based" lending was common and . . . the BKD experienced the benefits of low information cost due to the social and spatial proximity to their clients. Innovative techniques like group-lending and joint liability were tested (and given up again). Strict loan enforcement was common and resulted in [satisfactory] loan performance throughout most of the time; and the fee-based compensation upon loan collection worked as an incentive for BKD staff.

—Steinwand 2001, p. 103

In 1996 the BKDs had more than 775,000 outstanding loans and more than 250,000 voluntary savings accounts

The BKDs declined during World War II and in the years after Indonesia's independence. Including both lumbung desas and bank desas, the number of BKDs fell from about 13,500 in 1940 to about 4,000 in 1950 (Steinwand 2001, p. 124). In the early 1950s consideration was again given to transforming the BKDs into a cooperative system, but once again the cooperative model was not implemented. The government decided to rehabilitate the BKD system in the 1950s, and the number of BKDs gradually increased. But as noted, the Soeharto government preferred rural banking that was less autonomous than the village-owned BKDs—such as the state-owned cooperatives (Koperasi Unit Desa, or KUDs) and BRI's unit desas.

Effects of the 1992 Banking Law. To comply with the 1992 Banking Law (see chapter 9), the BKDs were granted a number of collective Bank Perkreditan Desa (BPR, or People's Credit Bank) licenses, as they were too small to receive BPR licenses on an individual basis. But opening new BKDs was not permitted. As BPRs, the BKDs are supervised by BRI through its branch network on behalf of Bank Indonesia, the central bank.[19] Bank Indonesia reimburses BRI for the salaries of its branch-level BKD supervisors. BRI, however, incurs some expense for work by its regional and head office staff on BKD data management and reporting. In 1991 BRI gave the BKDs permission to mobilize voluntary savings from the public. And the following year BRI recapitalized some of the inactive BKDs.

The board of a BKD usually consists of the village head as chair, a member of the village government (the secretary or the head of the village finance office), and one other member. The board receives a commission of 3 percent of loan principal collected.

BKD services. At the end of 1996 there were 4,806 active BKDs, each providing small commercial loans to individuals residing in the village. Not all villages have BKDs, and in practice these organizations sometimes serve a few residents of neighboring villages as well. Although figures by gender are not available, many, probably most, BKD customers are women.

In 1996 there were more than 775,000 outstanding loans and more than 250,000 voluntary savings accounts (table 14.7). Borrowers are required to deposit compulsory savings, but voluntary savers need not borrow. The average

Table **14.7** **Performance of the Badan Kredit Desa, 1992–96** (millions of U.S. dollars except where otherwise indicated)

Indicator	1992	1993	1994	1995	1996
Number of active BKDs	4,731	4,889	4,801	4,806	4,806
Number of outstanding loans	1,008,756	907,451	765,586	779,652	779,599
Number of voluntary savers	322,179	311,066	283,592	267,931	251,028
Value of BKD deposits at BRI	21.4	23 9	24 8	26 0	28.0
Value of outstanding loans	31 6	33 8	37 0	40.1	43 8
Value of savings[a]	6 8	7 6	8 3	8 7	8.3
Income	11.9	12.7	12 8	13 8	15.4
Expense	5 5	6 4	6 9	7 0	8 0
Profit (adjusted for loan losses)[b]	3 8	6.3	5 5	5.8	5 9
Adjusted return on assets (percent)[c]	7.5	11 4	9 2	9 3	8 7

a The total includes both compulsory and voluntary savings Voluntary savings, typically 15–20 percent of total savings, totaled $1 2 million in 1992 and $1 4 million in 1996

b Profit minus change in arrears past final due date plus actual bad debt expense

c Adjusted profit / (total assets less arrears past final due date)

Source BRI data

outstanding loan balance in 1996 was about $56 (5 percent of the country's $1,073 GNP per capita); the average compulsory savings account balance was $32 (3 percent of GNP per capita) and the average voluntary savings account balance was $6 (less than 1 percent of GNP per capita). BKD loans rarely reach above $200. Loans are made to individuals, usually for short terms (typically 12 weeks). For the month of December 1996, 146,219 loans were disbursed; of these 78 percent were for 10–12 weeks; 13 percent for 35 days; and 9 percent for seasonal agricultural loans. Collateral is not required. The loan process is simple and fast; approval and disbursement are often received on the same day the application is made. Most BKDs are open one morning a week (although some are open more frequently). They are staffed by members of the BKD board and a bookkeeper. The BRI supervisor is also present when the BKD is open; at the end of the morning, cash on hand is deposited in the BKD account at BRI (the account may be held at the supervising branch or at a nearby unit desa).

Interest rates. Interest rates on loans are set by local governments and may vary from one BKD to another. However, the following example illustrates a typical arrangement. A loan of $50 is taken for 12 weeks, and 12 weekly payments of $5 each are made. The first payment is for the interest; the second payment is for compulsory savings (which are returned without interest to the borrower the following year at the holiday following the end of the Islamic fasting month). Payments 3–12 repay the loan principal. Stated interest is thus 20

percent for a 12-week period, but the effective monthly interest rate is higher because of the forgone use of the compulsory savings. Ravicz (1998, p. 15) calculates the BKDs' annual effective interest rate to be 131 percent if savings are returned when the loan is repaid. Since savings are typically returned only once a year, the actual interest rate is higher. Thus the BKDs have a much higher annual effective interest rate than the unit desas.

The average outstanding loan balance in 1996 was 5 percent of GNP per capita

Repayment. It is difficult to determine BKD arrears and default rates because loans in default are written off only after five years—and sometimes not even then. Like most BPRs, BKDs also do not provision adequately for loan losses (chapter 9). Ravicz (1998, p. 13) estimated default and arrears rates by writing off all loans in default each year. According to these calculations, the BKD arrears rate (loan volume in arrears net of previous years' defaults) was 21 percent in 1996. Since each BKD village board is responsible for loan collection, results vary widely among individual BKDs. The standardized training and the discipline of unit desa staff cannot be replicated at the BKDs, which are operated by village leaders. But since a BKD serves a small community where everyone is known to everyone else, many BKD loans that fall into arrears are eventually collected.

Sustainability. BRI provides a line of credit for BKD lending operations. But by 1996 most BKDs financed their loans with retained earnings (deposited at BRI) and the compulsory savings of their borrowers. BKDs that did not have adequate funds to finance their loan portfolios could borrow from BRI at a 21 percent annual effective interest rate. At the end of 1996 the BKDs had nearly $44 million in outstanding credit and $8.3 million in savings (of which 83 percent was in compulsory savings). BKD deposits at BRI totaled $28 million (see table 14.7).

The BKD system has been profitable for decades. Table 14.7 shows the profits from 1992–96, adjusted for loan losses. In 1996 the BKDs made $5.9 million in profit after adjustment for loan losses and provisioning. The return on assets, adjusted for arrears past the final due date, was 8.7 percent.

Like moneylenders, BKDs offer low transaction costs for borrowers. They fall between unit desas and informal commercial moneylenders in terms of both interest rates and the total cost of credit to borrowers.

Managed by village leaders, the BKD system has a lower repayment rate than the unit desa system. But the BKD system is also profitable, primarily because the lower repayment rates are compensated for by the higher interest rates for loans, interest received on BKD deposits at BRI, and the much lower operating costs of the BKD system. And in 1996 the system reached nearly 800,000 borrowers with an average loan balance of $56 and more than 250,000 voluntary savers with an average account size of $6.

The unit desas and the BKDs together serve a substantial portion of the low-income people of Java and Madura (where 59 percent of the country's population lived in 1995), and the unit desas serve the rest of the country as well.

The BKDs have deeper outreach; the unit desas have wider outreach. With both systems in operation, BRI makes an extraordinary contribution to financing low-income people throughout the world's fourth most populous country. But there is still room for expansion—both for the unit desas and for the BKDs (if the regulation is changed to allow new BKDs to open).

Pembinaan Peningkatan Pendapatan Petani-Nelayan Kecil

Sponsored by the Ministry of Agriculture and subsidized by donors and the government, Pembinaan Peningkatan Pendapatan Petani-Nelayan Kecil (Income Generating Program for Marginal Farmers and Fishermen, known as the P4K Project) was introduced as part of the second phase (1990–96) of the ministry's large income-generating project. P4K is a subsidized credit and training program for poor rural self-help groups. Participants include small and marginal farmers, farm laborers, sharecroppers, and small fishermen organized into small groups of 8–16 households. Women account for about half of P4K participants.[20] P4K provides training (in such areas as skill development, education, health, and family welfare); loans, which require compulsory savings; and voluntary savings facilities.

The BKD system has been profitable for decades. P4K is a highly subsidized credit and training program for poor rural self-help groups

The BKDs are Indonesian (originally European) in background, and they adhere to the financial systems approach to microfinance as practiced for more than a hundred years in Indonesia. In contrast, the subsidized P4K program is a recent donor- and government-driven import influenced by the poverty lending view of microfinance, but with a modified approach: P4K does not provide credit to the extremely poor. The BKDs (and the unit desas) provide individual loans; P4K uses a group lending methodology. Since the BKDs and P4K serve many of the same villages (as do the unit desas), comparison among them is instructive.

The microfinance component of the P4K program is administered for the Ministry of Agriculture by BRI through its branch network. In 1996, 80 percent of loanable funds were financed by the International Fund for Agricultural Development (IFAD) and 20 percent came from Bank Indonesia liquidity credits. The mean cost of funds provided to the program was a highly subsidized 6.3 percent a year. P4K also received support from the United Nations Development Programme (UNDP) and the Dutch government.

BRI is required by the government to provide loans under the P4K project and to collect the repayments. While BRI's responsibility for P4K credit is at the branch level, many of the cash transactions are carried out at the units or even at the village posts as a service provided to the branches by the units—since the units are more conveniently located for most borrowers than the branches. However, the last payment of a P4K loan must be made at a BRI branch.

P4K's target population is a result of the program's view that access by the poor to financial resources is based on a series of steps (IFAD 1996, p. 26). Thus the extremely poor require grants, charity, and employment. However, households with annual per capita income equivalents above 320 kilograms of rice (about equal to $137 in 1996 prices) can use commercial microfinance, some-

times with special conditions. The households in between—those with annual per capita incomes equivalent to 240–320 kilograms of rice—are provided first with revolving credit financed by grants, then with subsidized loans. According to P4K administrators, in practice the project targets primarily households with annual per capita incomes of 240–320 kilograms of rice.

The P4K program was designed specifically to assist self-help groups of poor borrowers make the transition from P4K credit subsidies to commercial microfinance; thus borrowers are limited to four subsidized P4K loans with maturities of 12–18 months each. Group members are jointly and severally liable for the loans to group members; this guarantee serves as the borrowers' collateral. Interest on the loans is 12 percent a year flat rate (21.15 percent annual effective rate; McGuire, Conroy, and Thapa 1998, p. 154). However, actual interest is higher since the groups are required to save at BRI as a condition of receiving a loan; the amount of savings required from each group is $21 for the group's first loan, 10 percent of its second loan, and 20 percent of its third and fourth loans. The borrower does not have the use of his or her compulsory savings during the loan period, although the savings of the group members are deposited in a BRI SIMPEDES account that pays interest on the minimum monthly balance. Taking into account the compulsory savings requirement, the annual effective interest rate for loans ranges from 24–33 percent (depending on the percentage of compulsory savings required), or from 22–31 percent for prompt payers, who receive a small rebate (Ravicz 1998, p. 66).

In contrast to the unit desas and the BKDs, only 19 percent of P4K groups received credit after their first loans

In 1995 the credit limit for a borrower in a newly eligible P4K group was $43; for the borrower's fourth loan the limit was $128. The average loan size in 1995 was $66, or 7 percent of GNP per capita. A small number of self-help groups (less than 2 percent) continue onto a fifth loan. In this case the interest rises to 18 percent a year flat rate (on the original loan balance). Taking into account the savings requirement of 25 percent of such loans, and the interest paid on the savings, Ravicz (1998, pp. 66–67, 73) calculates that these terms are equivalent to a 62 percent annual effective interest rate on a 12-month loan with monthly installments.

Between March 1990 and March 1996 the P4K project disbursed 75 billion rupiah in loans to members of 37,289 self-help groups (IFAD 1996, p. 45). In fiscal 1996, $10.9 million was disbursed in loans to an estimated 153,480 individuals in 15,137 groups. As of March 1996, there was $2.8 million in savings from P4K members.

During the six-year period the P4K program reached nearly half a million households, most of them in the lowest income quartile of Indonesia's population. But to evaluate the program meaningfully, a number of issues need to be addressed.

Interest rates. The interest rate charged on the first four loans is 1 percent a month flat rate on the initial loan balance. But taking into account the forced savings (which are inaccessible to the borrower during the loan period), the annual effective interest rate on the declining balance paid by the borrower is 24–33 percent. Within this range, the rate depends on the amount of compul-

sory savings required; Ravicz (1998, p. 71) estimates an average annual effective interest rate of 27 percent. For the few groups that take fifth loans, the annual effective interest rate for the same type of loan, including the compulsory savings requirement, is 62 percent.

Some group members deposit voluntary savings with their groups to be onlent to group members. "Each group determines the interest rate it will charge on these loans. Typically, groups lend out these funds at funds at a 5 percent flat rate per month. This is equivalent to about a 154 percent annual rate on a declining balance" (Ravicz 1998, p. 67).

Participation. Participation in the P4K program is difficult to measure because between March 1990 and March 1996 only 19 percent of P4K groups received credit after their first loans (those that received only one loan are known as "resting" groups), while 21 percent had never received a loan ("sleeping" groups) (Ravicz 1998, p. 73). But the program does not track the number of loans by the year in which the groups received their first loans, and it is unclear how many groups have been "resting" for years, how many had recently repaid their first loans, and how many were unable to obtain additional credits. Nevertheless, 51 percent of the P4K groups had received credit by March 1993 and 65 percent by March 1994 (IFAD 1996, p. 40). But as noted, during 1990–96 P4K had not re-lent to 81 percent of its borrower groups after their first loans. This provides a sharp contrast to both the BKDs and KUPEDES, which help creditworthy borrowers with good repayment records move out of poverty by continuing to lend to them in gradually increasing amounts.

Since most P4K borrower groups receive only one loan, they do not have the incentive to repay that BKD and KUPEDES borrowers have

Repayment. Information on the total volume of P4K loans in arrears is not available. Ravicz (1998) estimates arrears by comparing the number of groups with loans in arrears with the number of groups with outstanding loans. Groups with arrears were at or below 6 percent of groups with credits through 1993. But this percentage increased to 10.5 percent in 1994 and to 18.7 percent in 1995. In addition, the volume of payments overdue increased from 1.6 percent in 1993 to 7.4 percent in 1995. However, Ravicz notes that these figures overstate arrears because BRI does not write off P4K loans in default.

The arrears appear to be caused in part by the fact that the P4K program uses agricultural extension workers for the P4K credit component. The extension workers typically do not have a financial background, and they are not under the control or supervision of BRI. In addition, they have no direct incentive to investigate the creditworthiness of self-help groups or to help ensure timely repayment of loans (see Ravicz 1998, p. 74). And since most P4K borrower groups receive only one loan, they do not have the incentive to repay that BKD and KUPEDES borrowers have—the assurance of another loan for qualified borrowers with good repayment records.

Program costs. The costs of the P4K program are high. In 1995 the annual cost of the program, including Ministry of Agriculture costs, was $3.3 mil-

lion, or 30 percent of the loan volume. The cost per new group loan was $383; for old group loans it was $213 (Ravicz 1998, p. 74).

Program subsidies. Ravicz (1998, pp. 70–71) calculates a lower-bound estimate for the 1995 P4K subsidy dependence index (SDI) of 262 percent, indicating that instead of its 27 percent average annual effective interest rate, the P4K program would have to charge 98 percent to operate sustainably (see box 2.4 in volume 1 for discussion of the SDI).

Instead of its 27 percent average annual effective interest rate, P4K would have to charge 98 percent to operate sustainably

BRI's role in P4K. At BRI, the P4K program is under the Small Business, Food, and Cooperative Division, which is also responsible for other subsidized rural credit programs. Ravicz (1998, p. 74) comments on BRI's administration of P4K:

> BRI operates this program from its branches rather than through its Unit Desa system. This is highly surprising given that BRI branches are located only in district capitals, and generally make quite large loans. In contrast, Unit Desas are located in sub-district capitals, and make much smaller loans. Thus, Unit Desas are much closer to the credit end-users both geographically and in terms of the types of credits they typically issue. Relocating the program to Unit Desas would facilitate collection efforts and might also increase the proportion of groups receiving more than one credit as it would be much easier for groups to apply for additional credits.

From the point of view of P4K participants, Ravicz is right. But since 1984 BRI has carefully separated its government- and donor-subsidized credit programs, which are operated through its branches, from the microbanking division's KUPEDES credit program, which operates commercially at the unit desas. Offering a large commercial credit program that has achieved continuing high repayment rates in the same small bank outlets as much smaller subsidized credit programs with repayment problems would hardly be recommended under best practices in microfinance. Figure 12.1 shows clearly why P4K is administered through BRI's branches, not its unit desas.

Microfinance at BRI's branches: comparing the BKDs and P4K

In one sense comparing BKDs and P4K is rather like comparing mangoes and raisins: they are very different. But both provide finance to low-income people in Indonesian villages, and since resources for developing microfinance are limited a brief comparison of the two can be useful. Both provide small loans, require compulsory savings to obtain a loan, and also collect voluntary savings.

Supervised by BRI at the branch level, the BKD system is commercial in orientation and charges higher annual effective interest rates on loans than do both P4K and the unit desas. The BKDs, which serve individual clients, have

low operating costs. P4K is a relatively new program providing training and credit to groups of borrowers. Its subsidized credit component, managed by BRI also at the branch level, has high operating costs. Both programs have lower average loan balances and higher arrears rates than KUPEDES at BRI's unit desas.

BKD loans are financed by retained earnings, savings, and commercial loans from BRI. The BKDs receive no subsidies and are profitable after adjusting for loan losses and provisioning.

In contrast, the P4K portfolio is financed by donor grants and low-cost donor and government loans. P4K was far from profitability—although its lower-bound estimated 1995 SDI of 262 percent was considerably lower than the 520 percent estimated by Ravicz for 1992. P4K is not profitable primarily because of its subsidized interest rate and its high operating costs.

P4K is not profitable primarily because of its subsidized interest rate and its high operating costs

Like the BKDs, P4K reaches large numbers of poor people—but in the case of P4K most borrowers have received only one loan, which typically has only a limited effect on helping poor borrowers move out of poverty. In contrast, both the BKDs and the unit desas provide repeat loans to all creditworthy borrowers who want to reborrow. The difference between commercial and subsidized microcredit is symbolized by the fact that the BKDs (like the unit desas), call their customers clients, indicating a business association. The P4K program calls its customers beneficiaries, implying a form of charity.

In 1995 the subsidized P4K program would have had to charge an estimated minimum 98 percent annual effective interest rate to become sustainable. The BKDs were financially self-sufficient, despite relatively high arrears, with an annual effective interest rate of 131 percent (including the effect of compulsory savings, assuming that the savings are returned to the borrower at the end of the loan).

In comparison, the unit desas were very profitable, with an annual effective interest rate of 32 percent for prompt payers on most loans.[21] It should be noted, however, that, including the compulsory savings component of their loans, P4K borrowers pay annual effective interest rates that are not much different from KUPEDES rates. And P4K group members who borrow from their P4K groups at an annual effective interest rate of 154 percent pay far higher rates than do KUPEDES borrowers.[22]

The BKDs and the P4K program have attained outreach that is both wide and deep. The advantages of the BKDs are that they are convenient for borrowers, have low operating costs, are well supervised by BRI, and are experienced, trusted, well-capitalized, and profitable. The disadvantages are that they are available only on Java and Madura (although the majority of Indonesia's population lives in the area they serve), have relatively high arrears rates, and charge substantially higher annual effective interest rates than P4K or KUPEDES. Like the BKDs, P4K's advantage is its outreach. But P4K has many disadvantages. It has high subsidies, high operating costs, and relatively high arrears. It does not provide most of its borrowers with continuing access to loans, and its field staff know little about finance. And the P4K program is not sustainable.

If P4K were ended, its savers and creditworthy borrowers could become unit desa or BKD clients—thus saving the P4K subsidies, allowing borrowers to reborrow, and improving the service to clients. Unlike the BKDs and the P4K program, the unit desas require collateral for most KUPEDES loans. But the KUPEDES Skala Kecil pilot project in small-scale, noncollateralized credit (see chapter 12, note 23) was found to be successful, and, in some cases, small loans without collateral have been incorporated into KUPEDES—although there is considerable scope for expansion of such loans. In this context, the continuation of large P4K subsidies—and the administration of the P4K program by BRI—should be reconsidered.

The BKDs (and their villages and clients), however, benefit substantially from BRI supervision, lines of credit, and deposit facilities. And the BKDs, like the unit desas, continued their wide outreach and their profitability during the recent Indonesian crisis (see chapter 15).

Microfinance divisions with hundreds of thousands or millions of clients need to use the McDonalds model—a few products in high demand

Microbanking in a Division of a Multipurpose Commercial Bank: Structural Issues

Many lessons have been learned from BRI and other commercial banks about structural issues that emerge when microfinance is carried out in a bank division.[23] This arrangement offers some advantages for microfinance operations. BRI's head office supports the unit desa division (BUD) in areas ranging from internal audit to research and development, from logistics to prudential reporting. At the regional offices, BUD is provided with services from other bank divisions, including Human Resources Development, Logistics, and Systems and Technology. And BRI branches play a major role in the units' supervision and financial intermediation.

On balance, however, the benefits received by a microfinance division in a large multipurpose commercial bank are likely to be outweighed by the disadvantages. These stem from organizational problems inherent in the structure of an institution in which one division is engaged in a business that differs substantially from that of the others. Of course, variations in business activities, operations, and priorities exist among other bank divisions, but not to the same extent as in microbanking. At BRI there are some crucial differences between the operations of the microbanking division and those of the rest of the bank.

Much of the argument made in this section is drawn from BRI's experience, some from elsewhere. Not all of BUD's experience is relevant to other commercial banks with microfinance divisions. But since BRI has by far the most fully developed history of such a relationship, its lessons are worth exploring. Approaches taken by other multipurpose banks providing commercial microfinance are discussed in chapter 19.

Microfinance products must be designed to meet the demand of low-income clients and priced for institutional profitability. They must be delivered to large numbers of clients in many different localities, and loans must be re-

covered. Thus the operations of a bank's microfinance division are necessarily labor intensive—far more so than those of other bank divisions. And microfinance products and operations must be kept simple. Divisions serving a small number of wealthy clients can offer multiple products of different kinds. But microfinance divisions with hundreds of thousands or millions of clients need to use the McDonalds model for products—a few products in high demand. What is crucial for microfinance clients is not a large number of products, but a well-designed combination of a few products that each client can customize for his or her own use. Thus the unit desas have one loan product (with 36 combinations of maturities and payment schedules) and three basic savings accounts (with different ratios of returns and liquidity). Keeping large-scale microfinance simple in a multipurpose commercial bank can be difficult, as the need for simplicity may not be understood in other divisions with different functions.

Keeping microfinance simple in a multipurpose commercial bank can be difficult, as the need for simplicity may not be understood in other divisions

The staff of the microfinance division must be recruited on criteria that differ in some important respects from those used for the staff of the rest of the bank. Microfinance management, supervision, training, and reporting are markedly different from industry standards. The division operates on a larger scale in terms of number of offices, staff, vehicles, and the like than the bank's other divisions. Microfinance operating costs must be significantly higher than those of the other divisions. And the division's products must be priced well above banking industry norms. In the case of BRI, another difference is that the microfinance division is substantially more profitable than other bank divisions.

Yet as part of a commercial bank, the microfinance division does not have the authority to ensure that the basic requirements needed to conduct its business are met. Its ability to function effectively depends on whether the bank's chief executive officer, and often the managing directors of the bank's other divisions, understand and support microfinance. Even high microfinance profits do not necessarily ensure the support of other bank directors; profits can also engender rivalries. Over time, it is likely that some managers will be supportive of the microfinance division and others will be less so.

It is possible to succeed in the short and medium term with a dedicated microfinance manager, a supportive chief executive officer, and high-level support from relevant ministries—as occurred at BRI. But depending on the leadership of a few individuals is not an effective way to achieve long-term institutional viability.

The structural problem of the bank division model for microfinance can be stated simply: the responsible director does not control the main decisions that affect the activities of the microbanking division, while the bank's other directors and chief executive officer are typically not qualified to do so. For long-term sustainability, the director in charge of microbanking must have full authority over all aspects of the microbanking business.

There are two kinds of dangers to the development of commercial microbanking. One, discussed here only briefly, comes from outside the bank; this danger is considered more generally in volume 3 in the context of the broader issue of institutional structures and country conditions that are suitable for

microfinance. The other danger, specifically related to microfinance divisions of commercial banks, comes from inside the bank. Discussed below, this is an important and little-understood potential hazard for the development of microfinance in commercial banks.

External dangers to sustainable microfinance

Governments are generally not monoliths. Some policymakers may understand and support the development of commercial microfinance, while others may not agree with this approach. Thus while a country's ministry of finance or central bank may support commercial microfinance, government agencies charged with poverty alleviation may require the microfinance divisions of commercial banks to implement subsidized credit programs—not understanding (or not caring) that such programs undermine the divisions' commercial microfinance activities.

The staff of the microfinance division must be recruited on criteria that differ from those used for the staff of the rest of the bank

In Indonesia an ad hoc compromise was reached at BRI (see figure 12.1). Since 1984 subsidized microcredit programs have been channeled through the branches, while commercial microcredit is provided through the units. This has been a successful arrangement for the development of the microfinance division. But the agreement was not formally incorporated into the permanent bank structure, and it is vulnerable to changes imposed by external or internal sources.

Another danger to sustainable microfinance arises when regulatory authorities apply general industry standards without realizing how these affect the development of microfinance in both publicly and privately owned banks. Examples include:

- *Usury laws and interest rate caps.* These typically prevent microfinance divisions from covering their costs and discourage banks from entering this market.
- *Requirements for new branches.* If a microfinance unit with four staff members is subject to the same regulations as a regular bank branch (such as requirements for capital, reporting, collateral, and the like), few units will be opened and demand will not be met.
- *Reporting requirements.* Microfinance divisions with large numbers of small loans should be permitted to report on loans in aggregate, and through sampling, rather than being required to follow the industry practice of providing regular reports on all individual loans.
- *Requiring accounting by the accrual method.* The accrual method of accounting is generally too complicated for large microfinance systems and does not encourage rapid, effective followup of delinquency. A cash accounting system in which only income received is reported is usually more appropriate for microbanking.
- *Loan classification.* Given the large number of small loans at the local level, classification of overdue loans should not be carried out on individual loans by a loan committee but rather by automatic classification based on loan aging and repayment history.
- *Requiring collateral to be notarized.* This requirement makes it difficult to collect simple forms of collateral from low-income clients and increases the cost

to the borrower because notary fees tend to be high at the local levels of developing countries.

- *Supervision of the savings of the poor.* When the microfinance divisions of commercial banks collect savings from the public, it is important that they be appropriately publicly supervised. On the one hand, industry standards for supervision are often not appropriate for microsavings; on the other, too little supervision can be dangerous, especially because microfinance is new to the banking system.

Internal dangers to sustainable microfinance

The relationship between a bank's microfinance division and its other divisions is sensitive at every level of the organization. The main internal problem faced by a microfinance division is that its purpose and requirements may be misunderstood within the bank, and that the head office may not put a high enough priority on building a constructive and cooperative relationship between this division and the others in the bank. The following sections discuss some of the dangers to the microfinance division—and hence to the bank—that can arise from an inadequate understanding of microfinance within the bank. With the possible exception of government requirements to implement subsidized credit programs, these internal dangers can apply to both private and state-owned banks.

The microbanking director does not control the bank's important decisions affecting microfinance; the other directors typically are not qualified to do so

The role of the microbanking unit in a multiservice bank. The core of a successful microbanking division is its labor-intensive, client-centered, small-scale profit centers. But these units must be closely supervised by a higher level of the bank's organization. At BRI the branches play this role, also acting as financial intermediaries for the units. BRI branch managers must manage the commercial, retail, and sometimes corporate banking activities of the branch, implement the government's subsidized credit programs, and supervise the unit desas that report to the branch. The managers and BUD staff at the branches are trained to understand the role of the branch in unit desa development. But it is not easy to maintain an appropriate balance among the various functions of the branch, especially since commercial microfinance does not represent a large part of the branch's responsibilities—although it typically represents a large portion of its profits (or it covers losses from other branch activities).

BRI's divisions responsible for the main activities carried out at the branches, as well as divisions that carry out bankwide functions such as human resources, management information systems, operations, and logistics, sometimes perceive the units as arms of the branches. A unit can, to some extent, serve as an arm of its branch. But if the unit is to be profitable, its service to the branch must be an ancillary activity. For example, at BRI a borrower who lives in a rural area near a unit, but who wants and qualifies for a loan larger than the KUPEDES maximum, may take a larger loan from the branch. However, the borrower may prefer to pay the loan installments at the unit because of its more convenient location. In collecting the payments for this loan, the unit performs

a service delivery function for the branch. Similarly, computer terminals can be installed at the units to service branch-based checking accounts, facilitate money transfers, and house automated teller machines.

But some branch managers and representatives of a bank's other divisions tend to emphasize the unit's function in delivering services to the branch to the point that the unit's primary activity—providing financial services to the economically active poor—is threatened. This emphasis is dangerous for two reasons. First, the two functions have different basic requirements. Second, the microbanking function of the units enables the division's profitability—and in the case of BRI, the bank's profitability.

The relationship between a bank's microfinance division and its other divisions is sensitive at every level of the organization

Labor-technology ratios. The appropriate use of labor and technology is directly related to the role of microbanking units in a multipurpose bank. Those who see the units as extensions of the branches tend to argue for substantial increases in the computerization of the units and for major decreases in their labor costs. Those who understand microbanking realize that small savers and borrowers demand personal service from helpful staff delivered at multiple locations, and that they are willing and able to pay for these services. While labor may be costly, profitable microfinance programs are labor intensive. This crucial point is not always understood at a bank's head office or at its regional and branch levels.

With better technology, transaction costs can be safely lowered in the units in a variety of ways, both in the units' services to the branch and in their microbanking activities (especially in backroom operations). But operating costs for microbanking are necessarily much higher than those in the bank's other divisions. The many reasons include higher labor costs, higher transaction costs, expenses related to the operations of many small bank outlets, the specialized staff training required, and the need for research and development on products and services specially designed for the microfinance market. As discussed in the section on unit desa profitability in chapter 12, the operating costs of the unit desas in 1996 were 6.5 percent of average earning assets—far higher than general banking industry standards in Indonesia or elsewhere.

In modern banking, however, optimal ratios of labor and technology vary considerably among bank divisions. A bank with multiple divisions needs to ensure that its microbanking division is not outvoted by other divisions on issues vital to the sustainability of microbanking, and that its microfinance outlets do not become branch arms. It must be recognized throughout the bank that the units of the microfinance division are the bank's network for providing financial services to low-income clients; they are neither branch outlets nor small branches. It is not easy to achieve this perception in a multipurpose bank in which microbanking is one among many divisions.

The generalist management model. In the generalist model of management, found in many commercial banks, managers above a certain level are regular-

ly transferred (typically every two to four years) from one division to another. This model does not work well for microfinance because microbanking is a different business from standard commercial banking. Under the generalist management model, soon after a manager learns the microbanking business he or she is transferred to corporate, international, or commercial banking (all of which are generally considered plum assignments relative to microbanking). In the long run this model prevents the development of a strong, stable, experienced management team that understands the business of the microfinance division. This has been a serious problem at BRI.

The downsizing syndrome. Bank managers often think that the instruments and services designed and priced for commercial and corporate customers can simply be downsized—that is, shrunk—for use by microfinance clients. This is a mistake, because the demand for and pricing of microfinance are fundamentally different from other bank products. Microfinance clients want small loans and small savings accounts with the characteristics discussed in earlier chapters. Although some urbanized, better-off microbanking clients can use some of the bank's standard commercial products, most standard commercial products are not suitable for most microfinance clients. For its activities to be sustainable, a bank's microfinance division must have the authority to develop and implement the products and pricing that are appropriate for its market. This has not been a serious issue at BRI because the BUD Division has defended well against it. But it is a problem in some banks.

Decisions about use of profits and allocation of resources may be made with inadequate understanding of the requirements of the microfinance division

Managing bank support services. The various divisions of a commercial bank share the services provided by the bank's support divisions (such as human resources, training, and logistics); each user division should pay for the services it uses. However, the managers responsible for the bank's support divisions sometimes do not understand the special needs of the microfinance division. Without control over its own requirements for operation, the microbanking division remains vulnerable to uninformed management decisions that could cripple or destroy the microfinance effort. At BRI this issue has been handled through constant personal negotiation. While this method can work for some time, it is not structurally sound for the long term.

Use of profits and allocation of resources. Corporate decisions on the use of bank profits and the allocation of resources among divisions may be made with inadequate understanding of the requirements of the microfinance division, since these are often quite different from the needs of other divisions. As a result the microfinance division may not receive sufficient funds for its maintenance, improvement, and expansion. Since the microfinance division controls neither the use of its profits nor the bank's investment decisions, the division cannot protect itself in this regard. Once again, the microfinance division is vulnerable because of its differences. This has been a particularly crucial issue at BRI since the bank's profits come from its microbanking division.

Uninformed planning. Problems in bank planning can arise because of lack of knowledge about the business of microfinance. For example, it may be considered efficient to combine microfinance units and regular bank branches when both are located in the same area (usually in towns and cities). But these entities serve different clients, need different products and pricing, require different kinds of staff with different training, and have different requirements for buildings, transportation, and the like. That their consolidation is neither efficient nor profitable is not necessarily understood by managers with little experience in microfinance. This issue has been the subject of a long-term, ongoing debate at BRI.

What may appear to be good for the bank may not be good for the microbanking division

Use of deposits from microfinance clients. Well-run microfinance divisions are able to mobilize savings that, although small in terms of individual accounts, can be very large—and very stable—in aggregate. Therefore a bank that faces a shortage of funds may be tempted to instruct its microfinance division to emphasize savings at the expense of loans, in order to finance the activities of other bank divisions. In such cases the transfer price is normally set to encourage savings mobilization and to discourage lending.

This approach can reduce rural investment and raise interest rates on microloans higher than is necessary (to compensate for higher interest rates on unit savings accounts). The latter did not occur at BRI during 1984–96. But much of the units' savings were used to finance large loans at the branches—while the demand for small loans was only partly met. What may appear to be good for the bank as a whole may not be good for the microbanking division or its low-income clients; in the long run it may not be good for the bank either.

Managing required subsidized credit programs. Government instructions requiring implementation of subsidized credit programs can threaten a bank's commercial microfinance program. Unless the government can be persuaded to change its policy, the bank must find a way to implement the subsidies in ways that do not directly endanger the market approach of its microfinance division. Otherwise the division's viability is threatened. The BRI solution has been to implement the subsidized programs at the branches but not at the units (which are the locus of responsibility for commercial microfinance). Each bank affected by this problem must find its own solution; the two programs can coexist at the same bank if necessary, but not in the same division or in the same retail outlet.

"Modernization." Increasing competition tends to lead banks in developing countries to believe that they must develop a "modern" corporate image. Emphasis is placed on technological superiority, gleaming modern architecture, and managers with multiple degrees, preferably awarded by foreign institutions. A bank active in the microfinance market must understand that this approach should not be imposed on its microfinance division. Nor should the division be considered a pariah because of its simpler image. The economically active

poor prefer small, familiar bank outlets with friendly staff who understand their needs and treat them with respect.

This problem, though widespread, has barely been recognized; it needs to be understood and resolved. Given that most of the world's population do not have access to formal financial services, and that microfinance can be highly profitable, microfinance units may well become the most important outlets of the banks of the 21st century.

Why Do Structural Issues Matter?

Banks considering entering the microfinance market should consider carefully the lessons from these experiences. BRI's unit desa system faced institutional problems from both outside and inside the bank. These difficulties were typically solved on a case-by-case basis; this method allowed the units to function well but made their long-term viability dependent on the skill of their managing director, the priorities of BRI's president-director, and the goodwill of the coordinating minister for the economy and a few individuals at BRI, Bank Indonesia, the Ministry of Finance, the Ministry of State for Planning, and elsewhere.

The current restructuring of BRI indicates that many of the bank's problems are being addressed

Realizing better than anyone the vulnerability of the units because of the ad hoc decisionmaking involved, Sugianto, the long-term managing director responsible for the unit desa system, pressed in the mid-1990s for a national microfinance policy framework. He wanted to ensure that decisions crucial to the development of commercial microfinance in Indonesia—involving such matters as the administration of government-subsidized credit programs and central bank regulations concerning accounting methods, reporting requirements, and loan classification—would not depend on particular individuals, but would be made in the context of informed microfinance policy. But his untimely death in 1998 preceded the formulation of such a policy framework, and the momentum for its development lapsed.

The current restructuring of BRI into a bank providing commercial finance mainly to micro, small, and medium-size retail customers indicates that many of the bank's problems—both external and internal—have been understood and are being addressed (see chapter 15). If BRI is successfully restructured in this way, its role in providing increased financial services to low- and middle-income people throughout Indonesia could generate an opportunity for the formulation of national policy on microfinance issues.

If only BRI and a few scattered banks were involved in commercial microbanking, the structural matters discussed here might not be so compelling. But the issue is urgent because commercial banks in developing countries are the primary institutions with the scale of operations required to reach the hundreds of millions of economically active poor who lack access to formal financial services. And many banks are now entering microfinance (see chapter 19).

An increasing number of governments and banks have begun to understand that commercial microbanking is in their own interest. Both push and pull forces

Table **14.8** **Indicators of financial self-sustainability for the unit desas, 1985, 1990, and 1995** (percent)

Indicator	1985	1990	1995
Nominal average yield on loan portfolio	27 4	31 5	31 6
Nominal average interest rate on deposits	10 5	11 3	9 7
Nominal interest rate spread	16 8	20 2	21 9
Real average yield earned on loan portfolio	21 7	22 4	20 2
Real average interest rate paid on deposits	5 6	3 6	0 3
Lowest nominal lending interest rate needed for financial self-sustainability	36 2	27 2	17 5
Lowest real lending interest rate needed for financial self-sustainability	30 1	18 4	7 3
Operating costs as a share of			
Average annual net loan portfolio	20 5	12 9	12 6
Half of the average annual net loan portfolio and deposits	31.5	11 6	8 3
Average annual total assets	15 1	8.0	5 3
Profit (millions of U S dollars)[a]	–0 8	34 3	170 2
Share of profitable units	48 3	89 1	95 7
Average annual deposit volume/average annual loan portfolio volume	0 3	1 2	2 0
Subsidy dependence index	32 2	–13 7	–44 5

Note Inflation was 4 7 percent in 1985, 7 4 percent in 1990, and 9 4 percent in 1995 There are slight discrepancies between the Yaron, Benjamin, and Charitonenko (1998) inflation figures used in this table and the data in table 2 1, which reports inflation as 4 5 percent in 1985 and 7 5 percent in 1990

a There is a small discrepancy between the 1995 profits provided in this table and current BRI data According to BRI's monthly reports, unit desa profits were 402 6 billion rupiah in 1995 Thus at the year-end exchange rate of 2,308 rupiah to $1, profits were $174 million (see table 2 2)

Source Yaron, Benjamin, and Charitonenko 1998, p 160

are present. Government banks are being pushed toward commercial microfinance by the large losses they typically incur from subsidized credit programs. This happened in Indonesia, and it is beginning to occur in many other countries—including India and China, which together are home to about half of the world's low-income people.

Both state-owned and private banks in many developing countries are also being pushed toward microfinance by increasing competition from overseas banks. Local banks, which fear competition for prime customers from large international banks, have begun to realize that foreign banks entering their country may be highly competitive in the corporate market, but are unlikely to compete in the microfinance market (although this may change in the coming decades).

Pull forces include the profits that can be earned from commercial microfinance, and the political benefits from governments that look favorably on banks that provide financial services to low-income people. However, the question of profits raises one of the most difficult issues that can be faced by a microfinance division of a commercial bank. Table 14.8 provides indicators of finan-

cial sustainability for the unit desa system in 1985, 1990, and 1995. It shows that in 1995 the subsidy dependence index (SDI) for the BUD Division was −44.5 percent, indicating that the division could have substantially lowered its KUPEDES interest rates, raised its interest rates on savings accounts, or both—while still remaining fully sustainable and self-sufficient.[24]

The profits of BRI's microfinance division have been used to cross-subsidize other BRI divisions that serve wealthier clients but have lower repayment rates and are less efficient. Thus the units' clients, the economically active poor, are subsidizing the bank's more affluent corporate and commercial customers. Yaron, Benjamin, and Piprek (1997, p. 129) pose the crucial question:

> What would have been the impact on the rural economy, and particularly on BRI-UD [unit desa] clients, if the value of negative subsidies had been used to decrease the spread between the BRI-UD's on-lending and deposit interest rates, instead of subsidizing other BRI non-unit desa activities? This question is of the utmost importance because the cross-subsidization within the BRI (as reflected in the negative SDI) results in adverse income distribution, with small-scale rural entrepreneurs subsidizing the more affluent clientele.

The bank division model is not likely to become the organizational standard for commercial microbanking in the future

Of course, this is a particular case, not a general rule. Nevertheless, there are clear structural dangers when microfinance is implemented through a division of a multipurpose commercial bank. Moreover, decisions made under this type of bank structure can result in regressive income distribution.

The dangers to microfinance in commercial banks can be overcome if they are recognized and if high priority is given to their prevention and remediation. There will be considerable incentives to do so once banks better understand the opportunities for profitable microfinance.

With many trials and errors, BRI built an efficient organization and management structure for its microbanking program. This structure enabled the BUD Division to develop the world's first fully sustainable large-scale system of microfinance and to help millions of the economically active poor expand their enterprises and increase their incomes. Given the context, the scale, the risks, and the many new ideas that had to be tested, Indonesia probably could not have developed large-scale commercial microbanking under another organizational model. By using the existing unit desa infrastructure, the coordinating minister for the economy and the minister of finance—who represented the government as BRI's sole shareholder—and BRI were able to build this system at that time. The owners and managers of other Indonesian organizations were uninformed, unwilling, uninterested, or unable to undertake large microbanking efforts.

Many lessons essential for building an organizational structure to provide large-scale profitable microfinance can be learned from the process of building BUD at BRI. One, however, is that the bank division model is not likely

to become the organizational standard for commercial microbanking in the future. Although they too have their problems, a bank subsidiary or an independent bank is a more likely bet (see chapter 21).

Indonesia and BRI have been leaders of the microfinance revolution from its inception. Over time, both the enormous potential of commercial microfinance and the structural problems inherent in the bank division model of microbanking came to be understood in their Indonesian context. The current restructuring of BRI—with its primary focus on providing commercial financial services to low- and middle-income people—is discussed in the next chapter. It represents a clear indication that the country and the bank plan to remain at the forefront of the microfinance revolution.

Notes

1. Parts of this chapter are based on Robinson (1997 c), BRI (1997a), and Sugianto and Robinson (1998).

2. The Ministry of Finance represents the government as the owner of BRI.

3. See Yaron, Benjamin, and Piprek (1997, pp. 32–33) for a table that shows the characteristics of old and new policy approaches and government interventions in rural finance. That table and the box in the introduction to part 3 provide useful complementary information and analysis.

4. Sugianto became responsible for the unit desa system in 1984; he was appointed managing director in 1986 (see Robinson 1998b)

5. See Patten (1996); Robinson (1997c); and BRI (1997a) for further discussion.

6. Until 1984 this position was referred to as unit desa officer; both titles refer to branch-level positions concerned with supervision of units.

7. Urban-rural remittances in Indonesia have been widely reported from microstudies. For example, a 1987 CPIS survey of Jakarta's informal sector workers found that 65 percent of 510 workers sent an average of 31,850 rupiah ($19.37) a month to their families in villages (CPIS 1988a).

8. See Schmit (1991, pp. 198–206) for discussion of the debates about whether SIMPEDES would contribute to urban bias or "urbanize" villagers. SIMASKOT responded to existing demand in urban areas for a liquid savings account. Many urban residents who had heard about SIMPEDES requested that it be made available in the cities; this led to the development of SIMASKOT, adapted from SIMPEDES.

9. Television began to reach some villages in the mid-1980s, especially on Java and Bali. By the 1990s television became widely available in much of rural Indonesia.

10. Much of this section is based on BRI (1997a).

11. The International Visitors Program began formally in 1996 under a cooperative agreement between BRI and the U.S. Agency for International Development. It was developed in response to growing international demand from governments, banks, NGOs, donors, and foundations for study tours to BRI that would enable institutions in other countries to learn about the unit desa system. During 1996–98 HIID provided technical advice to BRI under the cooperative agreement, and I served as coordinator of the HIID project.

12. See BRI (1997a, pp. 13–14) for detailed discussion of the role of the unit business manager.

13. In addition to those discussed, two other kinds of branch employees serve the units directly: staff who perform general administrative and clerical functions related

to supervision of the units, and reserve staff who fill in when there are temporary vacancies at the units because of vacations, sick leave, training leave, and the like.

14. Amounts lent were not available by year, so this figure is not inflation-adjusted.

15. Trainees are required to submit an extensive anonymous evaluation of each course and instructor. One topic on the evaluation questionnaire is how well the theoretical explanations relate to the trainee's experiences; others range from assessment of the quality of the training center administration to whether the classes are disturbed by noise. The comments of the trainees are taken quite seriously by the training center and by BUD.

16. In practice, however, it is sometimes difficult to find appropriate places in the bank for the returning trainers.

17. See Steinwand (2001) for a discussion of BKD history; parts of this section draw from that source.

18. The early lumbung desas established in Central Java by De Wolff van Westerrode in 1897–98 were based on the indigenous Javanese lumbung (granary) used to store paddy for consumption or seed; some lumbung provided loans to members of the village (see Suharto 1996, Steinwand 2001).

19. For discussion of the BKDs in the 1990s, see Chaves and Gonzalez-Vega 1996, BRI (1998a), Ravicz (1998), and Steinwand (2001).

20. For discussion of the P4K program, see International Fund for Agricultural Development (1996); Seibel and Parhusip (1998); McGuire, Conroy, and Thapa (1998); and Ravicz (1998).

21. As noted in chapter 12, the KUPEDES annual effective interest rate of 32 percent a month would be higher if the prompt payment incentive (0.5 percent a month for six months or for the life of the loan, whichever is shorter) were included. But the KUPEDES prompt payment incentive maximum of 3 percent of the loan in a six-month period is much smaller than the forced savings requirements of P4K (and the BKDs).

22. It is worth noting here that where local officials or borrowing groups that onlend set interest rates for loans (such as the BKDs' 131 percent annual effective interest rate and the 154 percent annual effective interest rate set for their members by P4K groups; Ravicz 1998, p. 67), there is a tendency for the interest rates to be set much higher than those set by efficient, profitable microfinance institutions (such as the KUPEDES annual effective interest rate of 32 percent for prompt payers for most loans). This pattern occurs in other countries as well.

23. Much of this section is taken from Sugianto and Robinson (1998). Because the death of Sugianto, BRI's long-term managing director responsible for the unit desa system, unfortunately preceded the final updating and editing of this chapter, responsibility for the opinions expressed here is entirely mine.

24. The subsidy dependence index (SDI) measures the percentage increase in the average yield obtained on the loan portfolio needed to compensate for the elimination of all subsidies in a financial institution (see box 2.4 for discussion of the SDI).

15 Commercial Microfinance in Indonesia: Stability in Crisis, 1997 to Mid-2001

The Indonesian crisis that began in 1997, its development, and its complex political, economic, and financial roots were discussed in chapter 8. The information in that chapter is essential for understanding the reasons for the failure of the financial system and the subsequent bank and corporate debt restructuring efforts discussed in this chapter. The focus in this chapter is on a dramatic contrast that became evident during the crisis—between commercial microbanking institutions, represented here by Bank Rakyat Indonesia's (BRI's) unit desas, the village-owned Badan Kredit Desas (BKDs), and the private Bank Dagang Bali (BDB), all of which remained stable and profitable, and the Indonesian financial system, which collapsed. The analysis explores the four years between the

start of the crisis in July 1997 and President Megawati Soekarnoputri's assumption of office in July 2001.

For reasons that were primarily political rather than economic, the East Asian crisis hit Indonesia the hardest of any country in the region. In June 1997, the month before the crisis began, the Indonesian rupiah was valued at 2,450 to the U.S. dollar; in June 1998 it was 14,900 to the dollar. By the end of 1998 the value of the rupiah had recovered to 8,025 to the dollar, but it later declined again (see the appendix for monthly exchange rates). In late 1997 and in 1998 the currency devaluation was followed by sharp increases in interest rates and inflation (which reached 78 percent at its highest point in 1998), then by steep contraction in GDP. Rising social disorder and severe political instability forced the resignation of President Soeharto in May 1998, after 32 years in office.

A dramatic contrast became evident during the crisis. The Indonesian financial system collapsed, but commercial microfinance remained stable and profitable

With the fall of the rupiah, massive foreign debt—most of it unhedged and much larger than had been previously recognized—resulted in unmanageable debt burdens. Foreign debt in commercial banks reached about three times their equity. By 1998 about 70 percent of bank loans were in default. The private sector's foreign debt was more than twice the government's. Corporations went bankrupt, and the financial system melted down.

In mid-2000 Indonesian corporate debt was estimated at about $120 billion, 72 percent of which was denominated in foreign currencies. A large portion of the debt was concentrated in loans made to a small number of Soeharto family members and close associates. By early 1999 the Indonesian banking system had a negative net worth of nearly 200 trillion rupiah ($23 billion). Banks had essentially ceased lending, and deposits declined as depositors lost confidence in the banking system. *The Economist* (18 July 1998) commented: "Even with the fierce competition from its neighbors, Indonesia would probably walk away with the prize for Asia's most desperate banking system."

The International Monetary Fund (IMF), supported by the World Bank, Asian Development Bank, and other donors, created an emergency $42.3 billion soft loan fund for Indonesia. The IMF agreements with Indonesia stipulate that disbursement of these funds is contingent on tighter fiscal and monetary policies and a variety of financial and other reforms. But, as widely expected in In-

donesia, implementation problems arose with some of the reforms. As a result the IMF postponed disbursements on a number of occasions. Nevertheless, under the program with the IMF, the government of Indonesia made important and timely achievements in macroeconomic stabilization and other areas.

As part of the IMF program, the Indonesian Bank Restructuring Agency (IBRA) was created to restructure and recapitalize the banking industry; the agency was also given a major role in corporate debt restructuring. IBRA has made some progress. But formidable obstacles—deeply imbedded in the financial system and in Indonesian corporate culture—continue to impede both bank restructuring and corporate debt recovery. The problems are greatly exacerbated by Indonesia's weak and corrupt legal and judicial systems.

By early 1999 Indonesia's banking system had a negative net worth of nearly $23 billion

When President Soeharto resigned in May 1998, he was succeeded by his vice president, B.J. Habibie. Responding to public demand, Habibie made a number of political reforms and called for general elections. But he was too closely connected to Soeharto to be reelected. Habibie was succeeded by Abdurrahman Wahid, who was elected in 1999 but impeached in 2001—essentially for not being able to govern the country. Wahid was succeeded by his vice president, Megawati Soekarnoputri (the daughter of Sukarno; see chapter 8), who took office in July 2001.

Presidents Habibie and Wahid both made some long-overdue reforms. But Habibie would not, and Wahid could not, address many of Indonesia's most urgent needs—such as making hard decisions on the economy, cracking down on corruption, bringing the Soehartos to justice, and building legal, judicial, financial, and other institutions. As of late 2001, President Megawati appeared to have the political capital required to begin to address these exceptionally difficult challenges. But it is unknown whether her government will exercise the political will required to make the needed reforms.

After discussing the financial crisis and the attempts to restructure the banking system and corporate debt, this chapter shifts its focus to commercial microbanking. The performance, during the crisis, of three major commercial microbanking institutions is examined. BRI's unit desa system is the developing world's largest financially self-sufficient commercial microbanking system, the BKDs are its oldest microfinance institutions, and BDB is the oldest private commercial bank specializing in microfinance. The BKDs

and BDB are considered first; the chapter then turns to unit desa performance from 1996–2000, with some additional information for 2001 (added when the chapter was in press). In stunning contrast to the banking sector generally (including BRI's other divisions), the unit desa system maintained its wide outreach and high repayment rate during the crisis, remaining profitable throughout. The review of unit desa performance during this period is followed by an overall analysis of BRI's microbanking system at the end of 2000.

The three institutions discussed here are among Indonesia's—and the world's—best commercial microfinance institutions. Not all Indonesian microfinance institutions fared as well during the crisis. But the strengths of commercial microbanking are not confined to the three institutions discussed in this chapter. Steinwand (2001) shows that the commercially oriented Bank Perkreditan Rakyat (BPRs, or People's Credit Banks) also generally performed well during the crisis (chapter 9). But the purpose here is not to discuss all microfinance in Indonesia. It is to show that mature, well-managed commercial microfinance institutions of quite different types can serve large numbers of savers and borrowers—remaining stable and profitable even as their country's financial system collapses.

Formidable obstacles—deeply imbedded in the financial and judicial systems and in corporate culture—impede bank restructuring and corporate debt recovery

The chapter concludes with an analysis of the reasons for the stability of commercial microbanking during the Indonesian crisis. Among many others, these include:

- Timely macroeconomic stabilization measures were undertaken by the government, with the support of the IMF and other donors.
- Most microbanking clients operate in the domestic economy and were not directly affected by the currency crisis.
- The government, with help from the IMF and other donors, quickly instituted emergency antipoverty programs, supplying food, creating employment, and keeping children in school. These programs, along with the stabilization measures, meant that most of the economically active poor stayed economically active—and were able to make use of commercial microfinance services during the crisis.
- The microfinance institutions discussed here had mobilized substantial amounts of public savings (or in the case of the BKDs, had

retained earnings deposited at BRI). All were liquid throughout the crisis, and their lending was not capital constrained.

- Borrowers greatly valued the option to reborrow in times of difficulty—and thus made loan repayment a high priority. And savers tried, where possible, to save more and consume less.
- Savers valued the security, convenience, liquidity, confidentiality, products, and services offered by these institutions. All these features were critical during the crisis. Some savers moved their accounts from failing banks to the unit desas, BDB, or the BPRs.
- Interest rates for savings, especially for fixed deposits, were high in 1998 and part of 1999 (at the unit desas they peaked at 60 percent in May 1998). These rates helped savers counter somewhat the effects of rising inflation and underemployment.
- Some high-level government officials who understood the importance of commercial microfinance for the economy continued their strong support for the institutions providing it.
- The institutions discussed had built a record of trust. They had good, committed management, friendly and motivated staff, and products appropriate for microfinance clients. Clients remained loyal because they valued the services they received.

With giant banks (including BRI) and corporations failing all around them, BRI's unit desas made and collected small loans, increased savings, and earned profits

There are important lessons from the Indonesian experience during the crisis—for Indonesia, for other countries, and for the microfinance industry.

Among the East Asian countries affected by the 1997 crisis, each had somewhat different reasons for the steep currency devaluations, plunging stocks, losses of foreign investment, rising prices, and growing unemployment that hit the region that year—although to varying degrees in different countries. In Indonesia even a long record of solid economic management with impressive achievements could not alleviate growing concerns about rapidly increasing, large-scale corruption at high levels—and about the country's political stability.

As discussed in chapter 8, the roots of the Indonesian crisis are complex, with multilayered and intertwined components (box 15.1). What was perceived in July 1997 as a currency crisis turned out to be a major political, economic, and financial crisis—and perhaps most important, a crisis of confidence.

The extent of Indonesia's economic downturn in 1997–98 was devastating. The Asian Development Bank (ADB news release 32/99, 19 April 1999) reported that "the economy plunged into a vicious cycle of rising inflation, falling exchange rates and increasing interest rates." And as noted in chapter 8, the World Bank (1998b, p. 1) commented that "no country in recent history, let alone one the size of Indonesia, has ever suffered such a dramatic reversal of fortune."

Yet an outsider with no knowledge of Indonesia who examined the performance of BRI's unit desas during 1984–2001 would have no way of knowing that beginning in 1997 the country had suddenly faced severe political instability, major economic hardship, and financial chaos. With giant banks and corporations failing all around them, the unit desas continued to increase their outreach, collect loans, mobilize savings, and earn profits. Other commercial microbanking institutions withstood the crisis as well. As a long-time manager at Bank Dagang Bali observed while discussing the stability of commercial microfinance during the collapse of the banking system: "The proverb is right. Big storms fell mighty trees, but the grass still grows."

This chapter first examines the financial aspects of the crisis, the collapse of the banking sector, and the government's efforts at bank and corporate debt restructuring. That discussion provides the background for the subsequent analysis of the remarkable stability of commercial microbanking throughout this period.

With few new bank loans, and with investors wary of Indonesia's financial and legal systems, the country has seen little new economic activity

Indonesia's Financial Crisis

By the beginning of 1999 the Indonesian banking system had a negative net worth of nearly 200 trillion rupiah ($23 billion). Although banks had essentially ceased lending in late 1997, they continued to incur losses. Loan repayment remained poor, and deposits declined. With few new bank loans, and with investors wary of Indonesia's financial and legal systems, the country has seen little new economic activity—which has impeded efforts to restore sustainable, broadly based economic growth.

For reasons discussed in chapter 8 (see also box 15.1), the crisis in Indonesia was the worst among all the affected East Asian countries. In late 1997 and in

Box **15.1** **Excerpts from Mark Baird's "Corporate Restructuring in Indonesia"**

The structural problems that led to the 1997 financial crisis existed in varying degrees in all of the affected East Asian countries But they were more severe in Indonesia, which was consequently hit harder than the other countries in the region The problems included

- a high dependence on foreign borrowing by Indonesian corporates
- little reliance by corporates on equity finance
- the absence of an effective legal and judicial system to settle contractual disputes and apply a viable bankruptcy regime
- a heavily concentrated family corporate ownership structure which depended for its success on non-transparent relationships with government and with banks
- poor corporate governance, particularly concerning disclosure and enforcement
- limited competition and prevalence of anti-competitive behavior
- an over-extended state-owned enterprise sector that imposed special demands and received special favors from government while crowding out private investment

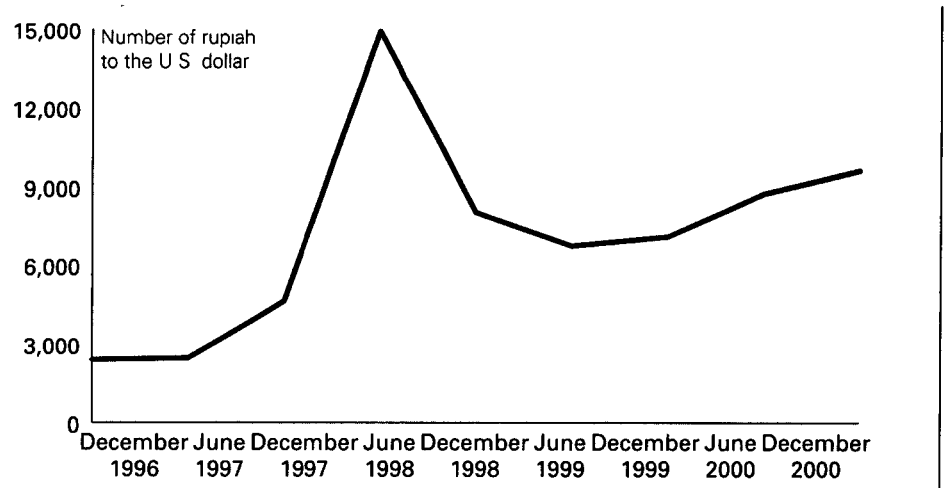
Source Baird 2000, p 1

1998 the rupiah plunged against the U.S. dollar (figure 15.1; see the appendix for more details). By the end of 1998 the rupiah had recovered to 8,025 to the dollar, and by the end of 1999 to 7,085. But by the end of 2000 the rupiah had depreciated again to 9,595 to the dollar. And in April 2001 the rupiah continued falling as political instability increased and proceedings for President Abdurrahman Wahid's impeachment moved forward. The rupiah, which was at 11,675 to the dollar at the end of April, remained above 11,000 to the dollar until President Megawati took office in late July. Within a few weeks the rupiah appreciated to about 8,500 to the dollar, but by October it had fallen to more than 10,000 to the dollar, where it remained in November and December 2001.

In 1998 annual inflation was 53.4 percent—a sharp contrast to the previous decade, when it had averaged less than 10 percent. But inflation fell to 20.5 percent in 1999, and in 2000 it was down to 3.7 percent. Annual inflation in 2001 (through November) was 11.4 percent. The consumer price index rose throughout 1997–2000 (figure 15.2), but consumer prices rose less sharply and showed far less volatility than the exchange rate—a point discussed later because of its significance for the stability of commercial microbanking during this period.

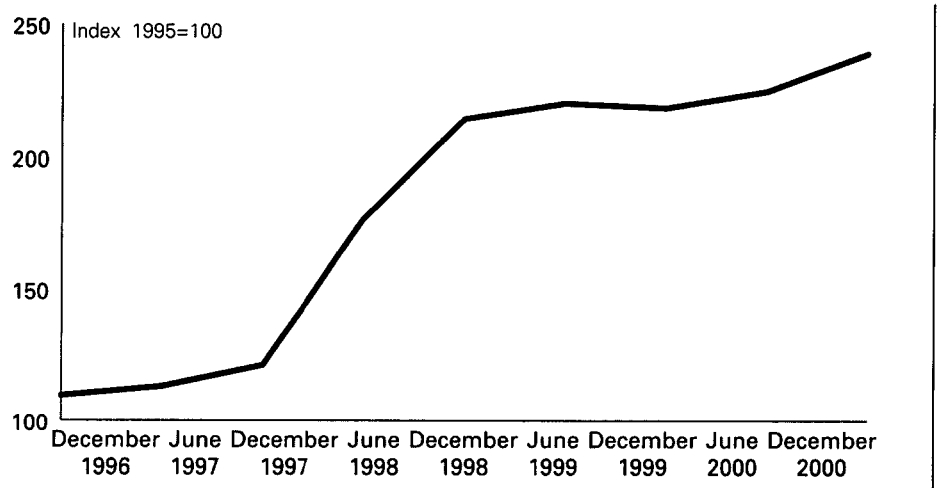
Most Indonesian corporations were technically bankrupt by early 1998. By mid-1998 the combined effects of political instability, the rupiah devaluation, high interest rates, capital outflows, bank failures, and growing unemployment caused a sharp contraction in the economy. GDP growth, which had averaged nearly 8 percent a year for more than a decade, was just 4.7 percent in 1997. And in 1998 GDP contracted by more than 13 percent. This dramatic downturn of 18 percentage points in one year ranks among the world's most severe economic collapses since the 1930s. But in 1999 GDP growth was 0.3 percent, and in 2000 it reached 5.2 percent.[1]

Figure **15.1** **Exchange rate in Indonesia, December 1996–December 2000**



Source IMF, *International Financial Statistics* (March 2001)

Figure **15.2** **Consumer price index in Indonesia, December 1996–December 2000**



Source IMF, *International Financial Statistics* (May 2001)

The International Monetary Fund (IMF), supported by the World Bank, Asian Development Bank, and a number of bilateral contributors, created an emergency $42.3 billion package of soft loans for Indonesia (see chapter 8). The funds were to be disbursed in installments contingent on tighter fiscal and monetary policies, financial reforms, and various sector-specific structural re-

forms. The parties reached agreement on a first program on 31 October 1997, but multiple difficulties ensued on both sides. On 15 January 1998 the government of Indonesia signed a second agreement with the IMF. But President Soeharto resisted the program's measures to remove subsidies, monopolies, and tax and credit privileges from many of the huge government projects controlled by the Soeharto family and its friends—which resulted in delays in disbursements and slow implementation of important aspects of the program. Even after Soeharto's resignation in May 1998, President Habibie did not carry out many of the reforms stipulated in the agreements. And President Wahid, who succeeded him, was unable to do so. The slow pace of compliance with parts of IMF–government of Indonesia agreements led to further postponements of some IMF disbursements during the period between 1998 and the impeachment of President Wahid in July 2001.

In 1998 about 70 percent of bank loans were in default. Depositors lost confidence in the banking system. Deposits declined. Bank assets fell

Nevertheless, under the agreements with the IMF significant progress was made on macroeconomic stabilization—although the stability remains fragile. Despite many severe problems, the economy has grown.

> In the three and one-half years since the fall of Suharto, three successive presidents have failed to overcome parliamentary bickering and push through controversial reform measures, reign in corruption or restore investor confidence... Indonesia's currency is sliding, inflation is rising and government finances are a mess. But its economy still managed to grow faster than expected in the third quarter [of 2001]...3.5 percent compared with the third quarter of 2000...demonstrating what the World Bank calls the country's ability to muddle through the global slowdown and its own political confusion.
>
> —Wayne Arnold, *The New York Times,* 16 November 2001

However, progress on structural reforms, especially bank and corporate debt restructuring, has been slow. Lack of political leadership, weak legal and judicial systems, opaque corporate and banking structures, rampant corruption at high levels, and the banking system's lack of adherence to international prudential standards have made bank restructuring extraordinarily difficult.

Although institutions have been established to restructure corporate debt, substantial obstacles continue to impede loan recovery. Many of the largest debtors, especially the Soeharto family and its friends, have not felt compelled to repay their loans—foreign or domestic. The Indonesian Bank Restructuring Agency (IBRA) has had some success in its extremely difficult charge. But both bank and corporate debt restructuring continue to encounter formidable political difficulties for reasons that are deeply embedded in the financial system and Indonesian corporate culture.

Overall, the reforms made with support from the IMF and other donors helped Indonesia stabilize its economy and recover from the depths of the crisis. But as discussed in chapter 8, broadly based economic recovery will require

implementing politically difficult financial reforms and developing independent and professional legislative, legal, judicial, administrative, and financial institutions.

The collapse of the banking system

In late 1997 and in 1998 the free fall of the rupiah, the poor quality of the loan portfolios held by many banks, large foreign debt, and corrupt and poor bank management and supervision resulted in massive bank failures and a general collapse of the financial system.[2]

The first bank closures. At the IMF's insistence, the government closed 16 banks on 1 November 1997 in an effort to signal that major reforms were under way. There is little doubt that many banks needed to be closed. But the way these first 16 banks were closed is widely believed to have been a mistake (see Radelet and Sachs 1998; Radelet 1999; Baker 1999; and Kenward 2000). The closures were carried out suddenly and without considering that no deposit insurance was in place. Depositors, who were allowed to withdraw a maximum of 20 million rupiah ($5,482 in November 1997), were told that they would have to wait for the banks' assets to be liquidated before learning whether additional deposits could be recovered from their accounts.

In 1997–98, Bank Indonesia issued $13 billion in liquidity credits to banks. Many were owned by the Soeharto family and friends, and little repayment is expected

The result was a severe crisis of confidence in the financial system and a run on banks, especially private banks. The country was thus faced simultaneously with precipitous currency devaluation and bank runs. In addition, creditors of the closed banks were uncertain whether they would recover their loans—and creditors of banks still open began calling in loans. To keep banks open, Bank Indonesia issued massive liquidity credits—about $13 billion between November 1997 and June 1998 (Radelet 1999, p. 9). But a substantial portion of these credits went to banks owned by Soeharto's family and friends, and many of the credits have still not been repaid. One of the banks closed in November 1997 was owned by one of Soeharto's sons. Within weeks he received permission to open a new bank with a different name—but in the same building and with the same staff as the bank that had been closed!

Serious mistakes were made on both sides. The IMF insisted on immediate bank closures as a demonstration effect rather than waiting for a well-designed reform strategy that would include bank closures but also ensure depositors of prompt settlement. When implemented by the government, the IMF-imposed plan generated panic. And despite the need for IMF assistance, Soeharto maintained a business-as-usual-in-Indonesia approach—which was unacceptable to the IMF, other donors, and many Indonesians.

In January 1998 the government guaranteed all bank deposits, which eased the runs on banks. But deposits continued to be moved from private to state-owned and foreign banks.

Nonperforming loans. Nonperforming loans (loans in default) have become an exceptionally difficult problem.[3] With foreign exchange obligations soar-

ing as the value of the rupiah fell, nonperforming loans jumped from about 9.5 trillion rupiah ($4 billion) at the end of 1996 to more than 300 trillion rupiah ($37 billion) at the end of 1998. In 1998 about 70 percent of bank loans were nonperforming, and interest owed on another 10–15 percent had been only partly paid (*International Herald Tribune,* 10 April 1999). As borrowers defaulted on loans, the value of bank assets fell. At the same time, depositors lost confidence in the banking system and deposits declined.

The extent of the nonperforming loans can be understood only in the context of the roots of Indonesia's crisis. As would happen anywhere during such a crisis, many borrowers were unable to repay their loans because of the currency devaluation, which greatly increased their debts in rupiah terms. But in this case the basic problems were outgrowths of the banking practices of Soeharto's Indonesia.

Nonperforming loans jumped from $4 billion in 1996 to $37 billion in 1998. At state banks in 1999, the 20 largest defaulting debtors owed more than $7 billion

In state-owned banks a large portion of the value of nonperforming loans is accounted for by a few politically powerful borrowers who were able to borrow large amounts from banks that did not evaluate the loans objectively. Repayment has not been a priority for these borrowers. As Eko Santoso Budianto, then IBRA's deputy chairman, commented in April 1999: "It is an open secret that most of the corporate debtors, particularly at state banks, are politically well connected businesspeople, including siblings of former President Soeharto and the family's associates" (*Tempo,* 21 April 1999). IBRA's chairman at that time, Glenn S. Yusuf, said that the 20 largest debtors owed state banks more than 60 trillion rupiah (about $7 billion) in nonperforming loans (*Tempo,* 20 April 1999).

The difficulties in recovering nonperforming loans from politically favored borrowers arise from more than just their increased debt and unwillingness to repay. The problems also stem from the poor quality of the borrowers' loan collateral, which is typically of much lower value than the outstanding debts. This shortfall is caused partly by the decreased value of the land and buildings that constitute much of the collateral. But it is also a result of the greatly exaggerated initial statements of the value of the collateral (by overstating the value of their collateral, well-connected borrowers were able to obtain larger loans).

And among private banks, few had observed the regulation limiting loans to bank-affiliated companies and their owners to 20 percent of the banks' loan portfolios. Most of the nonperforming loans of private banks are held by their affiliated companies and owners of these companies. As a result repayment problems in conglomerate-owned banks have been compounded by the debts and bankruptcies of the conglomerates' companies. In many cases where affiliates' reserves were low, banks wrote off the debts, depleting their capital. In addition, some of the businesses financed by both state and private banks had never been feasible, and some are believed to have been fictitious.

But it was not only banks and their debtors who contributed to Indonesia's corruption-ridden financial system and the gargantuan problem of nonperforming loans. Both Bank Indonesia and IBRA became involved in major scandals in 1999. A state audit faulted Bank Indonesia's accounting of the billions of dollars in emergency liquidity loans made in 1997 and 1998 to sup-

port failing commercial banks—many of which were owned by the Soeharto family and the conglomerates. As noted in chapter 8, the Supreme Audit Agency estimated in 2000 that 95 percent of these loans may never be repaid. "If [the deficit] were charged to the [central] bank, it would go bankrupt" (*Asiaweek,* 22 December 2000).

Meanwhile, IBRA became embroiled in a highly publicized corruption scandal after approving large payments to Bank Bali, a private commercial bank.[4] The payments ended up in a company controlled by Golkar, Indonesia's former ruling political party.

Reaching paralysis. The government imposed a tight monetary policy in 1998. Many banks that already had liquidity problems faced a severe shortage of liquidity. Banks offered high interest rates to attract depositors—often resulting in negative interest rate spreads. At one point the annual interest rate offered by some banks for one-month fixed deposit accounts reached more than 70 percent. Such rates attracted many depositors, including some business groups that deposited working capital, hoping to cut their losses in a poor market. But few companies or individuals were qualified to borrow at interest rates that would allow the banks a positive interest rate spread.

Most of the nonperforming loans of private banks are held by their affiliated companies, many of which are bankrupt

Thus banks were essentially paralyzed during 1998, with annual effective interest rates on loans often above 40 percent and few qualified takers. A negative interest rate spread led to negative interest rate revenue (meaning banks paid out more in interest than they took in) for more than 40 banks, including some of the largest state and private banks. Overall, 49 banks suffered losses in 1998. Of these, 36 saw their assets drop.

BRI was no exception. Although BRI's microbanking system remained profitable throughout, BRI—like other state banks (and many other banks)—was technically bankrupt. In 1998 BRI's branch network, with much of the value of its loan portfolio in large corporate loans, lost $3.4 billion against the bank's capital base of only $215 million. The profits of the unit desas had been covering the losses of the rest of BRI for years (box 15.2). But in 1998 the unit desas' continuing profits—remarkable as they were during such a severe crisis—were insignificant compared with the huge losses of BRI's branches.

By 1998 it became clear that many of Indonesia's banks would have to be liquidated or merged. Many would also have to be recapitalized. Some would have to be taken over by the government and then reprivatized. But it was widely recognized that such efforts would be very expensive—and very difficult politically.

Bank reforms and corporate debt restructuring

In August 1998 the government announced reforms designed to rebuild and to restore public confidence in what was widely being called Indonesia's "wrecked banking system" (*Jakarta Post,* 24 August 1998). The planned reforms included restructuring banks, improving bank regulations and laws, and upgrading and enforcing prudential regulations. In addition, corporate debt restructuring—a critical part of building a viable banking system—would be given high priority.

Box **15.2** **Excerpts from Klaus Maurer and Hans Dieter Seibel's "Agricultural Development Bank Reform: The Case of the Unit Banking System of Bank Rakyat Indonesia (BRI)"**

Profitability of BRI units versus BRI branches (net income in US$ million)

	1993	1994	1995	1996	1997	1998	1999	2000
BRI (consolidated before tax)	57	67	111	145	30	-3,308	-243	n a
Branch network	-10	-54	-64	-33	-60	-3,397	-411	n a
Unit banking system	66	121	174	178	90	89	168	121

In the 1990s, the Units and the microbanking business were generating the profits to sustain the rest of BRI! The rest of BRI, i e the branch network, has been running losses since several years—a fact well hidden in consolidated figures It was solely due to the Units' performance that, on a consolidated basis, BRI posted a positive net income until 1997 Needless to mention that the bill was paid by the Unit customers, the micro borrowers and savers.

The bomb exploded in 1998 when BRI was hit by the financial crisis 56% of the branches' loan portfolio—large corporate loans for the most part—turned sour and had to be written off. This resulted in a loss of US$ 3 3 billion against a capital base of only US$ 215 million In 1998, the consolidated BRI—including the Unit Banking System!—was technically insolvent and effectively bankrupt, like many other banks in Indonesia at the time. Being an integral part of BRI suddenly turned into a major risk for the [profitable] BRI Unit Banking System, the risk of being dragged into bankruptcy by the ailing mother organization However, the government stepped in to recapitalize BRI, the non-performing loans were transferred to the Indonesian Bank Restructuring Agency (IBRA) ..When BRI was severely affected by the financial crisis, the very existence and success of the Unit Banking System convinced policy makers to save and recapitalize BRI

Source Maurer and Seibel forthcoming, p 15, draft paper prepared for the International Fund for Agricultural Development

Bank restructuring and recapitalization. IBRA was created in 1998 to reorganize the banking system, classify all banks, and manage bank liquidations, mergers, restructurings, and recapitalizations.[5] In addition, IBRA's asset management unit was established to administer the banking system's nonperforming loans. (As noted, IBRA also plays a major role in corporate debt restructuring.) In October 1998 the government announced that the strategy for bank restructuring would focus on recapitalizing potentially viable banks, liquidating insolvent banks, merging state banks, and recovering liquidity support. Foreign accounting firms were brought in to conduct due diligence appraisals of all Indonesian banks.

The March 1999 bank rehabilitation plan placed Indonesia's 128 private domestic banks into three categories. Category A, for which 74 banks qualified, required a capital adequacy ratio—the ratio of equity capital to risk-weighted assets—above 4 percent. The government determined that banks in this category met Bank Indonesia's minimum capital adequacy standards and did not require public assistance. Bank Indonesia then investigated category A banks to determine whether, based on technical qualifications and moral standards, their owners and managers were fit and proper to continue in their po-

sitions. However, not all category A banks had good asset structures. Some had the bulk of their assets in Bank Indonesia certificates, and much of the rest in nonperforming loans.

Nine category B banks, defined as those with capital adequacy ratios between –25 and 4 percent, were declared eligible for recapitalization. To receive government funds for recapitalization, the owners of these banks had to provide cash for at least 20 percent of the recapitalization. In addition, the banks' owners and managers had to pass the fit and proper tests. The government also took over seven category B banks because their large size and extensive branch networks were required for the payments system to function, and because it was thought that they would be useful for the country's future banking development.

Most category C banks, defined as those with capital adequacy ratios below –25 percent, were closed, and their assets and liabilities were transferred to IBRA's asset management unit. Some category C banks were merged into new banks, with their nonperforming loans transferred to the IBRA unit.

In 1998 BRI lost $3.3 billion against a capital base of $215 million. The unit desas remained profitable but could no longer cover the losses of the rest of BRI

The first stage of bank reforms—between late 1997 and mid-1999—concentrated on closing failing banks and nationalizing selected banks (which were taken over by IBRA). Thus 66 private banks with a 14 percent market share were closed. But unlike the closing of the first 16 banks in 1997, later bank closures were carried out relatively smoothly as part of a wider restructuring plan. Another 13 private banks, with a 21 percent market share, were nationalized—including the country's largest private bank, Bank Central Asia, owned by close associates of former President Soeharto.

The second stage of bank reforms, beginning in 1999, focused on bank recapitalizations and mergers, and on corporate debt restructuring. Four of the seven state banks—Ekspor-Impor Indonesia, Bank Dagang Negara, Bank Bumi Daya, and Bank Pembangunan Indonesia, the State Development Bank, with a combined 25 percent market share—were merged in 1999 to form a new bank called Bank Mandiri (in Indonesian the word *mandiri* means "to stand alone"). The other three state banks—BRI, Bank Negara Indonesia, and Bank Tabungan Negara—were restructured and recapitalized to varying degrees. The bad assets of all state banks were shifted to IBRA'a asset management unit. The main reason BRI was recapitalized and restructured, rather than merged into Bank Mandiri, was its unit desa system.

But merging four moribund state banks into one, even with high-level management changes, does not necessarily transform the bank's corporate culture into one of professionalism and accountability. Many in Indonesia are skeptical about the future of Bank Mandiri, now the country's largest bank. If the newly capitalized bank continues to operate in the old banking culture, if the banks merged to form Bank Mandiri bring with them their political entanglements, if the new bank's middle managers (who come from the four merged banks) conduct business as usual, or if the bank is required to provide subsidized loans, Bank Mandiri may soon acquire a new set of nonperforming loans.

Another problem in the banking industry—one underlying many of the others—is that Indonesian accounting standards generally do not conform with

internationally accepted accounting principles. The main reason this problem persists is the lack of transparency and accountability endemic in Indonesia's financial system and corporate culture.

For example, as part of the recapitalization process public accountants submitted audits of Indonesian banks that set asset values based on financial reports provided by the banks. But IBRA then assigned two international finance companies, Lehman Brothers and J.P. Morgan, to reaudit the banks. The two firms used a different audit method, due diligence, which evaluates assets based on their real prices and cross-checks these prices at marketplaces. Due diligence produced dramatically different results, indicating that "the real value of certain banks is only about 20 percent of the value recognized by public accountants" (Kwik Kian Gie, then coordinating minister for the economy, finance, and industry, in an interview with the *Jakarta Post,* 20 April 1999).

Estimates of the cost of Indonesian bank restructuring range from 50 to 80 percent of GDP

Estimates of the costs of Indonesian bank recapitalization are staggering. In November 2000 Barclays Bank estimated that the cost would be more than 50 percent of GDP (Barclays Bank Country Report, 28 November 2000). Some estimates have been higher.

> The...recapitalization program is probably the most expensive in banking history anywhere—and almost certainly the most challenging. The total cost of recapitalizing Indonesia's banks will be about $90 billion, which is around 80 percent of the nation's gross domestic product...Lehman Brothers Asia estimates that that the Mandiri recapitalization will consume nearly one-quarter of the cost needed to fix all of Indonesia's banks.
>
> —Tim Healy and Tom McCawley, *Asiaweek,* 13 August 1999

Reasons for the high costs of recapitalizing Indonesia's banks include the lack of transparency in the banks (which originally masked their real conditions), negative interest margins, and poor loan recovery.

By 2000 more than 70 percent of the banking system was under government control. Although the government plans to reprivatize banks taken over by IBRA, progress has been slow. IBRA has the authority to sell assets taken over from defaulting debtors. But attempts to sell the banks have faced numerous difficulties—chief among them that the banks' powerful former owners still have some ownership rights and that the legal and judicial systems are generally weak, corrupt, and politicized. The first major test case will be the government's long-delayed sale of a 51 percent share of Bank Central Asia (BCA), Indonesia's largest private bank. The sale is planned for early 2002. A timely, orderly sale is considered crucial for encouraging foreign investment and for meeting the terms of the government's agreements with the IMF. But it is widely believed that BCA's former owners are trying to regain control of the bank. If IBRA and the government can finalize this sale, it will have an important impact on Indonesia's financial system.

There has been considerable progress in a relatively short period in establishing and strengthening IBRA and in closing, merging, and restructuring Indonesia's banks. But there is still a long road ahead.

Corporate debt restructuring. Restructuring Indonesia's massive corporate debt is essential for the country's economic recovery. It is also essential for Indonesians to regain confidence in their nation. But it is extremely difficult.

> Indonesian corporate debt in mid-2000 amounted to around US$120 billion: US$85 billion for large private corporations and $US35 billion for state-owned enterprises and SMEs [small and medium-size enterprises]. Of the total, 49 percent was owed to foreign creditors and 72 percent was denominated in foreign currencies. Of the large corporate debt, three-quarters is non-performing and in need of restructuring.
>
> —Baird 2000, p. 1

Corporate debt in mid-2000 was about $120 billion (72 percent in foreign currencies). Of this, $85 billion was owed by large private corporations

Corporate debt restructuring got off to a very slow start. But by 2000 some important gains had been made. The two main institutions implementing corporate debt restructuring are IBRA and the Jakarta Initiative Task Force (JITF).

Like many Indonesian institutions, IBRA was established without an appropriate governance structure. Following the Bank Bali scandal of 1999, IBRA was audited in 2000 for the first time. The auditors found that IBRA's accounting standards were not in accordance with generally accepted accounting principles and that some payment records could not be reconciled with the records of Bank Indonesia and the Ministry of Finance.

A new IBRA governance structure was adopted in 2000, including appointment of a governing board of independent professionals. IBRA's rules were modified to permit more flexibility in corporate restructuring, and legal protection was provided for IBRA staff who implement its rules. IBRA turned over the collection of commercial loans (those of 5 billion to 50 billion rupiah) to banks and focused its efforts on the largest debtors. Large corporations with debts of more than 50 billion rupiah represent more than 75 percent of the value of nonperforming loans but only about 1 percent of debtors. "The new framework has started to deliver results. IBRA has now entered into restructuring agreements or initiated legal action to resolve 70 percent of its loans to the Top 21 obligors" (Baird 2000, p. 2).[6] A recent high-level IBRA appointment has raised concerns, however, because it is widely believed that the official is closely connected with the Soeharto family.

A commercial court was established to handle debt settlements and bankruptcy proceedings. But IBRA has been hampered in its efforts to take legal action against uncooperative debtors with large nonperforming loans. The agency has received adverse rulings in many of its cases; such rulings are widely thought to be the result of political influence on the judicial system. Only a small fraction of the debt has been recovered.

Unlike IBRA, which is a large creditor with the authority to compel restructuring and asset sales, JITF does not hold debt. It acts as a mediator between private debtors and creditors. In 2000 JITF's mandate was strengthened in several ways, including referral of noncooperating negotiating parties for action by the attorney general. JITF is also empowered to offer tax and other exemptions as incentives to cooperating parties. In October 2000, 50 companies with a combined $10 billion in debt were under active JITF mediation, while 27 with $5 billion in debt had concluded binding restructuring agreements with JITF assistance. In addition, foreign banks had reached or nearly completed agreements with a number of large debtors (Baird 2000, p. 2).

Overall, there has been progress in corporate loan restructuring at both IBRA and JITF. But noncompliance by debtors remains a major problem, and efforts to prosecute large debtors have generally failed. IBRA recently expanded its legal actions against noncooperating debtors, but progress will depend largely on whether recently initiated judicial reforms can be effectively implemented and on whether new reforms can be instituted.

Large corporations represent only 1 percent of debtors but account for more than 75 percent of the value of nonperforming loans

Challenges ahead

Some significant advances have been made in recapitalizing and restructuring banks—helped by the use of fit and proper tests, changes in bank management, new capital adequacy standards, increased transparency, the use of international firms to assist in transitions, and other aspects of the rehabilitation process.

But severe problems remain in the financial system, especially in bank and corporate debt restructuring and related areas. The challenges for the financial system center on its most fundamental needs, including:

- *A strong, professional central bank.* A strong, accountable, independent central bank is vital for the rehabilitation of the financial system. Efforts are being made to strengthen Bank Indonesia but—like the judicial system—it has become part of the country's political battleground. Even with recent improvements, uncertainties remain about the central bank's governance and its supervision capacity.
- *Basic reforms of the legal and judicial systems.* Fundamental reforms are essential for Indonesia's ineffective, politicized, and corrupt legal and judicial systems. The scale of the problem is monumental. "Indonesia's justice system has been badly broken for a generation. Not long ago a senior lawyer in Jakarta claimed that up to 90% of court cases are decided by bribes to judges, prosecutors, and other court officials" (Robert N. Hornick, *The Asian Wall Street Journal,* 24–30 December 2001). But as Hornick points out, there are steps that can be taken quickly and at little cost that would begin to move the country down the road of judicial and legal reform. Some reforms have already been instituted. Legal and judicial reform is crucial for financial sector reform, as well as for the nation generally.
- *A new corporate culture.* Indonesia's corporate culture needs a major overhaul. Many of the basic causes of Indonesia's recent financial crisis—and certain-

ly the extent to which the country was affected—stem from aspects of its corporate culture (see box 15.1). Poor corporate governance, lack of accountability and transparency, prevalent anticompetitive behavior, and sweetheart deals for favored conglomerates and state enterprises contributed to the financial collapse. The changes needed in this difficult area will require sustained, high-level political will—and example.

- *A strong, professional IBRA.* IBRA has a gigantic task. It also has powerful enemies. Can the newly restructured IBRA take on the Soehartos and the conglomerates—in both bank and corporate debt restructuring—better than was possible under the old IBRA? An important part of the answer lies with the judiciary. But much also depends on whether IBRA can serve as a professional, accountable, and effective institution—and on whether it will have a strong, united government supporting its efforts. IBRA's own governance will be an important factor. IBRA faces obstacles in reprivatizing banks because of delays and stonewalling by former bank owners. Moreover, only a small part of corporate debt has been repaid (and some will never be collected).[7] IBRA needs to improve and expedite loan restructuring and asset sales with the 1 percent of debtors who hold more than 75 percent of the value of nonperforming loans. In addition, debt restructuring and asset sales must be conducted in a fully transparent manner.

IBRA has received adverse rulings in many of its legal cases against large debtors—a result widely attributed to political influence on the judicial system

> Deep operational restructuring is needed not only to maximize the future viability of the enterprise, but also to minimize the future risks for the Government and the burden on Indonesia's taxpayers. IBRA will also be under intense public scrutiny in settling these large debts with its high-profile debtors and must avoid the perception of insider deals, which represent a large reputational risk for the government.
>
> —Baird 2000, p. 2

The contest between IBRA and the Soeharto family and its friends is of the epic proportions seen in struggles in *wayang* performances (see chapter 8). As Warren Caragata (2001, p. 2) put it, "IBRA is at the epicenter of a struggle over Indonesia's economic soul."

- *A restructured banking system.* Failing banks have been closed, selected private banks have been nationalized, some banks have been merged, and bank recapitalization has proceeded. But much remains to be done. Though state banks vary, they generally have liquidity problems, high operating costs, little new lending, and in some cases problematic management—as well as ongoing state bank cultures. State banks are expected to restructure, raise earnings, and privatize—but progress has been slow. Reprivatization of nationalized private banks has also been slow. Two problems that affect the entire banking system are Indonesian accounting standards, which require extensive reform, and bank supervision by Bank Indonesia, which needs considerable improvement. Progress has been made in both areas, but much more is needed.

It is against this background of the Indonesian banking system since the crisis—with its 70 percent nonperforming loans, numerous bank closures, liquidity problems, high recapitalization costs, and loss of public confidence—that the analysis turns to commercial microbanking in Indonesia during the same period. There is a dramatic contrast here—one of significance not only for Indonesia, but also for the microfinance industry globally.

The Stability of Microbanking during the Crisis

Because their direct participation in imports or exports is limited, microbanking clients are affected more by changes in consumer prices than in exchange rates

Microbanking in Indonesia provides an extraordinary record of stability in crisis. This section considers how and why different kinds of commercial microfinance institutions maintained high outreach and continued profitability even as the country's financial system collapsed around them. The discussion begins with the Badan Kredit Desa (BKDs)—the village-owned banks supervised by BRI (see chapter 14)—and the privately owned Bank Dagang Bali (BDB; see chapter 10).

The focus then turns to a more extensive analysis of BRI's unit desas during the same period. To highlight the stability of the units during the crisis, the appendix provides indicators of unit performance by month from December 1996 to December 2000, shown alongside exchange rates and consumer prices. The decline in the real value of the unit desas' assets, liabilities, and profits can be more meaningfully understood by adjusting current figures to changes in the consumer price index rather than the exchange rate. (This is also the case for other microfinance institutions.) Because their direct participation in imports or exports is generally limited, microbanking clients are typically affected more by changes in domestic purchasing power as measured by the consumer price index than by changes in the exchange rate (farmers who cultivate export crops are an exception). The differences between the changes in these two variables have been important in this context. For example, between the second quarter of 1997 and the end of 1998, during the height of the crisis, the consumer price index rose 90 percent—compared with a currency devaluation of 232 percent.

Although the crisis affected the institutions in different ways, all three remained relatively stable, their clients generally remained loyal, none of the institutions required recapitalization or subsidy, and all continued to earn profits. Still, some important differences among them are worth exploring to better understand the ways that commercial microfinance can be affected by a severe national crisis.

The Badan Kredit Desa, 1997–98

The BKDs survived the crisis well. Their performance from 1996 through August 1998 (the latest data available) is shown in table 15.1.[8] In August 1998 Indonesia was in deep crisis. But BKD outreach remained stable in terms of the number of outstanding loans and voluntary savings accounts, with some increase in loans and a slight decrease in savings accounts. In rupiah terms the value of outstanding loans and voluntary savings accounts increased gradually, though

Table **15.1** **Performance indicators for the Badan Kredit Desa (BKD), 1996 to August 1998**

Indicator	1996	1997	August 1998
Number of active BKDs	4,806	4,806	4,806
Number of outstanding loans	779,599	813,306	807,603
Number of voluntary savers	251,028	259,732	242,761
Value of outstanding loans			
Millions of rupiah	104,363	115,478	120,848
Millions of U S dollars	43 8	24 8	10.9
Value of voluntary savings			
Millions of rupiah	3,359	3,573	4,080
Millions of U S dollars	1 4	0 8	0 4
BKD deposits at BRI			
Millions of rupiah	66,878	76,389	80,284
Millions of U S dollars	28 0	16 4	7 2
Income			
Millions of rupiah	36,630	40,972	28,846
Millions of U S dollars	15 4	8 8	2 6
Expenses			
Millions of rupiah	19,099	21,437	15,083
Millions of U S dollars	8 0	4 6	1 4
Adjusted profits[a]			
Millions of rupiah	14,106	16,487	13,532
Millions of U S. dollars	5 9	3 5	1 2
Adjusted return on assets (percent)[b]	8 7	9 2	7.3

Note The year-end rupiah exchange rate for one U S dollar was 2,383 in 1996, 4,650 in 1997, and 8,025 in 1998
a Profits – change in arrears past final due date + actual bad debt expenses
b Adjusted profits / (total assets – arrears past final due date)
Source BRI data

their dollar values declined steeply. (The discussion in this section is based primarily on BRI data and Steinwand 2001.)

In 1996 the average loan balance was 133,868 rupiah ($56)—5 percent of the country's $1,073 per capita GNP. The average voluntary savings account balance was 13,380 rupiah ($6), less than 1 percent of per capita GNP. In August 1998 the average loan balance was 149,638 rupiah ($14), or 2 percent of the $680 per capita GNP. The average voluntary savings account was 16,807 rupiah ($1.52), or less than 1 percent of per capita GNP.

Stated annual effective interest rates on loans typically continued at 20 percent for a 12-week period (although as discussed in chapter 14, the actual effective interest rate is higher because of the forgone use of compulsory savings). BKD voluntary savers, whose accounts are kept at BRI, received the bank's increased interest rates during this period (see below).

As noted in chapter 14, it is difficult to determine BKD arrears and defaults because the BKDs write off bad debt only after five years (and not always then). Moreover, like most People's Credit Banks (BPRs), the BKDs do not adequately provision for loan losses. But BKDs serve small communities, and most loans that fall into arrears are eventually collected. BRI data on BKD defaults—which are not adjusted for defaults that were not written off—show that defaults (loans more than 90 days overdue) made up 15 percent of the outstanding portfolio in 1996, 19 percent in 1997, and 20 percent in August 1998. But for 1996 Ravicz (1998, p. 78) adjusted default and arrears rates by writing off all loans in default each year. This adjustment resulted in an estimated default rate of about 5 percent for 1996.

The BKDs were stable during the crisis. In rupiah terms, deposits rose steadily and profits increased. Average loan balance was 2 percent of GNP

In rupiah terms, BKD deposits at BRI increased steadily during this period—from 66.9 billion rupiah ($28 million) in 1996 to 80.3 billion rupiah ($7.2 million) in August 1998. Profits, after adjusting for loan losses and provisioning, increased from 14.1 million rupiah in 1996 ($5.9 million) to 16.5 million rupiah ($3.5 million) in 1997. Through August 1998 adjusted profits of 13.5 million rupiah ($1.2 million) were on track to match or possibly exceed the 1997 rupiah total by year's end. Returns on assets, adjusted for loan losses and provisioning, stayed high throughout—reaching 7.3 percent in August 1998 at the height of the financial crisis.

Overall, the BKDs remained stable during 1997 and the first eight months of 1998. In August 1998 the BKDs served more than 807,000 clients. As noted, reported loan defaults increased (but the BKDs continued their practice of not writing off bad debts for at least five years). However, the BKDs remained profitable because of their relatively high interest rate on loans, the higher interest rate they received on deposits at BRI in 1997–98, and their low operating costs.

Bank Dagang Bali, 1996–2000

As a small private bank, BDB faced difficult times during the crisis. (This section is based on BDB data and discussions with BBB owners and managers.) The bank remained profitable each year from 1996–2001, as it had earlier (chapter 10). But profits fell sharply in 1998 and 1999, even in rupiah terms. In 2000, however, BDB saw a substantial increase in profits, reaching 7 billion rupiah ($725,000) before taxes (tables 15.2 and 15.3). Between 1996 and 2000 assets more than quadrupled in rupiah terms. In dollar terms, assets in 2000 ($143 million) were higher than in 1996 ($135 million). The growth in assets came primarily from deposits in the interbank money market and from securities and investments. BDB deposits held in other banks jumped from 33.8 billion rupiah ($14.2 million) in 1996 to 303.0 billion ($31.6 million) in 2000.

The rupiah value of BDB's outstanding loans remained fairly stable from 1996 to1999, though there was a sharp decline in their dollar value. As in other banks, BDB's annual effective interest rate rose in 1998—to more than 41 percent—then gradually decreased. In 2000 the rupiah value of outstanding loans

Table **15.2** **Bank Dagang Bali profit and loss statement, 1996–2000**
(millions of rupiah)

Indicator	1996	1997	1998	1999	2000
Income	52,777	89,650	165,985	188,699	191,623
Operating income	52,676	89,553	161,872	181,429	191,264
Interest, commissions, and fees	50,571	80,623	154,184	178,458	186,771
Other	2,105	8,930	7,688	2,971	4,493
Nonoperating income[a]	101	97	4,113	7,270	359
Expenses	49,439	86,097	163,367	187,344	184,666
Operating expenses	49,429	86,085	163,202	187,194	184,009
Interest	37,459	58,434	139,680	162,207	160,665
Overhead	11,970	27,651	23,522	24,987	23,344
Salaries	4,148	4,201	4,388	4,433	5,488
Other overhead	7,822	23,450	19,134	20,554	17,856
Nonoperating expenses[a]	10	12	165	150	657
Net profits	2,345	2,496	1,841	957	4,870
Pretax profits	3,338	3,553	2,618	1,355[b]	6,957
Taxes	993	1,057	777	398[b]	2,087

Note The year-end rupiah exchange rate for one U S dollar was 2,383 in 1996, 4,650 in 1997, 8,025 in 1998, 7,085 in 1999, and 9,595 in 2000 See the appendix for more complete data on exchange rates and the consumer price index for 1996–2000
a Refers to income and expenses from nonbanking activities (such as the rental and sale of buildings)
b These are the 1999 audited figures But a subsequent adjustment shows that in 1999 pretax profits were 539 million rupiah and taxes were 153 million rupiah
Source Bank Dagang Bali data

was more than twice the 1999 total. And the dollar value of the portfolio increased from $33 million in 1999 to $53 million in 2000.

On the liabilities side, rupiah deposits at BDB nearly quadrupled between 1996 and 2000, from 270 billion rupiah ($113 million) in 1996 to 1.1 billion rupiah ($116 million) in 2000 (table 15.4). The biggest increase was in time deposits—in 2000 their rupiah value was more than five times that in 1996. But of BDB's 402,000 accounts of all types in 2000, 98 percent were passbook savings.

At BDB annual interest on general passbook savings accounts was raised from 12.0 percent in 1996 to 13.5 percent in 1998, while interest on time deposits jumped from 16.0–16.5 percent in 1996 to 26.9 percent in 1998. Interest rates declined gradually in 1999 and 2000.

The number of outstanding loans decreased from 15,645 in 1996 to 10,417 in 2000 (table 15.5). Part of this decrease was a response to increasing arrears in 1997 and 1998, although repayment remained good given the circumstances. BDB had been accustomed since 1970 to on-time repayment rates of 98 percent or higher. But noncurrent loans with payments 30–90 days overdue rose from 1.2 percent in 1996 to 5.7 percent in 1998. Doubtful loans with payments 91–180 days overdue rose from 0.7 percent to 1.8 percent, and bad debt (loans with payments more than 180 days overdue) increased from 0.2 per-

Table **15.3** **Bank Dagang Bali balance sheet, 1996–2000**
(millions of rupiah)

Indicator	1996	1997	1998	1999	2000
Assets	323,005	382,958	749,449	765,462	1,376,812
Current assets	267,969	301,723	586,603	471,210	871,769
Cash	3,960	5,415	7,980	10,644	7,525
Bank Indonesia	9,113	18,567	24,228	31,551	67,220
Other banks	33,831	18,882	300,445	191,617	303,044
Outstanding loans	223,393	265,610	259,863	245,360	513,090
Reserve for bad debt	–2,328	–6,751	–5,913	–7,962	–19,110
Fixed assets[a]	10,086	16,490	15,839	14,774	14,292
Other assets[b]	44,950	64,745	147,007	279,478	490,751
Liabilities	298,106	328,255	692,906	709,895	1,317,168
Demand deposits	14,937	18,803	14,706	20,912	27,503
Savings deposits	59,084	54,732	107,419	95,524	92,775
Time deposits[c]	195,762	207,800	361,499	425,070	992,026
Bank Indonesia[d]	1,614	9,383	115,982	117,082	105,082
Other loans	20,325	28,883	58,830	15,808	61,783
Other liabilities	6,384	8,654	34,470	35,499	37,999
Equity	24,899	54,703	56,543	55,567	59,644
Capital (including retained earnings)	22,554	52,207	54,702	54,610	54,774
Net profits	2,345	2,496	1,841	957[e]	4,870
Total liabilities and equity	323,005	382,958	749,449	765,462	1,376,812

Note See table 15 2 for exchange rates
a Includes land, buildings, vehicles, and office furniture but excludes fixed assets held in the names of the bank's owners
b Includes marketable securities and investments
c Includes certificates of deposit
d Long-term liabilities
e This is the 1999 audited figure But a subsequent adjustment shows that in 1999 net profits were 386 million rupiah See table 15 2, note b
Source Bank Dagang Bali data

cent to 2.0 percent. However, by 2000 BDB had a 97 percent on-time repayment rate, with noncurrent loans down to 0.9 percent and doubtful loans to 0.5 percent; bad debt was 1.8 percent. While some of the repayment problems during the crisis were in the microloan portfolio, most of the increase in arrears and bad debt was concentrated in BDB's larger loans, especially a few of its largest loans.

Thus BDB's strategy for remaining viable during this difficult period included reducing the number of outstanding loans (primarily large loans, as part of its efforts to lower arrears) and taking advantage of the high interest rates offered by the interbank money market.

During the crisis BDB concentrated its microbanking efforts mainly on savings (see table 15.4). As discussed in chapter 10 for earlier years, time deposits account for a small share of BDB's accounts (2 percent in 2000) but for a large share of the value of its savings (89 percent in 2000). In 2000 the average time

Table **15.4** **Bank Dagang Bali savings, 1996, 1998, and 2000**

Indicator	1996	1998	2000
Time deposits[a]			
Amount (millions of rupiah)	195,762	361,499	992,026
Share of total (percent)	72	75	89
Number of accounts	8,015	11,665	7,997
Share of total (percent)	2	3	2
Passbook savings			
Amount (millions of rupiah)	59,084	107,419	92,775
Share of total (percent)	22[b]	22	8
Number of accounts	354,888	380,450	393,146
Share of total (percent)	98	97	98
Giro accounts			
Amount (millions of rupiah)	14,937	14,706	27,503
Share of total (percent)	6[a]	3	3
Number of accounts	956	748	766
Share of total (percent)	0	0	0
Total			
Amount (millions of rupiah)	269,783	483,624	1,112,304
Number of accounts	363,859	392,863	401,909

Note See table 15 2 for exchange rates
a Includes certificates of deposit
b Small discrepancies between this table and table 10 4 are due to rounding (table 10 4 is in U S dollars)
Source Bank Dagang Bali data

Table **15.5** **Bank Dagang Bali outstanding loans, 1996, 1998, and 2000**

Indicator	1996	1998	2000
Value (millions of rupiah)	223,393	259,863	513,090
Number	15,645	12,385	10,417

Note See table 15 2 for exchange rates
Source Bank Dagang Bali data

deposit balance was 124 million rupiah ($12,929). In contrast, passbook savings accounted for 98 percent of savings accounts in 2000 but for only 8 percent of the value of savings. In 2000 BDB had more than 390,000 passbook savings accounts with an average balance of 236,000 rupiah ($25).

Although BDB took a somewhat different route to commercial microfinance than did the BKDs and BRI's unit desas, like the others it maintained its profitability and its outreach to poor clients during the crisis. In 2001 BDB's

performance continued to improve, and the bank earned record profits. BDB may go public when the Okas retire, with the Oka family retaining a majority interest so they can ensure that BDB maintains its focus on microfinance.

BRI's unit desa system, 1996–2000

Continuing its profitable nationwide financial intermediation for low- and lower-middle-income people throughout 1996–2001, the unit desa system proved that such efforts can remain extraordinarily stable even in times of severe national crisis.[9]

Table **15.6** **Unit desa savings and lending, 1996–2000**

Indicator	1996	1997	1998	1999	2000
Value of outstanding loans					
Billions of rupiah	4,076	4,685	4,697	5,957	7,827
Millions of U S dollars	1,711	1,008	585	841[a]	816
Number of outstanding loans (thousands)	2,488	2,616	2,458	2,474	2,716
Long-term loss ratio (percent)[b]	2 15	2 17	2 13	2 06	1 90
Portfolio status (percent)[c]	3 65	4 73	5 65	3 05	2 51
Value of savings					
Billions of rupiah	7,092	8,837	16,146	17,061	19,115
Millions of U S dollars	2,976	1,900	2,012	2,408[a]	1,992
Number of savings accounts (thousands)	16,147	18,143	21,699	24,236	25,823

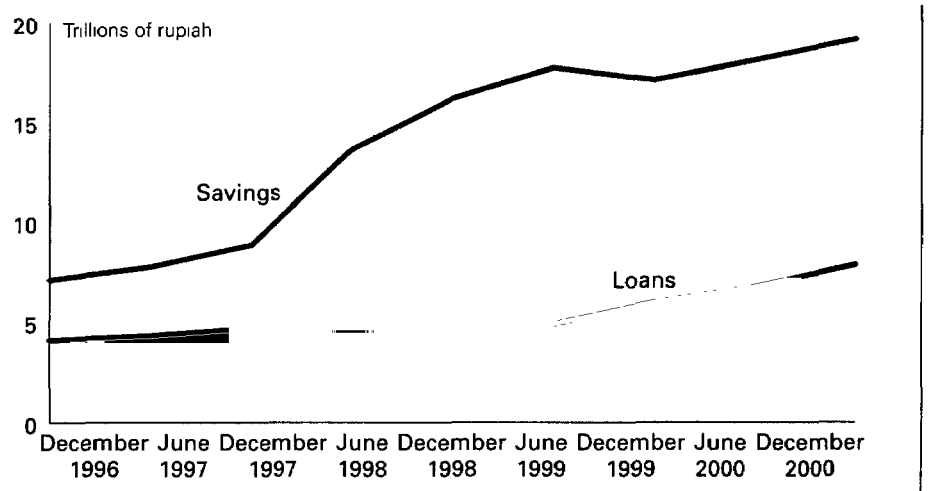
a The 1999 exchange rate used to calculate this table differs slightly from the one in table 2 1 (volume 1), resulting in small discrepancies between the 1999 dollar values of outstanding loans and savings in table 2 3 and this table These discrepancies occurred because this table uses more recent data from the International Monetary Fund (IMF) than were available for table 2 1
b The long-term loss ratio measures the cumulative amount due but unpaid since the opening of the unit compared with the total amount due
c Portfolio status measures the aggregate amount of overdue principal installments compared with total principal outstanding
Source BRI monthly unit desa reports

Table **15.7** **Unit desa pretax profits and returns on assets, 1996–2000**

Indicator	1996	1997	1998	1999	2000
Pretax profit[a]					
Billions of rupiah	422 9	417 0	713 7	1,190 3	1,160 5
Millions of U S dollars	177.4	89 7	88.9	168 0[a]	120 9
Return on assets (percent)	5 7	4 7	4 9	6 1	5 7

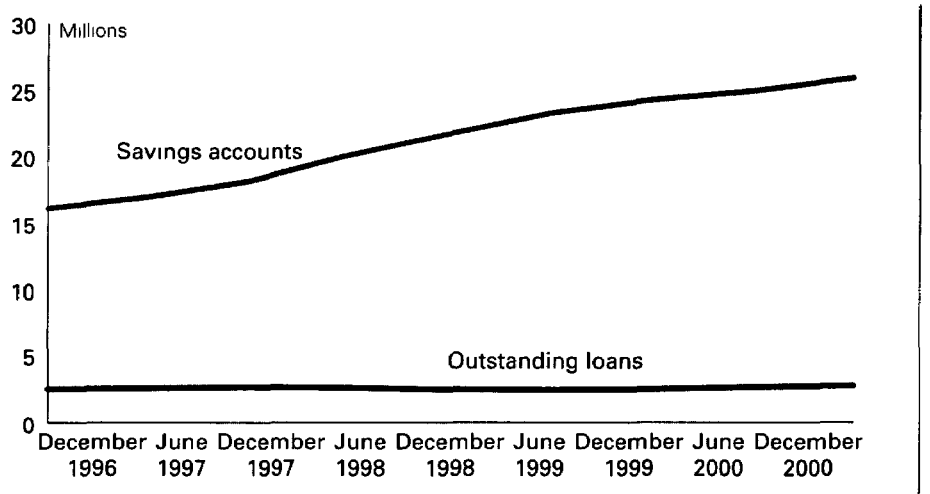
a At the end of each year all the unit desas' profits are transferred to Bank Rakyat Indonesia's general account
Source BRI monthly unit desa reports

Figure **15.3** **Value of unit desa loans and savings, December 1996–December 2000**



Source BRI unit desa monthly reports

Figure **15.4** **Number of unit desa outstanding loans and savings accounts, December 1996–December 2000**



Source BRI unit desa monthly reports

Savings and lending in the unit desas from 1996–2000 are shown in table 15.6, and profits and returns on assets are in table 15.7 (see the appendix for more detail). The value of outstanding KUPEDES loans rose from 4.1 trillion rupiah ($1.7 billion) in 1996 to 7.8 trillion rupiah ($816 million) in 2000 (figure 15.3). The number of loans increased slowly, from 2.5 million in 1996 to 2.7 million in 2000 (figure 15.4). Repayment remained high and steady

throughout. In December 2001 there was 9.9 trillion rupiah ($949 million) in 2.8 million loans, portfolio status was 2.2 percent, and the long-term loss ratio was 1.65 percent (see table 15.6 for loss ratio definitions).

The value of savings (in rupiah terms) and the number of savings accounts increased dramatically during the same period. In 1996, 16.1 million accounts held 7.1 trillion rupiah ($3.0 billion) in savings. By 2000 there were 25.8 million accounts with 19.1 trillion rupiah ($2.0 billion; see figures 15.3 and 15.4). By December 2001, 27 million accounts held 22.0 trillion rupiah ($2.1 billion).

Figure 15.5 shows unit desa deposits and loans in real terms from 1984–2000 (in constant 1984 prices). During this period deposits grew steadily, though at a slightly lower rate after the crisis began. In real terms the value of outstanding loans declined sharply in 1998 but grew steadily in 1999 and 2000.

In rupiah terms, assets more than quadrupled at Bank Dagang Bali between 1996 and 2000 (a 6 percent increase in dollar terms)

Because the unit desas are a division of a larger bank, at the end of each year all their profits are transferred to BRI's general account. The unit desa system continued to be profitable during 1996–2000, posting a pretax return on average assets of 5.7 percent in 1996, 4.7 percent in 1997, 4.9 percent in 1998, 6.1 percent in 1999, and 5.7 percent in 2000 (see table 15.7). In 2001 the pretax return on average assets was 5.8 percent.[10]

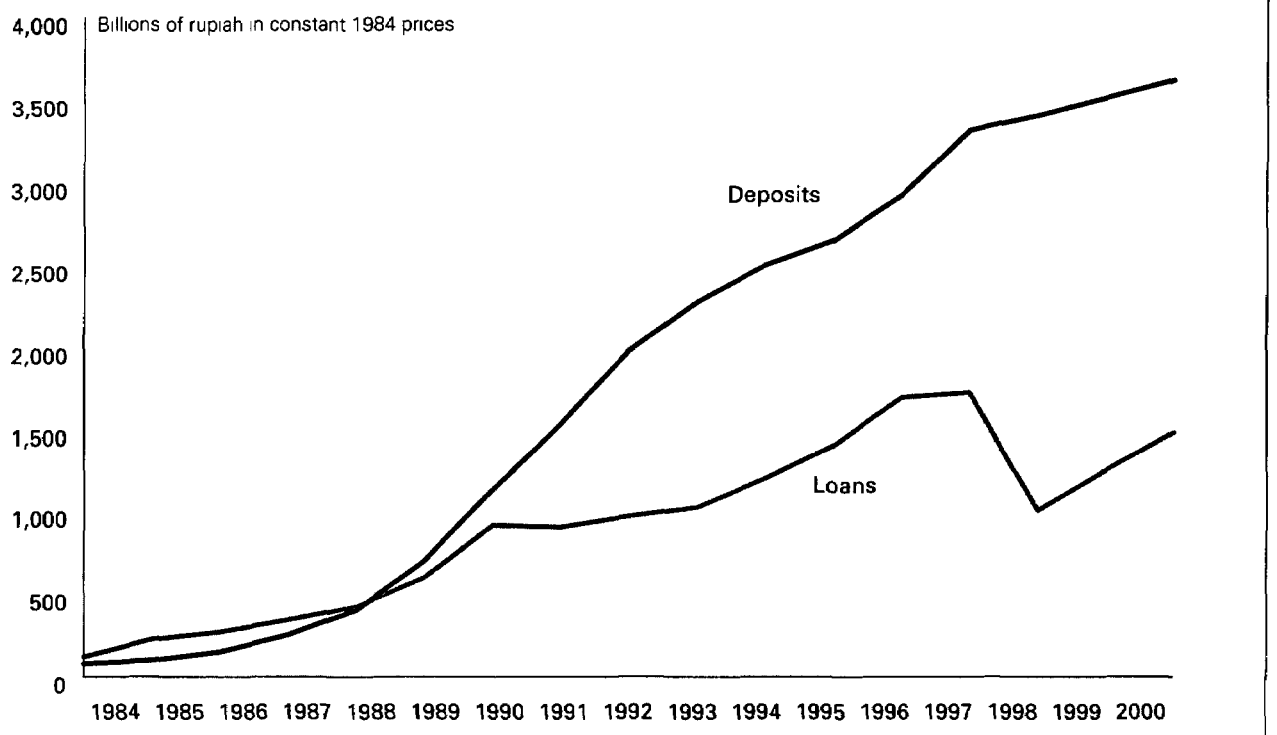
In 1997 BRI began a partial reorganization, carried out as part of the government's plan to sell BRI shares to the public (with the government retaining a majority share). The original plan was to float BRI shares in 1999, but the public offering was postponed because of the crisis. However, reorganization proceeded as part of the restructuring and recapitalization plans for state banks.

With the reorganization, responsibilities and reporting relationships changed somewhat from those shown in figure 14.3. Six chief operating officers, reporting to the chief executive officer, each held responsibility for one of the following divisions: micro, retail, corporate, and investment banking; human resources development; and systems and technology. Divisions responsible for other activities such as audit and supervision reported directly to the chief executive officer. The name of the division responsible for the unit desa system was changed from Business Unit Desa to Microbanking.

Further reorganization occurred during the crisis. The government decided that the recapitalized and reorganized BRI would focus largely on micro and retail banking. As a result the Microbanking Division now has more autonomy within the bank, which may mitigate some of the problems with the old BRI divisional structure discussed in chapter 14. A new chief executive officer and a new group of chief operating officers have been installed. When the bank is considered ready, shares will be sold to the public.

Savings. Despite the exceptionally steep decline in currency value, deposits in the unit desas increased steadily in rupiah terms between 1996 and 2000 (see table 15.6).[11] Deposits in BRI's rupiah-denominated accounts outside the unit desa system also increased substantially during this period.[12] The rupiah value of unit desa savings accounts from 1996–2000 is shown in table 15.8; the

Figure **15.5** **Real value of unit desa loans and savings, 1984–2000**



Source Maurer and Seibel forthcoming, p 9, draft paper prepared for the International Fund for Agricultural Development

number of accounts is shown in table 15.9 (see chapter 13 for descriptions of the units' savings products).

Time deposits (Deposito Berjangka). As in BDB, the largest gain in the value of the unit desas' deposits (which are denominated in rupiah) was in time deposits—which jumped from 791 billion rupiah ($323 million) in June 1997, the month before the crisis began, to a high of 7.1 trillion rupiah ($871 billion) in May 1999. Then, as interest rates gradually decreased, the value of the units' time deposits dropped to 3.1 trillion rupiah ($319 billion) at the end of 2000.

The number of time deposit accounts at the units grew by nearly nine times—from 108,911 in June 1997 to a peak of 956,877in May 1999. These accounts then decreased to 297,495 in December 2000. At the end of 1998, at the height of the crisis, time deposits made up 4 percent of the units' accounts but 39 percent of the value of savings. But by 2000 time deposits accounted for only 1 percent of accounts, with 16 percent of the value of savings. This pattern continued in 2001.

The sharp increase in the use of time deposits at the units in 1998 and 1999 reflects three important trends:

Table **15.8** **Value of unit desa savings by account type, 1996–2000**
(billions of rupiah)

Account type	1996	1997	1998	1999	2000
TABANAS	787	917	1,192	1,528	1,838
	(11)	(10)	(7)	(9)	(10)
SIMPEDES	4,407	5,338	7,165	9,515	11,904
	(62)	(60)	(45)	(56)	(62)
SIMASKOT	976	1,225	1,271	1,802	2,081
	(14)	(14)	(8)	(10)	(11)
Time deposits	775	1,203	6,323	4,060	3,062
	(11)	(14)	(39)	(24)	(16)
Giro	122	140	193	152	222
	(2)	(2)	(1)	(1)	(1)
Other	24	13	2	4	8
	(0)	(0)	(0)	(0)	(0)
Total	7,091	8,836	16,146	17,061	19,115
	(100)	(100)	(100)	(100)	(100)

Note Numbers in parentheses are the share of the total for each account type See table 15 2 for exchange rates
Source BRI unit desa monthly reports

Table **15.9** **Number of unit desa savings accounts by account type, 1996–2000**
(thousands)

Account type	1996	1997	1998	1999	2000
TABANAS	4,544	4,797	5,192	5,706	5,821
	(28)	(27)	(24)	(24)	(23)
SIMPEDES	10,100	11,670	13,877	15,791	17,601
	(63)	(64)	(64)	(65)	(68)
SIMASKOT	1,333	1,477	1,690	2,169	2,035
	(8)	(8)	(8)	(9)	(8)
Time deposits	109	138	873	509	297
	(1)	(1)	(4)	(2)	(1)
Giro	59	61	65	60	68
	(0)	(0)	(0)	(0)	(0)
Other	3	1	1	1	1
	(0)	(0)	(0)	(0)	(0)
Total	16,148	18,144	21,698	24,236	25,823
	(100)	(100)	(100)	(100)	(100)

Note Numbers in parentheses are the share of the total for each account type
Source BRI unit desa monthly reports

- Savers with time deposits (and other accounts) in failing banks moved their funds to time deposits at the units.
- Unit desa savers who also had savings in other banks shifted these funds to the units.
- Unit desa savers shifted funds from other unit savings products into time deposit accounts to obtain their higher interest rates.

In June 1997 annual interest rates for time deposits at the units ranged from 13.5 percent for 1- to 3-month deposits to 14.5 percent for 6- to 14-month deposits. By August 1997 the annual interest rate for 1-month time deposits had reached 30 percent. Interest rates peaked in May 1998, when the annual rate for 1-month time deposits reached 60 percent. By the end of 1998, however, the interest rate for 1-month time deposits had fallen to 35 percent.

Interest rates at the units continued to fall in 1999 as the economy improved. Annual interest rates for fixed deposits declined from the December 1998 range of 35 percent for 1-month deposits to 16 percent for 24-month deposits to December 1999 rates of 11 percent for 1-month deposits and 12 percent for 24-month deposits. After May 1999, as interest rates were reduced, time deposits gradually decreased (see tables 15.8 and 15.9).

In 1996 BRI's unit desas had 7 trillion rupiah ($3 billion) in 16 million savings accounts. By 2001 they had 22 trillion rupiah ($2.1 billion) in 27 million accounts

The average time deposit account at the units was 7.3 million rupiah in both June 1997 and December 1998. But that average account was worth $2,980 in June 1997 and $910 in December 1998. By December 2001 the units had 269,865 time deposit accounts containing 3.3 trillion rupiah ($313 million). The average time deposit was 12.1 million rupiah ($1,156).

SIMPEDES and SIMASKOT. SIMPEDES and its urban counterpart SIMASKOT together accounted for most of the funds mobilized at the units during 1996–2000 and for most of the accounts (see tables 15.8 and 15.9). Among unit desa savings products, the largest absolute increase in number of accounts was in SIMPEDES, which grew by nearly 7 million accounts—from 10.8 million in June 1997 to 17.6 million in December 2000 (and to 24.2 million in December 2001).

Annual interest rates for SIMPEDES ranged from 0-13 percent (depending on minimum monthly balance) in June 1997; the high end of the range rose to 20 percent in the fourth quarter of 1998. But SIMPEDES interest rates were lowered in 1999: from 0–20 percent in December 1998 to 0–11 percent in December 1999. For SIMASKOT, annual interest rates rose from 0–14.5 percent in June 1997 to 0–22 percent in the fourth quarter of 1998, but these rates were also lowered in 1999.

The value of SIMPEDES savings at the units increased in rupiah terms from 4.9 trillion rupiah ($2.0 billion) in June 1997 to 7.2 trillion rupiah ($893 million) in December 1998, and to 11.9 trillion rupiah ($1.2 billion) in December 2000—a clear indication that savers who valued liquidity were actively saving at the units. By December 2001 the SIMPEDES total was up to 15.8 trillion rupiah ($1.5 billion). In contrast to the fixed deposit accounts, SIMPEDES continued to serve smaller savers. The average SIMPEDES account, which had been

436,339 rupiah ($183) in 1996, was 516,333 rupiah ($64) in December 1998; by December 2001 it was 652,831 rupiah ($63).

SIMASKOT continued to be in demand in cities, accounting for 8–9 percent of the number of unit desa savings accounts and 8–14 percent of the value of savings during 1996–2000. The average SIMASKOT account was 732,544 rupiah ($307) in 1996 and 751,700 rupiah ($94) in 1998. By December 2001 the average SIMASKOT account was 1.1 million rupiah ($105).

In 1996, before the crisis, SIMPEDES and SIMASKOT accounted for 76 percent of unit savings and 71 percent of savings accounts. Time deposits accounted for 11 percent of savings and less than 1 percent of accounts. But by December 1998 time deposits accounted for 39 percent of savings, while SIMPEDES and SIMASKOT accounted for 53 percent. However, 72 percent of accounts were in SIMPEDES and SIMASKOT, while only 4 percent were in time deposits.

In real terms, the value of outstanding KUPEDES loans declined sharply in 1998 but grew steadily after that

Thus during the crisis many savers who could afford to put their funds in time deposits did so—primarily because of the high interest rates—but many kept SIMPEDES or SIMASKOT accounts as well. Smaller savers continued to rely on SIMPEDES and SIMASKOT. Both kinds of savers appeared to consider these choices their best options for savings under the circumstances.

Overall, unit desa savings grew from 7.1 trillion rupiah ($3.0 billion) in December 1996 to 19.1 trillion ($2.0 billion) in December 2000, and the number of savings accounts rose from 16.1 million in 1996 to 25.8 million in 2000. By December 2001 the units had 22.0 trillion rupiah ($2.1 billion) in 27 million accounts, for an average account size of 813,106 rupiah ($78). SIMPEDES and SIMASKOT accounted for 84 percent of the savings and 91 percent of the accounts. The multiple reasons that savers continued to save at the unit desas throughout the crisis are explored later in the chapter.

Credit. Outstanding KUPEDES loan balances (in rupiah terms) and the number of outstanding loans remained steady between 1996 and 1998 (see table 15.6). But in 1999 and 2000 the value of outstanding loan balances began to grow—from 4.7 trillion rupiah ($585 million) at the end of 1998 to 7.8 trillion rupiah ($816 million) at the end of 2000. The number of loans also increased, from 2.5 million at the end of 1998 to 2.7 million at the end of 2000. In December 1996 the average loan balance was 1.6 million rupiah ($687); in December 1998 it was 1.9 million rupiah ($238), and in December 2000 it was 2.9 million rupiah ($300). By December 2001 the average loan balance was 3.5 million rupiah ($340).

The KUPEDES flat monthly interest rate on all loans was raised from 1.5 percent to 2.2 percent in September 1998 (excluding the incentive of 0.5 percent a month collected each month and returned to prompt payers; see chapter 12). For borrowers who paid on time, this was equivalent to an annual effective rate of about 45 percent for most loans. After two interim decreases, the flat monthly rate was lowered to its original 1.5 percent in September 1999 (equivalent for prompt payers to an annual effective interest rate of about 32 percent for most loans).

Monthly loss ratios during 1996–2001 are especially interesting (see box 12.3 for definitions of the loss ratios used by the unit desa system). The long-term loss ratio never rose above 2.2 percent in any month between December 1996 and December 2001. During the same period the 12-month loss ratio peaked in January 1998—but it was only 2.4 percent. The short-term loss ratio was more volatile, as would be expected, but it peaked at 5.8 percent (also in January 1998). Although the value of the rupiah to the U.S. dollar plunged from 4,650 in December 1997 to 10,375 in January 1998, unit desa borrowers still repaid their loans that month and in succeeding months. During 1996–2001 portfolio status peaked at 6.1 percent in February 1999 (considerably lower than the 9.1 percent reached in 1992 during the tight money period; see table 12.5).

Borrowers valued greatly their option to reborrow in time of crisis. Some cut back on consumption in order to repay their KUPEDES loans on time. In some cases repayment of KUPEDES installments may have impinged on nutrition, health, and education needs, but it is not known to what extent this occurred. Another occurrence that cannot be quantified is that some KUPEDES borrowers were so concerned about maintaining their option to reborrow from their units that they borrowed from moneylenders in order to make their KUPEDES payments. Another problem arose when some unit staff held back on lending to new borrowers for fear of crisis-related future risks to the borrowers' enterprises. Finally, some borrowers were reluctant to take out loans during the crisis because of uncertainties about their enterprises and incomes. What borrowers valued was not necessarily a new loan provided immediately, but rather the option to borrow whenever they wanted. As the economy began to improve during 1999, these difficulties began to ease somewhat.

Savings in the liquid SIMPEDES account increased from 4.9 trillion rupiah ($2.0 billion) in June 1997 to 15.8 trillion rupiah ($1.5 billion) in December 2001

Overall, between 1996 and 2000, and continuing in 2001, the unit desas had an extraordinary loan repayment record. It is impossible to discern from their performance that they were operating in a country where the financial system had collapsed. The reasons that the units' repayment rate remained so high are examined later in the chapter.

Profitability. The units have been consistently profitable throughout the crisis, earning pretax returns on average assets—ranging from 4.7 percent in 1997 to 6.1 percent in 1999—that would please many banks in noncrisis countries (see table 15.7). In 1996 the unit desas made a pretax profit of 423 billion rupiah ($177 million) after covering all costs, including the cost of their supervision at BRI and the cost of unit desa training. In 1997 unit profits were 417 billion rupiah ($90 million). Had they been calculated on the same basis as in 1996, 1997 profits would have been higher in rupiah terms than 1996 profits. But a reserve requirement imposed by the central bank in 1997 resulted in a decrease in the units' profits that year, from 477 billion rupiah ($103 million) to 417 billion rupiah ($90 million).

In rupiah terms unit profits were 71 percent higher in 1998 than in 1997. In 1998, the worst year in Indonesia in more than 30 years, pretax unit desa profits were a stunning 714 billion rupiah ($89 million) despite a higher cost

of funds that reduced the financial spread in 1997 and 1998.[13] Profits were increasingly generated by savings deposited at the branches, but also by KUPEDES loans. And in 1999 unit desa pretax profits reached 1.2 trillion rupiah ($168 million), 67 percent higher in rupiah terms than in 1998. In 2000 unit desa profits were again 1.2 trillion rupiah ($121 million), and in 2001 they were 1.3 trillion rupiah ($129 million).

The units have always operated with a comfortable financial spread, giving them the flexibility to survive difficult times and to overcome and learn from mistakes. They operate with a spread of about 20 percent of average outstanding loans, while operating costs average about 11 percent (see Maurer and Seibel forthcoming for detailed analysis of the income and cost structure of the unit desas, 1994–2000). But the spread could have been reduced after the system had been profitable for some time. The crucial issue about unit desa profitability has been the use of unit desa profits to cross-subsidize wealthier customers of BRI's less successful divisions (see chapters 12 and 14). In commercial microfinance it is not necessary to choose between economic and social profitability; the unit desas have set an extraordinary record for both. But given the units' position as a BRI division, the reality has been that smaller borrowers pay higher interest rates to cover losses on larger loans provided at lower interest rates to wealthier borrowers—who have much lower average repayment rates. As discussed in chapter 12, this practice represents a substantial regressive income redistribution. If the mandate for the restructured BRI to concentrate primarily on micro and retail banking can be implemented effectively, it may be possible to lower KUPEDES interest rates, raise interest rates paid to savers, or both.

Because of income uncertainties, some former KUPEDES borrowers did not borrow during the crisis. But they valued highly the option to borrow when ready

The unit desas at the start of the 21st century

In contrast to the approach taken in earlier chapters of volume 2, the focus here is not on the development of the units over time. Rather, this section provides a snapshot of the unit desas at the end of 2000 and some thoughts about their future. While the units' current strengths and challenges can be assessed, their future will depend heavily on factors beyond the control of BRI's Microbanking Division. These include the future course of the Indonesian economy and the country's governance, BRI's own governance and management, and the extent to which BRI focuses on micro and retail banking.

Strengths. Institutional sustainability and large-scale, continuing outreach to the economically active poor are the twin criteria for success in the new microfinance paradigm. The unit desa system has been able to achieve and maintain widespread coverage because the system is profitable and fully self-sufficient. The increasing volume of business in the units makes possible economies of scale that add to the system's profits. The units' stability and profitability during the crisis underscore the depths of their strengths. A few of the system's most important strengths are discussed here. Many reinforce one another, and the whole is considerably greater than the sum of the parts.

- *The unit desa mission.* Credit is provided to all sectors and to all levels of the economically active poor, as well as to lower-middle-income borrowers. Savings are mobilized from all types of savers who live or work in a unit's service area. This approach to savings mobilization makes it possible for the units to finance KUPEDES loans to all creditworthy loan applicants whose credit needs are within the KUPEDES loan size range. This fact is widely known, and it contributes to the high repayment rate: borrowers know that they will not be constrained by lack of available funds at the unit—and that their ability to borrow again depends entirely on their performance.
- *Simplicity and efficiency.* Simplicity is the key to large-scale outreach in commercial microfinance. The units offer one broadly based loan product and a few carefully designed savings and deposit accounts. Unit products are easy for clients to use, and they are sufficiently flexible that they can be customized by clients to meet the needs of their households and enterprises. Unit forms, procedures, and reporting requirements are also simple. The uniformity of all units and their limited functions make it possible to manage thousands of such units at a high level of efficiency, using many high school graduates with in-house training as unit managers. The average number of active loans per credit officer was 534 in 2000 (Maurer and Seibel forthcoming). There were 3,724 unit desas that year; the average unit had 6,934 savings accounts. Efficiency and simplicity are closely related—and essential for profitable large-scale microfinance.
- *Management.* The unit desa system was built by exceptional managers at BRI's head office who enjoyed high-level government support. This was a sine qua non for developing a system with the outreach and profitability of today's unit desas. Keeping the units simple at the local level requires high-level management of complex issues at the head office.
- *Financial intermediation.* The unit desa system operates as a profitable nationwide financial intermediary. The success of the strategies discussed above depends on an institutional system that operates many secure, conveniently located units. Each unit operates as a profit center, with staff promotions and incentives based on unit performance. Funds are intermediated using the transfer price mechanism, so all creditworthy borrowers can receive loans. (The transfer price is the interest rate paid on funds deposited by a unit in its supervising branch or on funds borrowed by a unit from the branch.)
- *High KUPEDES repayment.* Because KUPEDES loans are widely available at attractive interest rates for all productive purposes and can be obtained and repaid easily and conveniently, most borrowers want to repay in order to keep open their option to reborrow. Other reasons for high repayment include the units' methods of borrower selection and loan collection, extensive training and substantial performance-based cash incentives for unit staff and their supervisors, loan amounts that are determined by borrowers' present cash flows, restriction of loans to ongoing enterprises, refusal to relend to defaulting borrowers,[14] the prompt payment incentive, prompt classification of overdue loans, a cash-based accounting system, and close supervision of the

By examining the unit desas' performance between 1996 and 2001, it would be impossible to learn that the country had been in deep crisis

units. High repayment rates during the crisis showed that borrowers place a high value on positive credit ratings.

- *Meeting savings demand.* The units meet the demand for savings from the poor by also collecting savings from the nonpoor—whose deposits raise the average account size and thus make it possible for the units to serve all savers profitably. The savings mobilized from the public are then available to finance the KUPEDES portfolio. All unit desa loans are financed by savings, which has been a lower-cost source of funds than commercial debt. The extent of mobilized savings and the rapid growth of savings during the crisis show that the units have developed savings products and services that are in high demand.
- *Accountability.* Each unit is a profit center, with its own monthly profit and loss statement and balance sheet. The accounting system is set up so that the monthly performance of every unit is completely transparent. Unit staff and their supervisors are treated as professionals and held accountable for their performance. They are given authority, training, good salaries, and cash incentives, and they are placed on a career track within the bank. Unit staff and branch supervisors are provided with extensive training to equip them to make good financial decisions. Unit managers approve all loans of amounts that fall within their authority, and they and their credit officers are held accountable for their financial decisions. Promotions are given or withheld based on performance.

For years BRI had used unit desa profits to cross-subsidize losses from larger loans to corporate clients, resulting in substantial regressive income redistribution

Challenges. Despite the unit desas' remarkable strengths, microbanking at BRI faces many challenges. The vulnerabilities of the unit desa system are caused by issues arising outside BRI, issues inside BRI but outside the Microbanking Division, and issues within the Microbanking Division.

External dangers. The units are potentially vulnerable to difficulties beyond the control of BRI:

- *Further downturns in Indonesia's economic and political environment could undermine unit desa performance.* The units cannot be expected to maintain stability indefinitely under severe pressures. If in the next few years Indonesia were to face hyperinflation, negative growth, substantial increases in poverty and unemployment, extended social unrest, and political fragmentation and instability, the performance of the units would eventually reflect the problems of the wider society. But if Indonesia moves steadily toward a stable, growing economy and a freely elected government that governs effectively, the unit desas are likely to continue to demonstrate that large-scale commercial microbanking can be robust, resilient, stable, and profitable.
- *Can BRI's mandate be implemented effectively?* The government's recent decision that BRI will concentrate primarily on micro and retail banking should solve many of the units' problems discussed in chapter 14. This decision could also provide microbanking with important opportunities, and perhaps BRI will eventually focus entirely on micro and retail banking. But a smooth in-

stitutional transition may be difficult. BRI still serves some large clients, and not everyone agrees with its current mandate. The success of the newly restructured BRI will depend partly on whether commercial microbanking continues to have high-level, powerful supporters who understand the importance of the units for the economy and the country.

- *Subsidized credit is expanding.* Another danger comes from an old debate; the government's views on microfinance have never been monolithic. The tensions between social and commercial finance continue, in some ways remarkably similar to those in the days of Boeke and Fruin (see chapters 9 and 11). Short-sighted government efforts to use extensive subsidized credit to help agribusiness and to alleviate poverty do not work any better now than they did in the 1970s. The government rightly sees the expansion of agribusiness (including agriculture, agroindustry, and agribusiness trade) as an important potential component of rebuilding the economy. But Bank Indonesia's massive low-interest liquidity credits to government programs for agriculture and related business and trade activities—onlent to borrowers at subsidized interest rates—pose a problem for the country and a danger to the unit desas. Large low-interest credit programs, doomed to failure for reasons discussed in previous chapters, threaten the unit desas whether administered through BRI or not—although the former would be the worst case. Even if the credit subsidies are not administered through BRI, massive cheap credit can undermine the commercially oriented unit desas (and the country's many other commercial microfinance institutions). The government should be replicating its successes, not its failures.
- *Inappropriate regulations continue.* The unit desa system is still required to comply with some general banking regulations that are inappropriate for microfinance (see chapter 14). In most cases ad hoc compromises have been reached on such regulations (as with accounting, reporting, and loan classification methods). But these compromises represent informal decisions made by particular individuals and could be changed at any time. The basic requirements for the operation of commercial microfinance should not be left to the vagaries of personnel appointments and informal relationships. Appropriate policies and regulations for microfinance are needed. In this context it is encouraging that Minister of Finance Boediono has indicated support for commercial microfinance and for the development of a viable strategy for microfinance in Indonesia (Boediono 2002).

The key to large-scale outreach in commercial microfinance is simplicity—but this requires high-level management of complex issues at the head office

Potential problems in BRI but outside the Microbanking Division. It is too early to know how well the restructured and recapitalized BRI will perform. But an old danger signal still flashes. The Microbanking Division does not yet have the authority to make many of the decisions and resource allocations on which its business depends. The extent to which this problem impedes the development of microfinance will depend partly on how well the bank fulfills its mandate to provide micro and retail banking. If serving low- and middle-income retail clients becomes BRI's central business, then its managers will have an incentive to make decisions that further that effort. But if the bank's commit-

ment to its mission is not strong enough, some problems from the past may continue, perhaps in new forms.

Unit desa products are few. But they are carefully designed to be flexible so that clients can combine and customize the products to meet their own needs

- *Management issues are crucial.* Because of BRI's generalist management model, under which managers are regularly transferred from one division to another (chapter 14), the unit desa system has never been able to build a core group of high-level managers with extensive experience in microfinance. And since no other large bank in Indonesia has developed a major microfinance focus, there is only a tiny pool of Indonesian commercial bank managers who are microfinance experts. This situation makes it difficult to fill BRI's top management posts. Not surprisingly, BRI's recently appointed managers did not come with substantial microfinance experience. Perhaps, like Kamardy Arief (BRI's president-director from 1983–92; see chapters 12–14), they will learn microbanking on the job. But BRI should make it a high priority to develop a core group of high-level, well-trained, and experienced microfinance experts to lead its microbanking activities.
- *The decisionmaking process for investments in the unit desas needs to be changed.* Although the Microbanking Division has had input into BRI's investment decisions, it has never had direct control over major investments for microbanking. Thus the division does not have the authority to decide how much of its profits to invest in maintaining, improving, and expanding the unit desa system. In addition, there are special problems for the unit desas arising from BRI's losses in 1998. One is a severe unit desa staff shortage; another is a lack of investment funds for replacing old equipment at existing units and for purchasing computers, furniture, motorcycles, and the like for new units.
- *The units' savings and profits should be used differently.* For years unit savings have been used to finance large loans (with generally low repayments), while unit profits have covered losses in other bank divisions. Among its other ill effects, this corporate strategy has affected the unit desa interest rates charged to borrowers and paid to savers. In the restructured BRI, borrowing rates could be lowered or savings rates could be raised (or both) if the political will is forthcoming. Even with increased investment for maintaining and expanding the units, some change in interest rates should be possible, benefiting unit clients.
- *Interdivisional coordination needs an overhaul.* The Microbanking Division still depends on other divisions for such functions as personnel, recruitment, logistics, training, and the like. Managers of those divisions do not always understand microbanking needs. For example, units are sometimes understaffed because their labor requirements are not well enough understood and because the Human Resources Development Division (as well as regional and branch authorities) controls much of the units' recruiting and staffing. In addition, problems at branch or regional levels can arise if the units are given low priority relative to other functions of these offices. If the bank develops a strong commitment to fulfill its mandate for micro and retail banking, this problem should be substantially resolved. If not, microbanking may continue to be hampered by problems of interdivisional coordination.

Challenges for the Microbanking Division. There are also problems and challenges that are largely internal to the Microbanking Division. The problems tend to concern mission drift and inertia among some managers and staff. The challenges are related to meeting what is still large unmet demand for financial services among low- and lower-middle-income people in Indonesia. Both the problems and the challenges have arisen partly as a result of BRI's lack of high-level managers who are microfinance experts. Managing the growth of its micro and retail banking is a major challenge for the institution.

- *Expanding the unit desa system should be a high priority.* While the unit desa system has achieved wide coverage, few of the units have saturated their markets. There are many areas where new units and village service posts could be operated profitably. Some expansion occurred during the crisis: in 1996 there were 3,595 units, and by December 2001 there were 3,823. Investment in the units and their expansion should become easier under the restructured, and eventually perhaps partly privatized, BRI. Such expansion would be especially timely in helping Indonesia recover from its economic difficulties.[15]
- *Lending can be substantially increased.* Despite the large outreach and high quality of the KUPEDES portfolio and its continued emphasis on low- and lower-middle-income borrowers (and the presence of many other commercial microfinance institutions), there is still large unmet demand for small loans in Indonesia. The KUPEDES loan product is designed to permit borrowers to start with relatively small loans, improve their enterprises, and qualify for larger loans. Millions of borrowers have reborrowed at larger loan sizes. Thus the average outstanding KUPEDES loan balance would be expected to increase gradually, as it has—from 174,000 rupiah ($161) in 1984 to 1.6 million rupiah ($687) in 1996, and to 3.5 million rupiah in 2001 ($340). KUPEDES has helped many Indonesians out of poverty—in some cases twice (the second time during the crisis).

  But the many years of KUPEDES success have led to some mission drift. After attaining substantial profitability, some units have not sufficiently emphasized the continuing provision of small loans to new borrowers. Continuing the earlier trend (chapter 12), in December 2000, 42 percent of the KUPEDES portfolio was in loans whose stated purpose was trade, while 30 percent was in loans to salaried employees (favored by unit staff because loan repayment is deducted from the borrower's salary). With more than 40 million households in Indonesia and 2.8 million KUPEDES loans (and relatively little competition in many areas), there is considerable scope for increasing lending—especially for small loans to new borrowers. "Given the potential of Indonesia's rural economy and the likely credit demand of micro and small businesses, the number of borrowers could probably double or triple" (Maurer and Seibel forthcoming, p. 14). A gradual but continuous expansion in new small loans would help Indonesia boost economic growth and increase equity.
- *Service to women should be expanded.* The gender distribution of savers at the units is not known, but many are women. About one-quarter of KUPEDES

The units meet demand for savings from the poor by collecting savings also from the nonpoor. This makes it possible to provide savings services to all profitably

loans are taken by women, but this understates the use of KUPEDES credit by women because households often use loan proceeds for several enterprises, including those operated by women. Nevertheless, there is considerable scope for increasing loans to women. Other countries and institutions have found that lending to women can have important development effects.

- *A better mechanism for transferring funds is a high priority for clients.* A safe, fast, and simple mechanism for transferring funds is a high priority for many unit clients in both urban and rural areas. Significant improvement has been made since the early 1980s, when low-income people complained that to transfer money to suppliers, buyers, family members, and others, they usually had to get on a bus and carry the cash to the recipient. Nevertheless, there remains considerable room for improvement in developing rapid, efficient facilities that enable funds to be transferred throughout the country from a sender in one unit to a receiver in another.
- *A small number of carefully selected new products could be developed.* There is demand in both rural and urban areas for additional unit products, including children's education loans, mortgage loans, checking accounts, automatic transfers, and special time deposit accounts for education, housing, and retirement. Clients' views on potential products should be carefully elicited because new products and services represent both opportunities and potential dangers for the units. On the one hand, serious consideration should be given to developing products for which there is significant demand at profitable prices. On the other hand, if the units are to increase outreach and maintain profitability, they need to stay simple—and should be sparing in the addition of new products and services.
- *Joint ventures could provide income while spreading the lessons of the unit desa system.* BRI has received numerous inquiries from financial institutions, governments, and donors about possible joint ventures with microfinance institutions in other countries. So far none has been activated, at first primarily because of staff constraints in the Microbanking Division and more recently because of the crisis and the changes under way at BRI. Developing joint ventures could become an important opportunity once the restructured BRI has had time to focus on its main priorities. Such ventures could be advantageous to BRI (both in income and experience) while helping to accelerate the international spread of commercial microfinance.

Unit staff are given authority, extensive training, good salaries, and cash incentives. And they are held accountable for their performance

Commercial Microfinance in Indonesia: What Has Been Learned?

Indonesia offers four main lessons about commercial microfinance:

- Millions of people can be served profitably over the long term by different types of financial institutions, and loans can be fully financed by savings, commercial debt, private investment, and retained earnings. The BKDs, BDB, and unit desas all provide small loans and voluntary savings services, none is sub-

sidized, and all are profitable. This is also true of many People's Credit Banks (BPRs), in addition to the BKDs.

- Commercial microfinance has a set of core requirements. Thus appropriate policies and regulations (or deregulations) are required. High-level government support is crucial. Banks need skilled, committed, long-term senior managers to build and maintain large-scale microbanking systems. Transparency, accountability, and professionalism are necessary at all levels.
- Commercial microfinance can be both economically and socially profitable.
- Microbanking can be extremely stable, even during severe national crisis.

The first two lessons have been discussed at length, but some comments will be useful on the third and fourth.

Use of massive subsidized credit to reduce poverty does not work any better now than it did in the 1970s. Indonesia should replicate its successes, not its failures

Commercial microfinance can be both economically and socially profitable

Commercial microbanking in Indonesia has had several positive effects on development and equity. First, a large volume of credit has been provided profitably to low- and lower-middle-income borrowers at substantially lower interest rates than were previously available to them. Second, the savings instruments provide millions of poor savers with positive real returns and legally recognized assets—while also creating new sources of investment. Third, both loans and savings products have been extraordinarily successful in reaching customers who had never before borrowed or saved in formal sector financial institutions.

Unit savings accounts provide security and income flows from returns. In addition, they help low-income people build their creditworthiness and self-finance business expansion, education, housing, and other basic requirements. These savings have helped to deepen local financial markets and to enable small loans to be offered on a large scale.

Many KUPEDES borrowers started years ago with small loans and over time have qualified for larger loans. The low default rate indicates that borrowers typically use their loans for profitable activities and that they do not become mired in the accumulating debt cycle that often accompanies informal commercial loans from moneylenders (chapter 6).

Widespread loans and savings services have made possible increased production by microfinance clients, resulting in higher incomes—and often in greater self-confidence among clients. Production growth has also increased employment, since many successful clients employ others to work in their enterprises. In addition, increased household income is often used for children's education and for improving the health and nutrition of household members.

Stability in crisis

The experienced commercial microbanking institutions discussed above have shown that they can viably serve the economically active poor in difficult times as well as in good times. The stability of the unit desas, BKDs, and BDB in time

of extraordinary economic, political, and financial crisis is significant both for Indonesia and for the microfinance industry generally.

Why has commercial microbanking remained stable during a crisis so severe that the Indonesian banking industry (including BRI) failed? There are multiple reasons. Some are specific to the unit desas, but others also apply to the BKDs, BDB, BPRs, and other commercial microfinance institutions in Indonesia.

Economic and political issues. Most microfinance clients operate in the domestic economy and were not directly affected by the fall of the rupiah. This fact, combined with macroeconomic stabilization measures and emergency antipoverty programs, meant that most economically active poor people stayed economically active—and were able to make use of commercial microfinance services.

An old danger signal flashes at BRI. The Microbanking Division lacks authority over such crucial unit desa issues as recruitment, investment, and expansion

- Although there were many difficulties on both sides of the agreements between the IMF and the government of Indonesia, support from the IMF and other donors helped the Indonesian government achieve significant progress on macroeconomic stabilization relatively quickly. Although inflation reached 78 percent at its highest point in 1998, it was contained before it reached hyperinflation and sharply reduced by 2000. GDP, which contracted by more than 13 percent in 1998, grew by 5 percent in 2000.
- The government, with help from the IMF and other donors, quickly instituted extensive anti-poverty programs, supplying food, creating employment, and keeping children in school.
- Most microbanking clients were not directly affected by the currency crisis. However, some were indirectly affected because they sell products to, buy products from, or work for (or were laid off from) firms engaged in foreign exchange transactions. But some, such as farmers cultivating export crops, saw substantial increases in income during the crisis.
- Many low- and lower-middle-income people were adversely affected by rising inflation and growing unemployment and underemployment, especially in late 1997 and in 1998. Borrowers greatly valued the option to reborrow in time of difficulty—and thus made loan repayment a high priority. And savers tried, where possible, to save more and consume less.
- In the case of the unit desa system, many savers believed that because BRI is a state bank (and the country's oldest bank), the government guaranteed unit desa savings. Deposits were in fact not guaranteed, though there was something of an implicit guarantee (the government probably would have covered losses by unit desa savers had it become necessary). As noted, in January 1998 the government did guarantee savings and deposits in all banks.
- Some high-level government officials who understood the importance of commercial microfinance for the economy continued to watch over the major microfinance institutions during the crisis.

Institutional issues. These institutions had built a record of trust. They had good, committed management, friendly and motivated staff, and products ap-

propriate for microfinance clients. Clients remained loyal because they valued the services they received.

- Clients trust financial institutions that are trustworthy. Well-trained, motivated staff at the unit desas and BDB were able to use their knowledge and skills in an increasingly difficult context, and thereby to retain their clients' trust. And BKD clients generally trust the BKD they use because it is owned by their village.
- BRI and BDB had long-established microbanking systems that were flexible and robust. And BRI's supervision of the BKDs was especially important during the crisis.
- Unit desa staff and their supervisors, whose salaries and incentive payments are high by local standards, were strongly motivated to ensure that their units performed well and that they continued in their jobs.
- The security, convenience, and services offered by these microbanking systems were highly valued by their clients, most of whom remained loyal.

In commercial microfinance, it is not necessary to choose between social and economic profitability. The unit desas have set an extraordinary record for both

Credit. All three institutions maintained substantial liquidity throughout the crisis, and lending was not capital constrained. Borrowers wanted to retain their option to reborrow and made loan repayment a high priority.

- The unit desas had learned in 1991–92 (during a period when a tight monetary policy was in effect and KUPEDES lending slowed) that arrears increased when borrowers perceived the availability of future loans to be uncertain. During the recent crisis KUPEDES loans were continuously available to creditworthy borrowers (although some units did not actively seek out new borrowers during this period).
- Most borrowers in the unit desas and BDB entered the crisis with good credit ratings. For them, maintaining the option to borrow in time of crisis became a high priority. They knew that their institutions were liquid, and they trusted them to provide future credit if they repaid their loans on time.
- Over time, microcredit clients in these institutions had tended to invest profits in their enterprises, generally maintaining the level of business achieved with each loan. Most increased their equity and lowered their loan leverage, making them better able to withstand external shocks (see Patten, Rosengard, and Johnston 2001 for discussion of this point in the unit desa context).

Savings. Savers valued the security, convenience, liquidity, confidentiality, products, and services offered by these institutions—factors that were especially important during the crisis. Some savers moved their accounts from failing banks to the unit desas, BDB, or BPRs.

- Over the years many savers had built up substantial balances in their savings accounts that helped cushion the effects of the crisis (including the ability to make loan repayments even when income was low).

- Interest rates for savings, especially for fixed deposits, were high during 1998 and part of 1999. These rates helped savers counter somewhat the effects of rising inflation and underemployment.
- Accounts were opened by savers who moved deposits from failing banks to the unit desas, BDB, and BPRs even though the savers had not previously been clients of these institutions.
- Unit desa and BDB savers who also had accounts in other, doubtful banks shifted funds from those banks to the units or BDB.
- Traditional forms of savings (such as gold, grain, and animals) had become less popular for the reasons discussed in chapter 13. Saving in more than a small amount of gold bore an unacceptable security risk. Grain was too prone to be borrowed, especially in times of hardship. And saving in more than a few animals held too high an opportunity cost.
- At BRI the transfer price from the branches to the unit desas was 15 percent in June 1997. It rose to 24 percent by September 1997, fluctuated between 20 and 26.5 percent in early 1998, and reached 33 percent in May 1998, where it remained for the rest of the year. Thus unit desa staff, whose incentive payments are based on unit profitability and overall performance, had strong incentives to follow the priority signaled by the transfer price and mobilize savings. After 1998 the transfer price was gradually reduced.

The BKDs, BDB, and unit desas are of different institutional types, but all provide small loans and voluntary savings services, none is subsidized, and all earn profits

The three institutions discussed here—a division of a state bank, a private bank, and a century-old village banking system—all maintained their outreach and profitability during the crisis. But they had (and have) different strengths and weaknesses. The unit desa system is the world's largest financially self-sufficient microbanking system. Among the three institutions discussed here, only the unit desas carried out nationwide financial intermediation among borrowers and savers. But as a division of BRI, the units generated regressive income distribution: they cross-subsidized low-interest accounts of large borrowers who had low repayment rates with higher-interest microloans that had high repayment. These were largely politically motivated decisions and were beyond the control of BRI's Microbanking Division.

BDB focused mainly on mobilizing savings. The bank used the savings of wealthier clients to raise the average account size, making it possible to collect savings from large numbers of poor clients while remaining profitable. In contrast, lending at BDB, while profitable, has not achieved large outreach.

The 4,806 active BKDs continued to serve their villages—with the highest return on assets of the three institutions. Unlike the unit desas and BDB, the BKDs had problems with arrears and defaults. But the BKD repayment problems were not caused primarily by the crisis. They were outgrowths of a poor writeoff policy and of a long-term tolerance for arrears—because most overdue loans are eventually repaid. The BKDs are profitable mainly because of their interest rates on loans (higher than those of the unit desas or BDB), their retained earnings deposited at BRI, and their low operating costs.

These three institutions all hold world records. As noted, the BKDs are the oldest commercial microbanking system in operation, the unit desas are the largest financially self-sufficient microbanking system, and BDB is the oldest operating licensed commercial bank that focuses on microfinance. But it is not only these commercial microfinance institutions that survived the Indonesian crisis. As Steinwand (2001, pp. 288, 303) makes clear, many Indonesian financial institutions that provide microfinance continued to serve their clients profitably throughout the crisis. Speaking about Indonesia's People's Credit Banks (BPRs), Steinwand comments:

> In contrast to the commercial banking sector, the BPR sector has been hardly hit by the crisis. Instead some of them like the LPD [Lembaga Perkreditan Desa] and LPN [Lumbung Pitih Negara] gained windfall profits from the crisis. The crisis convincingly proved that savings deposits at BPR are...even in difficult times the most stable source of funding...The most dynamic and best managed BPR were always those with a strong savings base.

During the crisis in Indonesia, commercial microfinance institutions served millions of poor people profitably—a hallmark of the microfinance revolution

The evidence from Indonesia for the stability of commercial microbanking in experienced institutions is extraordinary. In the country "that would probably walk away with the prize for Asia's most desperate banking system" (*The Economist,* 18 July 1998), profitable commercial microfinance institutions continued to serve millions of poor people—at a critical period when they particularly needed access to financial services. This record is a hallmark of the microfinance revolution.

Notes

1. The 1999 and 2000 GDP data are preliminary figures from the Biro Pusat Statistik, the Indonesian Bureau of Statistics.

2. For discussion of the Indonesian financial sector collapse, see Wardhana (1998b); Cole and Slade (1998); World Bank (1998b); Furman and Stiglitz (1998); Radelet and Sachs (1998); Kenward (1999, 2000); IMF (1999d); Baker (1999); Lane and others (1999); Radelet (1999); and Stern (2000).

3. There are four categories of nonperforming loans, ranging from loans fewer than 90 days overdue but with payment irregularities to loans more than nine months overdue (for which 100 percent provisioning and writeoff are required).

4. Bank Bali should not be confused with Bank Dagang Bali. The two banks are unconnected.

5. Baker (1999) provides a detailed discussion of bank restructuring in Indonesia; see also Radelet (1999).

6. As used by IBRA, obligor means an ownership-based group of debtors. The 21 largest obligors consist of 340 debtors.

7. Baird (2000, p. 2) points out that Thailand's Financial Sector Restructuring Authority recovered only 22 percent of unsecured business loans.

8. As noted in chapter 14, BKD accounting does not meet the same international standards as accounting at the BRI unit desas. For example, information on BKD profits and defaults is sometimes inconsistent across years, and annual arrears figures include bad debts incurred over a long period but not written off, thus overstating arrears (see Ravicz 1998, p. 13).

9. For discussion of the unit desas during the crisis, see Charitonenko, Patten, and Yaron (1998); Patten, Rosengard, and Johnston (1999, 2001); Seibel and Schmidt (2000); Steinwand (2001); and Maurer and Seibel (forthcoming).

10. Although BRI pays taxes, the unit desa system does not; thus unit desa returns on assets are based on pretax profits.

11. It should be remembered that the terms *savings* and *deposits* are used synonymously in this book except where otherwise indicated.

12. As a state-owned bank, BRI was able to mobilize substantial savings even at the height of the crisis in 1998. Thus BRI's rupiah deposits, excluding unit desa deposits, increased from 10.2 trillion rupiah ($4.2 billion) in June 1997 to 20.0 trillion rupiah ($2.5 billion) in December 1998, an increase of 97 percent. The bank had dollar deposits as well (but not in the units). Total rupiah deposits for both the units and the rest of BRI increased from 17.9 trillion rupiah ($7.3 billion) in June 1997 to 36.2 trillion rupiah ($4.5 billion) in December 1998, an increase of 102 percent.

13. There were, however, some problem areas. Between 1996 and 1997 the number of unit desas increased by 96, from 3,595 to 3,691, and the share of units operating at a loss increased from 5.1 to 5.7 percent. The new units could easily account for this increase. But between 1997 and 1998 the number of units increased by only 12, to 3,703, while the share of units operating at a loss increased to 12.2 percent (the previous high during the 1990s was 16.0 percent in 1991, during the period of the government's tight money policy). However, in 1999 the number of units fell by 9, to 3,694, and the share of loss-making units was just 3.9 percent. In 2000, 97.7 percent of the 3,724 units were operating profitably—an all-time end-of-year unit desa record. In 2001 the number of unit desas increased by nearly 100, to 3,823—of which 96.1 percent were profitable.

14. With the exception of defaults caused by force majeure throughout a particular area.

15. The issue of expansion of the unit desas became complex during the crisis. While the units were profitable throughout, BRI's massive losses in 1998 caused problems for the units. Although subsequently recapitalized, BRI is not yet rated "healthy" by Bank Indonesia and so has had difficulty obtaining permission to open new units.

Appendix

Rupiah–U.S. dollar exchange rates, consumer prices, and performance of Bank Rakyat Indonesia's unit desa system, December 1996–December 2000

Indicator	December 1996	January 1997	February 1997	March 1997	April 1997	May 1997	June 1997	July 1997	August 1997	September 1997	October 1997	November 1997	December 1997
Exchange rate (end of period)	2,383	2,396	2,406	2,419	2,433	2,440	2,450	2,599	3,035	3,275	3,670	3,648	4,650
Consumer price index (1995 = 100)	109 5	111 3	112 2	112 2	112 6	113 0	112 9	113 9	114 9	116 2	117 8	118 7	120 7
Value of outstanding loans													
Billions of rupiah	4,076	4,187	4,125	4,141	4,167	4,205	4,301	4,354	4,408	4,439	4,501	4,573	4,685
Millions of U S dollars	1,711	1,747	1,714	1,712	1,713	1,723	1,756	1,675	1,452	1,355	1,226	1,254	1,008
Number of outstanding loans													
(thousands)	2,488	2,508	2,525	2,511	2,524	2,524	2,547	2,544	2,545	2,565	2,585	2,599	2,616
Long-term loss ratio (percent)[a]	2 15	2 17	2 20	2 19	2 19	2 19	2 18	2 18	2 17	2 16	2.15	2 17	2 17
Portfolio status (percent)[b]	3 65	3 77	4 11	4 18	4 31	4 42	4 41	4 46	4 55	4 63	4 67	4 80	4 73
Value of savings													
Billions of rupiah	7,092	6,972	7,101	7,263	7,419	7,654	7,741	7,929	7,984	8,079	8,293	8,704	8,837
Millions of U S dollars	2,976	2,910	2,951	3,003	3,049	3,137	3,160	3,051	2,631	2,467	2,260	2,386	1,900
Number of savings accounts													
(thousands)	16,147	16,232	16,349	16,508	16,665	16,852	16,993	17,190	17,370	17,630	17,856	18,048	18,143
Pretax profit or loss[c]													
Billions of rupiah	422 9	9 4	32 6	69 3	106 1	143 2	183.1	222 1	246 7	285 1	334 1	380.8	417 0
Millions of U S dollars	177 4	3 9	13.5	28 7	43 6	58 7	74 7	85 4	81 3	87 1	91 0	104 4	89 7
Return on assets (percent)	5 7	1 5	2 6	3 6	4 1	4 3	4 5	4 6	4 4	4 5	4 7	4 7	4 7

Appendix

Rupiah–U.S. dollar exchange rates, consumer prices, and performance of Bank Rakyat Indonesia's unit desa system, December 1996–December 2000 (continued)

Indicator	January 1998	February 1998	March 1998	April 1998	May 1998	June 1998	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998
Exchange rate (end of period)	10,375	8,750	8,325	7,500	10,525	14,900	13,000	11,075	10,700	7,550	7,300	8,025
Consumer price index (1995 = 100)	129 0	145 5	153 5	160 5	169 1	176 9	192 1	204 2	211 9	211 3	211 5	214 5
Value of outstanding loans												
Billions of rupiah	4,751	4,642	4,614	4,560	4,555	4,594	4,590	4,608	4,597	4,592	4,612	4,697
Millions of U S dollars	458	531	554	608	433	303	353	416	430	608	632	585
Number of outstanding loans (thousands)	2,629	2,624	2,613	2,585	2,579	2,571	2,536	2,508	2,510	2,491	2,473	2,458
Long-term loss ratio (percent)[a]	2 22	2 21	2.20	2 19	2 20	2 19	2 20	2 17	2 15	2 15	2 13	2.13
Portfolio status (percent)[b]	5 07	5 31	5 35	5 55	5 73	5 77	5 94	5 81	5 86	5 99	5 92	5 65
Value of savings												
Billions of rupiah	9,124	9,910	10,986	12,157	12,289	13,581	14,515	15,130	15,636	16,054	16,240	16,146
Millions of U S dollars	879	1,133	1,320	1,621	1,168	912	1,117	1,366	1,461	2,126	2,225	2,012
Number of savings accounts (thousands)	18,324	18,594	19,107	19,359	19,643	20,062	20,607	20,929	21,414	21,594	21,884	21,699
Pretax profit or loss[c]												
Billions of rupiah	–1 9	22.5	61 2	139 3	152 5	208 4	280.2	351 5	419.0	497 5	580 0	713 7
Millions of U S. dollars	–0.2	2 6	7.3	18 6	14.5	14 0	21 5	31.7	39 2	65 9	79 5	88 9
Return on assets (percent)	–0 2	1 5	2 6	4 2	3 6	3 9	4 2	4 4	4 5	4 5	4 6	4 9

a The long-term loss ratio measures the cumulative amount due but unpaid since the opening of the unit compared with the total amount due
b Portfolio status measures the aggregate amount of overdue principal installments compared with total principal outstanding
c Measured cumulatively within each year. At the end of each year all the unit desas' profits are transferred to Bank Rakyat Indonesia's general account
d. For the 1999 end-of-year exchange rate, there is a discrepancy between table 2 1 (volume 1) and this table Thus the 1999 dollar values of outstanding loans, savings, and profits are somewhat different in table 2 3 and this table. These discrepancies occurred because updated data from the International Monetary Fund (IMF) were used for this table In addition, for the consumer price index 1990 = 100 in table 2 1; here 1995 = 100
Source. BRI unit desa monthly reports; IMF, *International Financial Statistics* (March, May 2001)

Appendix

Rupiah–U.S. dollar exchange rates, consumer prices, and performance of Bank Rakyat Indonesia's unit desa system, December 1996–December 2000 (continued)

Indicator	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999	July 1999	August 1999	September 1999	October 1999	November 1999	December 1999
Exchange rate (end of period)	8,950	8,730	8,685	8,260	8,105	6,726	6,875	7,565	8,386	6,900	7,425	7,085[d]
Consumer price index (1995 = 100)	220.8	223 6	223.1	221 7	221 1	220.3	218 0	216.0	214.2	214 3	214 9	218 6
Value of outstanding loans												
Billions of rupiah	4,627	4,590	4,587	4,624	4,736	4,867	5,040	5,218	5,392	5,575	5,765	5,957
Millions of U S dollars	517	526	528	560	584	724	733	690	643	808	776	841[d]
Number of outstanding loans (thousands)	2,457	2,442	2,423	2,422	2,419	2,426	2,433	2,447	2,509	2,466	2,480	2,474
Long-term loss ratio (percent)[a]	2.16	2 15	2 13	2 11	2 09	2 07	2 07	2 05	2 03	2.01	2 02	2 06
Portfolio status (percent)[b]	5 98	6 08	5 98	5 93	5 75	5 57	5 37	5 11	4 92	4 73	3.88	3 05
Value of savings												
Billions of rupiah	16,174	16,394	16,836	17,288	17,500	17,676	17,612	17,579	17,630	17,857	17,669	17,061
Millions of U S dollars	1,807	1,878	1,939	2,093	2,157	2,627	2,562	2,324	2,102	2,588	2,384	2,408[d]
Number of savings accounts (thousands)	22,197	22,362	22,647	22,889	23,180	23,272	23,347	23,387	23,473	23,790	24,089	24,236
Pretax profit or loss[c]												
Billions of rupiah	85 1	183.9	292 5	412.0	554 3	805 9	886.3	980 5	1,069 5	1,146 2	1,197.1	1,190 3
Millions of U S dollars	9 5	21 1	33 7	49 9	68 3	119 7	128 9	129 6	127 5	166 1	161 2	168 0
Return on assets (percent)	6 8	7 1	7 3	7 4	7 8	9 2	8 4	8 0	7.6	7 2	6 7	6 1

Appendix

Rupiah–U.S. dollar exchange rates, consumer prices, and performance of Bank Rakyat Indonesia's unit desa system, December 1996–December 2000 (continued)

Indicator	January 2000	February 2000	March 2000	April 2000	May 2000	June 2000	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000
Exchange rate (end of period)	7,425	7,505	7,590	7,945	8,620	8,735	9,003	8,290	8,780	9,395	9,530	9,595
Consumer price index (1995 = 100)	221 5	221 6	220.6	221.9	223 7	224 8	227 7	228.9	228 8	231 4	234.5	239 0
Value of outstanding loans												
Billions of rupiah	5,889	6,013	6,141	6,238	6,478	6,713	6,869	7,019	7,183	7,396	7,733	7,827
Millions of U S dollars	793	801	809	785	752	769	763	847	818	787	812	816
Number of outstanding loans (thousands)	2,451	2,508	2,519	2,518	2,546	2,627	2,577	2,590	2,599	2,600	2,647	2,716
Long-term loss ratio (percent)[a]	2 07	2 04	2 04	2 02	1 99	1 96	1 95	1 92	1 90	1 86	1 85	1 90
Portfolio status (percent)[b]	3 20	3 18	3 15	3 20	3 07	2 99	2 97	2 94	2 95	2 87	2 82	2 51
Value of savings												
Billions of rupiah	17,249	17,420	17,478	17,606	17,890	18,055	18,472	18,755	18,797	18,994	19,144	19,115
Millions of U S dollars	2,323	2,321	2,303	2,216	2,075	2,067	2,052	2,262	2,141	2,022	2,009	1,992
Number of savings accounts (thousands)	24,115	24,423	24,576	24,484	24,619	24,883	25,098	25,300	25,489	25,642	25,832	25,823
Pretax profit or loss[c]												
Billions of rupiah	56 7	159 6	262.2	375 5	487 5	580 3	689.7	809 9	935 1	1,048 7	1,163 0	1,160 5
Millions of U S dollars	7 6	21.3	34.5	47 3	56 6	66 4	76 6	97 7	106.5	111 6	122.0	120 9
Return on assets (percent)	3 5	4.9	5 3	5 7	5 8	5.8	5 9	6 0	6.1	6 2	6 2	5 7

a The long-term loss ratio measures the cumulative amount due but unpaid since the opening of the unit compared with the total amount due
b. Portfolio status measures the aggregate amount of overdue principal installments compared with total principal outstanding
c Measured cumulatively within each year At the end of each year all the unit desas' profits are transferred to Bank Rakyat Indonesia's general account.
d. For the 1999 end-of-year exchange rate, there is a discrepancy between table 2.1 (volume 1) and this table Thus the 1999 dollar values of outstanding loans, savings, and profits are somewhat different in table 2 3 and this table. These discrepancies occurred because updated data from the International Monetary Fund (IMF) were used for this table In addition, for the consumer price index 1990 = 100 in table 2 1, here 1995 = 100.
Source. BRI unit desa monthly reports, IMF, *International Financial Statistics* (March, May 2001)

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Glossary and Acronyms

Note: Except for international acronyms, entries refer to Indonesia unless otherwise specified.

Abri	Angkatan Bersenjata Republik Indonesia, the armed forces
adat (Indonesian)	custom, tradition
afdeelingsbank (Dutch)	district bank
APEC	Asia-Pacific Economic Cooperation forum
arisan (Indonesian)	rotating savings and credit association
ASCA	nonrotating accumulating savings and credit association
ASEAN	Association of Southeast Asian Nations
AVB	Algemeene Volkscredietbank; General Popular Credit Bank, a precursor of BRI
bagian (Indonesian)	literally a part or a share. BRI divisions (*urusan*) are divided into sections (*bagian*).
Bahasa Indonesia	the national language
balai desa (Indonesian)	village hall
Bank Mandiri	A state-owned bank created in 1999 by the merger of four state banks
bank pasar (Indonesian)	market bank, a secondary bank
bank umum (Indonesian)	general bank, the first of two bank categories recognized by the 1992 Banking Law

BAPINDO	Bank Pembangunan Indonesia, State Development Bank
BAPPENAS	Badan Perencanaan Pembangunan Nasional, the National Development Planning Agency
BCA	Bank Central Asia, Indonesia's largest private bank
BDB	Bank Dagang Bali
BIMAS	Bimbingan Massal (Mass Guidance), the government's subsidized agricultural credit program operated through BRI, 1970–85
Bina Swadaya	Self-Reliance Development Foundation, based in Jakarta
BKD	Badan Kredit Desa, village-owned credit organizations established in the late 19th century during the Dutch colonial era; today they are supervised by BRI
BKKs/CJ	Badan Kredit Kecamatan, subdistrict credit organizations (LDKPs)in Central Java
BKKs/SK	Badan Kredit Kecamatan, subdistrict credit organizations (LDKPs) in South Kalimantan that are modeled on but independent of the BKK/CJ
BKKBN	Badan Koordinasi Keluarga Berencana Nasional, the National Family Planning Coordinating Board
BKPD	Bank Karya Produksi, People's Credit Bank (LDKP) in West Java
BPD	Bank Pembangunan Daerah, regional development banks that became general banks under the 1992 Indonesian Banking Law (also known as provincial development banks)
BPR	Bank Perkreditan Rakyat, People's Credit Bank, has two primary meanings. It refers to rural financial institutions that have met the criteria specified for the second of the two bank categories established by the 1992 Banking Law (the first category is general banks) and that are licensed as BPRs. The term BPR is also used to refer to the nearly 9,000 unlicensed People's Credit Banks (generic BPRs); the earliest generic BPRs were established in the late 19th century under the Dutch colonial regime.
BPU	(i) Bank Perniagaan Umum, the first private bank in Bali.(ii) Bank Pasar Umum, market bank for the public, established by I Gusti Made Oka and Sri Adnyani Oka in1968; the precursor to BDB.
BRI	Bank Rakyat Indonesia, a state-owned commercial bank
BRI unit *desa*	The lowest-level permanent outlet of BRI's micro-banking system, unit desas are located at subdistrict level and provide financial services to the villages (desas) of their subdistricts.
Brown planthopper	*Nilaparvata lugens Stal,* a pest that attacks rice plants. It induced large rice crop losses in Indonesia in the 1970s and

	1980s as new insecticide-resistant biotypes of brown planthopper developed.
BSD	Bank Shinta Daya, a private licensed BPR in D.I. Yogyakarta
BUD	Business Unit Desa, BRI's microfinance division, now called Microbanking Division
BUMD	Badan Usaha Milik Daerah, enterprise owned by a provincial government
BUMN	Badan Usaha Milik Negara, state-owned enterprise
CGAP	Consultative Group to Assist the Poorest, a multidonor-international consortium formed in 1995 to assist the development of microfinance. In 2001 CGAP had 29 member-donors; its secretariat is located at the World Bank in Washington, D.C.
compulsory savings	savings required as a condition of obtaining a loan. Also called forced or mandatory savings, such savings usually cannot be withdrawn until the loan is repaid or longer, and sometimes not until the borrower leaves the institution. Since borrowers do not have access to their savings during these periods, the effective interest rate of the loan is higher than the stated interest rate.
CPI	consumer price index
CPIS	Center for Policy and Implementation Studies, an Indonesian research and policy advising institution that grew out of DPIS
Dayak	an ethnic and linguistic category of people indigenous to the Central Kalimantan area
deposito berjangka (Indonesian)	time deposit account
desa (Indonesian)	village
DPIS	Development Program Implementation Studies. A HIID project (1979–83), funded by the Indonesian Ministry of Finance, that conducted field work in a number of Indonesian provinces and provided advice to the Indonesian government on four of its development programs. DPIS advised the government on the transformation of BRI's unit desa system from a channeling agent for subsidized credit to a commercial microfinance intermediary. CPIS was an outgrowth of the DPIS project.
DPR	Dewan Perwakilan Rakyat, Indonesian parliament
dwifungsi	"dual function;" refers to the Indonesian military's dual role in protecting political stability and preventing its deterioration
East Timor	Formerly a Portuguese colony, East Timor (Timor Timur) was annexed by Indonesia in the mid-1970s. In

	1999 East Timor voted overwhelming for independence (a vote followed by a massacre of East Timorese by Indonesian militias, supported by some elements in the Indonesian military). East Timor then became a United Nations protectorate, and in 2001 it was preparing for independent statehood.
effective interest rate	interest rate calculated on a declining balance basis—that is, the real cost of the money actually in the client's hand from time to time, in contrast to a flat interest rate calculated on the original loan balance. The computation of effective interest rates should incorporate all fees, commissions, compulsory savings, and other costs paid by the borrower to the lender for the use of the borrowed money during each period of the life of the loan. But in practice some or all of these costs to the borrower are frequently omitted in statements of effective interest rates.
FAO	Food and Agriculture Organization
financial intermediaries	organizations that provide financial products and services (such as credit, voluntary savings, payment services, and transfer facilities), intermediating between borrowers and lenders/savers
flat interest rate	rate of interest calculated against the original face amount of the loan (rather than, as in effective interest rate, on the declining balances owed after successive installment payments).
FPPI	Foster Parents Plan International
gabah (Indonesian)	dry, unhulled paddy
GDP	gross domestic product
GEMINI	Growth and Equity through Microenterprise Investments and Institutions, a USAID-funded project in the 1990s
GERTAK	Gerakan Serentak, a quasi-military drive to collect overdue BIMAS loans that began in 1981
giro	demand deposit account
GNP	gross national product
Golkar	*golongon karya,* or functional groups. Technically a coalition of groups, Golkar was the military-backed political arm of the Soeharto regime; it is now a political party.
gotong royong (Indonesian)	cooperation
grassy stunt	a virus carried by the brown planthopper; rice plants with grassy stunt disease do not form grains and have no yield
GTZ	Gesellschaft für Technische Zusammenarbeit GmbH, the German government's Agency for Technical Cooperation

Habibie, B.J.	Indonesia's third president, 1998–99
Haj	pilgrimage to Mecca (Saudi Arabia) made as part of the religious life of a Muslim
HIID	Harvard Institute for International Development
IBRA	Indonesian Bank Restructuring Agency
IDT	INPRES Desa Tertinggal, presidential instruction for backward villages. A program created in 1993 to provide support to backward ("left behind") villages.
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
informal commercial moneylenders	unregulated lenders whose subsidiary, primary, or sole occupation is the provision of credit with the expectation of profiting from the loan. Some lend at their own risk; others are brokers who intermediate between savers and borrowers—in which case the savers bear all or part of the risk.
ING	Internationale Nederlanden Bank, now ING Barings
INPRES Desa	A presidential instruction that provides an annual grant for development to each Indonesian village
INPRES Sekolah Dasar	A presidential instruction for the construction of primary schools
IRRI	International Rice Research Institute, the Philippines
Javanese	an ethnic and linguistic category of people who have traditionally inhabited the central and eastern parts of the island of Java
JITF	Jakarta Initiative Task Force. Established to restructure corporate debt, JITF acts as a mediator between private debtors and creditors.
kabupaten (Indonesian)	district
kecamatan (Indonesian)	subdistrict
KIK	Kredit Investasi Kecil, Small Investment Loan Program
KMKP	Kredit Modal Kerja Permanen, Small Permanent Working Capital Loan Program
KOSTRAD	Kommando Strategis Angkatan Darat, strategic reserve command of the Indonesian army
KPM	Kelompok Pengusaha Mikro, microenterprise group
Kredit Midi	A BRI unit desa loan program that provided loans up to $503 (1981–83)
Kredit Mini	A BRI unit desa loan program that provided loans up to $201 (1974-83); a precursor to KUPEDES
KSP	Kelompok Simpan Pinjam, Savings and Credit Group

KUD	Koperasi Unit Desa, government-supported village-level cooperatives (KUDs should not be confused with BRI's unit desas)
KUK	Kredit Usaha Kecil, Small Business Credit Program. A subsidized directed credit program begun in 1990 that directs all Indonesian banks to lend at least 20 percent of their volume of credit to small enterprises. The obligation of banks to provide KUK loans was suspended during the recent crisis.
KUKESRA	Kredit Usaha untuk Kesejahteraan Rakyat, the credit component of BKKBN's Prosperous Family Program, a subsidized Indonesian government program for women's groups
KUPEDES	Kredit Umum Pedesaan, the loan product of BRI's unit desas. KUPEDES is an acronym for general rural credit, but after 1989—when these loans were offered in urban units as well as rural ones—KUPEDES became widely known as general purpose credit.
KURK	Kredit Untuk Rakyat Kecil, Small Enterprise Credit Institutions {LDKPs) in East Java
KUT	Kredit Usaha Tani, Credit for Farm Enterprise Program. KUT is a government-subsidized agricultural credit program that is channeled through BRI's branches, but not through its unit desas.
ladang (Indonesian)	swidden agriculture, an ancient technique in which a small forest area is burned and rainfed crops are grown in the ashes. After a few years the cultivator leaves the small plot and starts a new one. Often the cultivator returns to the original plot after a number of years and begins the cycle again.
LDKP	Lembaga Dana dan Kredit Pedesaan, Rural Fund and Credit Institutions that are owned by provincial or local governments (or both). Some LDKPs have become licensed BPRs, but most are a subcategory of BPR, using the term in its generic sense.
leverage	use of equity as a lever to obtain additional funds by borrowing or taking deposits.
LKP	Lumbung Kredit Pedesaan, Rural Credit Organizations (LDKPs) in Nusa Tenggara Barat, a province in eastern Indonesia
long-term loss ratio	a measurement of loan portfolio quality used by BRI's unit desa system for KUPEDES loans: the cumulative amount due but unpaid since the opening of the unit desa relative to the total amount due
LPD	Lembaga Perkreditan Desa, Village-owned Financial Organizations supervised by the provincial government of Bali

LPN	Lumbung Pitih Nagari, People's Credit Banks (LDKPs) of West Sumatra
LPUK	Lembaga Pembiayaan Usaha Kecil, Institutions for Small Enterprise Finance (LDKPs) of South Kalimantan
lumbung desa (Indonesian)	village granary or paddy bank
Madurese	a linguistic and ethnic category of people who have traditionally inhabited the island of Madura and the north coast of the eastern extension of the island of Java
Mahabharata	One of the two main ancient sacred epics of Hinduism, the Mahabharata (literally "great" and "weighty") was composed by the sage Vyasa. "What is here is found elsewhere; what is not here is not to be found anywhere." Through its stories and teachings the epic illustrates principles of truth and spiritual realization. The Bhagavad Gita, containing the great battlefield dialogue between Arjuna and Lord Krishna, a reincarnation of the god Vishnu, is retold in the Mahabharata. Adapted to local culture in Indonesia, the Mahabharata has been incorporated into the Indonesian *wayang* (shadow puppet theater) repertory.
MFI	microfinance institution
microfinance	small-scale financial services provided to low-income clients
MPR	Majelis Permusyawaratan Rakyat, People's Consultative Assembly
Nahdlatul Ulama	Indonesia's largest Muslim organization
NAM	nonaligned movement
NASAKOM	Nasionalisme, Agama, Komunisme (nationalism, religion, communism), a coalition grouping under President Sukarno
New Order government	the Soeharto government
NGO	nongovernmental organization
1945 constitution	the original Indonesian constitution under which the nation operates. The 1945 constitution, replaced by two successive constitutions in 1949 and 1950, was restored in 1959.
OKM	Operasi Karya Makmur, a quasi-military drive to increase BIMAS participation that began in 1981/82
OPEC	Organization of Petroleum Exporting Countries
P4K	Pembinaan Peningkatan Pendapatan Petani-Nelayan Kecil, Income Generating Program for Small Farmers and Fishermen. Sponsored by Indonesia's Ministry of

	Agriculture and international donors, P4K is a subsidized group-based program with a credit component that is administered through BRI's branches, but not through its unit desas.
PAKDES I	Paket 23 Desember 1987, Indonesian government package of deregulation measures on capital market policy
PAKDES II	Paket 20 Desember 1988, continuation of PAKDES I capital market reforms
PAKJAN	Paket 29 Januari 1990, followup to PAKTO 88 on credit
PAKMAR	Paket 25 Maret 1989, followup to PAKTO 88
PAKTO 88	Paket 27 Oktober 1988, Indonesian government package of financial, monetary, and banking reforms
palawija (Indonesian)	secondary crop
Pancasila	the five guiding principles of Indonesian state ideology: belief in one supreme being, Indonesian unity, humanitarianism, democracy by representative consensus, and social justice
PDI	Partai Demokrasi Indonesia, Indonesian Democratic Party
PDI-P	Partai Demokrasi Indonesia-Perjuangan, Indonesian Democratic Party-Struggle. Megawati Soekarnoputri contested the 1999 general elections as head of PDI-P (the P for Perjuangan symbolizes the struggle against Soeharto, who had her removed as head of the earlier PDI when he was president)
PDP	Provincial Area Development Project, a USAID-supported project to assist the BKKs of Central Java in the 1980s
pekarangan (Indonesian)	mixed garden cultivation, usually in small household or village plots
PHBK	Program Hubungan Bank dan Kelompok Swadaya Masyarakat, Program to Link Banks and Self-Help Groups. A subsidized technical assistance and credit program sponsored by Bank Indonesia and GTZ.
PKB	Partai Kebangkitan Bangsa, the National Awakening Party. Abdurrahman Wahid contested the 1999 general elections as head of the PKB.
PKI	Partai Komunis Indonesia, Indonesian Communist Party
portfolio at risk	a measurement of loan portfolio quality, defined as the total outstanding balance of loans with late payments divided by the total outstanding balance of the loan portfolio
portfolio status	a measurement of loan portfolio quality used by BRI's unit desas, defined as the aggregate amount of overdue principal installments relative to total principal outstanding

PPD	*pos pelayanan desa,* village service post, a subunit of a unit desa
PPP	Partai Persatuan Pembangunan, United Development Party
pribumi (Indonesian)	indigenous Indonesian
quintal	a unit of mass equal to 100 kilograms
Ramayana	ancient Sanskrit epic, written originally by Valmiki. One of the two great sacred epics of Hinduism, the *Ramayana* illustrates righteous ideals through the story of the god Vishnu's incarnation on earth as Rama, the prince of Ayodhya. The Ramayana, adapted to local culture in Indonesia, has been extensively incorporated into the Indonesian *wayang* (shadow puppet theater) repertory.
resurgence-causing insecticides	nonselective use of certain insecticides can cause the rapid emergence of new biotypes of insecticide-resistant pests, also killing the natural enemies of the pests; this can result in a rapid increase in pest populations, known as resurgence (see *brown planthopper*)
ROSCA	rotating savings and credit association
rupiah	unit of Indonesian currency
savings collector	an individual or association that holds the savings of clients (usually poor savers) and charges a fee for the service. Typically savings collectors operate in the informal, unregulated economy, but some are registered organizations.
sawah (Indonesian)	irrigated rice fields (regardless of source or quality of irrigation)
SBI	Sertifikat Bank Indonesia, Bank Indonesia certificate; a security issued by the central bank
SDI	subsidy dependence index. Measurement of the percentage increase in the average yield obtained on a loan portfolio needed to compensate for the elimination of all subsidies in a financial institution.
Shari'a	Islamic law
short-term loss ratio	a measurement of loan portfolio quality used by BRI's unit desas that measures monthly changes in the components of the long-term loss ratio
SIMASKOT	*simpanan kota* (urban savings), a savings product offered in BRI's urban unit desas
SIMPEDES	*simpanan pedesaan* (rural savings), a savings product offered in BRI's rural unit desas
Soeharto	Indonesia's second president. Acting president 1967, president 1968–98
Soekarnoputri, Megawati	Sukarno's daughter; Indonesia's fifth president, 2001–present

Sukarno	Indonesia's first president, 1949–67
Sundanese	an ethnic and linguistic category of people who have traditionally inhabited the western part of the island of Java
SUSENAS	Survei Sosial Ekonomi Nasional, a periodic socioeconomic survey that reports on Indonesian consumption, income, and other variables
TABANAS	*Tabungan nasional,* a national savings product
TAKESRA	Tabungan Kesejahteraan Rakyat, the savings component of BKKBN's Prosperous Family Program, a subsidized Indonesian government program for women's groups
TAMADES	*Tabungan masyarakat pedesaan,* a savings product of the Central Java BKKs
tani (Indonesian)	farmer
tegalan (Indonesian)	dryland that is normally continuously cropped but is not irrigated
transaction costs	when a lender (formal or informal) provides a loan to a borrower, both parties bear transaction costs. Such costs to the lender include obtaining information about the creditworthiness of the borrower, administering the loan, and collecting it. Transaction costs that borrowers may incur include the opportunity cost of time spent traveling, preparing a loan application, and (in group lending programs) attending meetings; transportation costs; and bribes to officials.
TSP	triple superphosphate, one of the fertilizers in the BIMAS packet
twelve-month loss ratio	a measurement of loan portfolio quality used by BRI's unit desas that measures the change over the most recent 12-month period in the components of the long-term loss ratio
UBM	unit business manager, a unit desa supervisor based at the unit's supervising branch
UDO	unit development officer, supervisor of unit business managers at large BRI branches
UDR	unit development report, a monthly report assessing the condition of each BRI unit desa based on 26 indicators
UNDP	United Nations Development Programme
urusan (Indonesian)	the primary meaning of the word is business; BRI is divided into divisions called urusan
USAID	United States Agency for International Development
Vishnu	the Sustainer in the Hindu holy trinity of Brahma the Creator, Vishnu the Sustainer, and Siva the Destroyer. Rama and Krishna are among the human forms in which the god Vishnu appears.

volksbank (Dutch)	people's bank
Volkscredietwezen	popular credit system: credit institutions established in Indonesia by the Dutch colonial administration to provide banking services to indigenous Indonesians. Also the name of an early 20th century journal about the institutional history of the Indonesian popular credit system.
voluntary savings	savings that are deposited voluntarily in a financial institution.
Wahid, Abdurrahman	Indonesia's fourth president, 1999–2001
wayang (Indonesian)	traditional Javanese shadow theater, the most common form of which is puppet theater. Wayang interweaves entertainment, art, philosophy, ethics, history, mythology, and commentary on current events. An ancient art, wayang is extremely popular in Indonesia, especially on Java and Bali.
WOCCU	World Council of Credit Unions

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See inside for sample questions and additional comments

Around the world, a revolution is occurring in finance for low-income people. The microfinance revolution refers to the delivery of financial services to the economically active poor on a large scale through competing, financially self-sufficient institutions. In a few countries this has already happened; in others it is under way. The emerging microfinance industry has profound implications for social and economic development. For the first time in history, capital is well on its way to being democratized.

The Microfinance Revolution, in three volumes, is aimed at a diverse readership—economists, bankers, policymakers, donors, and social scientists; microfinance practitioners and specialists in local finance and rural and urban development; and members of the general public interested in development. The first volume, *Sustainable Finance for the Poor,* focuses on the shift from government- and donor-subsidized credit systems to self-sufficient microfinance institutions providing voluntary savings and credit services. This second volume, *Lessons from Indonesia,* examines the remarkable lessons from Indonesia's long history of commercial microfinance—its stability, outreach, and profitability even during the recent severe crisis—and focuses on Bank Rakyat Indonesia's (BRI's) unit *desa* system, the world's largest sustainable microbanking system. The third volume, *The Emerging Industry* (much of which was written with Peter J. Fidler), explores commercial microfinance around the world and offers a preview of it in 2025.

This second volume focuses on Indonesia, the first country to develop large-scale commercial microfinance. Chapter 8, an introduction to Indonesia through mid-2001, and chapter 9, a review and critique of the country's rural development and rural financial institutions, provide background for understanding microfinance in Indonesia today. Bank Dagang Bali, the oldest licensed general bank specializing in commercial microfinance currently operating in a developing country, is discussed in chapter 10.

The development and growth of BRI's microbanking (unit desa) system from 1970–96 are considered in chapters 11–15. Chapter 11 examines the system as it developed into a massive, failed subsidized rural credit program (1970–83). Chapters 12–14 explore the unit desas' transformation into a nationwide commercial microbanking system (1984–96). Topics covered include policy issues, lending, savings, and organizational reforms. Chapter 15 documents and analyzes the extraordinary stability of the unit desas through 2001—with some 20 million clients and more than 15 years of profitability—and other commercial microfinance organizations during Indonesia's recent crisis.

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