REFORM, GROWTH AND RESILIENCE OF SAVINGS-LED COMMERCIAL MICROFINANCE INSTITUTIONS: THE CASE OF THE MICROBANKING UNITS OF BANK RAKYAT INDONESIA[1]

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Abstract

For three decades microfinance has rapidly expanded around the globe. The recent global crisis was feared to have stopped, if not reversed, this process. CGAP reported in 2009 that the microcredit portfolios of many MFIs "are stagnant or shrinking". This study is based on the hypothesis that savings-led MFIs tend to be resilient to such crises, presenting the units of Bank Rakyat Indonesia (BRI) as a case. During the 1970s the units served as channels for subsidized credit. A global crisis in 1982 forced the bank to either close or reform them. With new savings and credit products at market rates of interest, they grew into the largest provider of microfinance. When crisis hit in 1997/98 and again in 2008/09, they proved resilient. Moreover, in 1998 they inspired the restructuring of insolvent BRI, now the most profitable bank with the widest (inclusive) outreach in Indonesia.

Keywords: *Commercial Microfinance, Global Financial Crisis, Microbanking, Savings Mobilization, State Bank Reform;* Indonesia.

JEL Classification: G01, G21.

INTRODUCTION

A wide range of financial institutions offer services to low-income people. Among them are national commercial and development banks, rural banks, agricultural and financial cooperatives, charities and credit NGOs, as well as self-help groups (SHGs) and other types of informal financial institutions. Some institutions, as in India, have ancient roots (Bhargava, 1934; Seibel 2010a). More recent origins during the 18th and 19th century in Europe (Fishlow, 1961; Moody & Fite, 1984; Raiffeisen, 1866/1970; Seibel, 2003) have brought about financial cooperatives, cooperative banks and savings banks

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in various parts of the developed and developing world since around the turn of the 19th to the 20th century (Huss, 1924; Strickland, 1922; Seibel, 2009). In response to external crises or policy changes various institutions (like Bank Rakyat Indonesia in its history since 1895) have spanned several categories, changing their ownership (private, investor, government, community, member, donor, or mixed) as well as their mission and structure. Well into the 1970s and 1980s agricultural development banks, frequently using groups or cooperatives as loan channels, were the most important providers of (subsidized) microcredit, together with other government – and donor – financed directed credit programs. Their poor performance and lack of outreach to small farmers and the poor (Donald, 1976; Von Pischke et al., 1983; Adams et al., 1984) eventually led to reforms of some of them (Seibel et al., 2005; Seibel, 2009; Yaron, 2006), but were also a major factor behind the emergence of a broad spectrum of credit NGOs. They focused on low-income people, but suffered from similar flaws as the development banks: donor dependency, interest rate subsidization, lack of profitability and, as a result, restricted outreach. A paradigm change, referred to since the 1990s as the *microfinance*[2] revolution, set out to resolve these flaws, focusing on profitability as a prerequisite of sustainability and growth of outreach. Spearheaded and documented by CGAP[3] as its think tank, this had led to an enormous expansion of the market, covering, as *inclusive finance* (UN, 2006), the poor as well as micro and small enterprises as target markets. Microcredit and microfinance have met with great expectations and enthusiasm, celebrated at microcredit summits since 1997, the International Year of Microcredit 2005 and the Nobel Peace Prize in 2006. This has attracted donors and also investors (CGAP, 2009b). In recent years, however, microcredit and microfinance have increasingly met with criticism, disappointment and heightened scrutiny (eg, Harper, 2003; Dichter, 2006; Dichter and Harper, 2007; Bateman, 2010)[4].

Little research has been done on crisis resilience by type of financial institution. Broadly speaking, there are two major types of financial institutions: those relying predominantly on savings[5] as a source of funds and those rely-

[2] The term microfinance was introduced in 1991, defined as the provision of both microsavings and microcredit as core services (Seibel. 1991, 1996, 2006).

[3] Consultative Group to Assist the Poor, www.cgap.org, www.microfinancegateway.org, www.mixmarket.org.

[4] See Intellecap (2010) and Justin (2010) on overindebtedness and the recent microfinance crisis in Andhra Pradesh.

[5] In many countries savings are so important to people that they are willing to pay for their collection at doorsteps, enabling them to have access to their accumulated savings (usually at the end of the month) instead of having to borrow (see: Daily deposit collection, in Seibel 2001).

ing on external funds by government, donors or investors. Contrary to the predominant paradigm of poverty lending in the 1960s and 1970s, there is mounting evidence (also well known to the anthropologist and economic historian) that the poor can save and have done so at all times and that institutions which accept their small savings for safekeeping and accumulation do them a great favor (United Nations 1986; Rutherford 2000). They also do themselves a great favor, be they informal, semiformal or formal, by generating a growing source of loanable funds.

While this is not a comparative study, the underlying hypothesis is that savings-led institutions tend to be resistant to external crises. This is one of three studies of such institutions in Southeast Asia: the People's Credit Funds, financial cooperatives under central bank regulation in Vietnam (Seibel with Tam 2010); village financial institutions (Lembaga Perkreditan Desa, LPD) under provincial law in Bali (Seibel, 2008, 2010b); and the village units-turned-microbanking units, a business segment of Bank Rakyat Indonesia (BRI), presumably the largest sustainable commercial microfinance network in the developing world.

This paper deals with the microbanking units (MBUs) of century-old Bank Rakyat Indonesia (BRI), transformed in 1984 from channels of subsidized targeted credit into savings-led profit-oriented financial intermediaries – long before the restructuring of BRI in 2000. How have the units, as a model of savings-led commercial microfinance, weathered first the Asian financial crisis and the concomitant meltdown of BRI in 1998, and then the global crisis of 2008/09? In a wider context, the reform of the units is part of the variegated history of the reform of state-owned agricultural development banks and of the transformation of BRI into a partially privatized commercial bank (Seibel, Giehler & Karduck, 2005; Seibel, 2009).

Chapter 1 poses the question of the resilience of savings-led microfinance in the framework of the recent financial crisis and global meltdown. Chapter 2 presents the history of crisis and reform in BRI since 1895 and its more than a century-old struggle for inclusive finance. In chapter 3 we show how this struggle took a new form with the establishment of village units (*unit desa*) in 1969 as a policy instrument for channeling subsidized credit to agriculture, their decline and, in 1984, their transformation into savings-led microbanking units with ever-increasing outreach and profitability. Chapter 4 describes how the reformed units experience their first historical test, during the Asian financial crisis. When the banking sector folded under bank runs and mounting defaults, the units collected vast amounts of additional deposits, their customers continued to repay their loans, and profitability remained high. BRI was one of the insolvent banks, pulled down by the dead weight of its corporate portfolio. Yet, as shown in Chapter 5, BRI was not merged with other defunct state banks, but restructured in 2000, practically saved by the units: their continual outstanding performance and their international reputation. Since then BRI has been partially privatized, returned to its original inclusive MSME (micro, small and medium enterprises) mission and grown into the most profitable bank with the largest outreach in Indonesia. Chapter 6 focuses on the units as they experienced their second historical test: the global financial crisis. Chapter 7 concludes that the microbanking units are a model of savings-based commercial microfinance, to be emulated.

1. MICROFINANCE AND THE GLOBAL MELTDOWN

For three decades, microfinance has rapidly expanded around the globe. By the end of 2008, microfinance investment vehicles (MIVs) had invested US$6.6 billion in microfinance institutions (MFIs), and almost as much had been provided by donors (CGAP 2009b). It is now feared that this process of growth might have been reversed, or at least come to a standstill, as stated in the American Banker: "The $32-billion microfinance sector has been pounded by the worst economic slowdown since the Great Depression… growth has pulled back significantly, with MFIs hampered by the capital constraints endemic to the financial market meltdown". (Rosta, 2009) On the basis of a survey among over 400 MFIs in 82 countries, CGAP (2009a), the microfinance sector's think tank and global advocate, reports that over the past eighteen months, "many MFIs are finding it harder to access funding, and their microcredit portfolios are stagnant or shrinking – a significant shift after years of remarkable growth". Of the top ten risks facing the microfinance sector in 2008/09, nine were reportedly related, directly or indirectly, to the economic meltdown, with credit risk and liquidity the two biggest. By the end of 2010 the leaders of 533 MFIs still considered credit risk the biggest threat[6] (CSFI, 2011, p. 6).

As CGAP realizes, its findings – like those of the Microfinance Banana Skins survey (CSFI, 2011) – are not based on a random sample. In fact, many of the microfinance institutions (MFIs) which make headlines and are found on the *Microfinance Information eXchange* (*MIX)* have enjoyed disproportionate support from international donors and investors; in fact, many of them

[6] Reasons included overindebtedness, highlighted by the microfinance crisis in Andhra Pradesh (Intellecap, 2010; Justin, 2010), which sent shock waves through the global microfinance community and beyond.

are microcredit institutions, not financial intermediaries in the original sense of microfinance[7]. Institutions which rely on their own resources, particularly deposits, and do not have a donor paying for their participation at international gatherings are less conspicuous. Least conspicuous are those savings-led MFIs which occur in numbers too large to be individually listed, eg, 1,350 village financial institutions (LPDs) in Bali (Seibel, 2008, 2010), 1,015 rural credit cooperatives (PCF) in Vietnam (Seibel & Tam, 2010) and also the 4,300 microbanking units of Bank Rakyat Indonesia (Seibel 2005, 2009) which are the subject of this paper, to mention just three subsets in Southeast Asia. They comprise almost 6,700 MFIs with a total savings balance of $7.1 billion as of 31 December 2008 – more than the total investments at the time by MIVs worldwide. Have these MFIs been equally affected by the global meltdown? Does it make a difference whether MFIs rely on their own resources rather than on those of donors and investors?

2. BANK RAKYAT INDONESIA: A HISTORY OF CRISIS AND REFORM

The people's (*rakyat*) credit system in Indonesia owes its very origin to crisis, poverty and globalization. In the last decades of the 19th century a number of factors pounded the rural population and led to its impoverishment: coercive recruitment of plantation labor until 1870; the opening up of the rural sector to European and Chinese capital after the Agrarian Law of 1870 which exposed the sector to the fluctuations of global markets; land shortage caused by an expanding plantation economy; a global commodity crisis in 1884 which led to the collapse of the agricultural investment banking sector in Indonesia; and a growing indebtedness to Chinese and Arab moneylenders. As in various European countries at the time, usury and the resulting indebtedness were considered a major cause of impoverishment – a social as well as a political concern threatening the stability of the Dutch colonial system. A popular credit system – in today's terminology: *inclusive finance* – appeared as a panacea. In the first decades of the 20th century, policy issues of how best to achieve this objective were hotly debated, focusing on such issues as social vs. commercial banking, centralized vs. decentralized local institutions, subsidized vs. commercial credit, and government dependence vs. self-reliance based on savings mobilization and retained earnings.

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[7] By the end of 2009 1,121 MFIs reported a total gross loan portfolio of nearly $71 billion to the MIX (www.mixmarket.org), while 619 MFIs reported total deposits of $27 billion.

This is the historical background for the emergence of Bank Rakyat Indonesia (BRI), which occupied a central place in these policy debates. BRI dates its origins to the *Hulp en Spaarbank der Inlandsche Bestuurs Ambtenaren* in Purwokerto Regency on Java, established in 1895[8]. Since 1897 it was popularly known as *Volksbank* (*bank rakyat*, people's bank). A financial intermediary from the beginning, it provided savings products and credit in cash or kind to Indonesians of any occupation and to European civil servants. It underwent many transformations and changes of name, until it was finally reestablished in 1968 as a commercial bank and, at the same time, the government's main policy instrument in the rural sector, with the task of financing rural development and the green revolution. In the tradition of the *dual economy* of the colonial period, BRI was given a dual function: commercial *general* lending to the middle class including small and medium enterprises according to banking criteria, and concessionary *special* loan programs for small farmers and microentrepreneurs. Heavily subsidized credit programs designed by government and donor agencies increasingly dominated BRI's agenda. (BRI, 1995; Patten & Rosengard, 1991; Seibel, 1989, 2009)

3. THE REFORM OF THE BRI UNITS: FROM SUBSIDY TO SAVINGS-BASED SELF-RELIANCE

In 1969 BRI was appointed as the only bank for Bimas, a program of subsidized agricultural credit with the main objective of rice self-sufficiency. Liquidity was provided by Bank Indonesia, the central bank, credit insurance by Ascrindo, a state insurance company. As a delivery channel BRI established a network of village units (*unit desa*) as sub-branches at sub-district (*kecamatan*) level, placed under BRI's district (*kabupaten*) level branches (Kuiper 2004, pp. 40-44, 166). Their number grew rapidly: from 18 in 1969 to 537 in 1970 and, after a surge in the oil price in 1973, to 2131. Other subsidized credit programs were added[9]. In 1974 the units were authorized to collect savings – at an interest rate of 15%, compared with 12% charged on loans; because of the inverted interest rate structure savings remained an insignificant (and loss-making) source of funds.

In 1971, Bimas loans accounted for 15% of the total amount, and 80% of

[8] The funder was Raden Bei Aria Wiryaatmadja, Vice-Regent of Banyumas, who in 1894 had given a low-interest loan from his own pocket to a teacher to pay back a usurious loan from a moneylender (BRI 1995, p. 5) – similar to the founding story of the Grameen Bank, some 80 years later.

[9] *Mini Credit* in 1974, *Maxi Credit* in 1980 (BRI, 1995, p. 67).

the number, of BRI loans outstanding. One third of the Bimas clients were in arrears, resulting in a loss ratio of 17.5%, with a deteriorating trend. With the boom of the oil price in 1973 the flow of cheap credit increased drastically, and so did numerous local and rural development grants (Kuiper 1004:116), blurring the line between grant and credit in the minds of the *beneficiaries*. To the borrowers, the benefits of subsidized credit were drastically reduced by several factors: a shift of transaction costs from lender to borrower, onerous procedures; restriction of loan purposes to production-oriented agricultural targets, frequent delays beyond the agricultural input time, and illegal extra charges by loan officers which in turn made it difficult for them to enforce repayment. As BRI (1995:62) noted, many borrowers were not farmers but "village authorities and individuals who had no relation at all to agricultural activities and this mismanagement of credit had much to do with the occurrence of problem loans". In the absence of incentives for small farmers to repay and for the staff at the units (numbering 14,000) to enforce repayment, the default rate had surged by 1982 to above 50%, resulting in heavy losses. Robinson (2005, p. 5) reports that none of the 3,600-odd units were profitable.

The decline of the oil price in 1982, another global event, marked a turnaround in rural finance policy. The loss of income from oil exports initiated an era of deregulation and a shift from a supply-driven to a demand-oriented approach. In the process market forces increasingly replaced the government as prime mover of development. Policy measures in 1983 comprised full interest rate deregulation, the elimination of credit ceilings and a reduction of central bank liquidity credit. This terminated the disbursement of program credit by the BRI units, putting the future of the network at risk. At the time BRI comprised 292 branches and 3617 village units, with a total of 31,777 employees, 45% of them in the units (BRI, 1995, p. 76) – the largest delivery network of any bank in Indonesia. BRI was given two options: closing or reforming the units. In August 1983 BRI was placed under new management. Kamardy Arief, newly appointed as president-director, opted for the latter, encouraged by the Minister of Finance. This marked the beginning of a process which eventually made BRI one of the largest and perhaps the most successful provider of commercial microfinance in the developing world. With technical assistance from the Harvard Institute for International Development (HIID), a new system was designed, turning the village units into microbanking units, implemented as of February 1984.

Under the new organizational system the units were separated from the branches and placed under their own administrative structure. Designed to remain micro, the standard staff size of a unit was set at four, which may expand up to eleven beyond which a unit is to be split into two. The units were turned into self-sustaining profit centres with substantial profit-sharing incentives for their staff; but when arrears exceeded 5%, unit managers would lose their lending authority as well as career prospects. Units were moved from rice planting areas to business centers, mostly at the subdistrict administrative center, providing financial services to the farming and non-farming population; unprofitable units would be closed or downgraded to service posts. Training and retraining were organized in regional centers. All government – and donor-supported programs were kept away from the units and handled by the branches.

At the market segment level the units moved away from the previous commodity approach with its emphasis on farmers, crop agriculture and seasonal loans. Credit was provided to any credit-worthy person and for any income-generating activity within the subdistrict, such as petty-trading, agricultural input trade, industry, services, agriculture, horticulture, small plantations and livestock as well as consumer credit. The units started a proactive approach to the market: anyone was considered a potential customer who was able to save and repay his loans, with no compulsory savings and no targeted credit.

At the product level, the credit-only approach was replaced by an equal emphasis on product innovations in savings and credit. Later, money transfer, cheque clearing and bill payment were added, and unlimited withdrawals of savings were permitted at any unit throughout the country. In emergencies and other cases, this enables customers to withdraw their savings instead of going into debt. On the basis of calculations of the transaction costs of both microsavings and microcredit, two new commercial products were crafted, both with commercial rates of interest. One is a rural savings product, *Simpanan Pedesaan* (Simpedes), with unlimited withdrawals and a lottery component with prizes in monthly public events, complementing demand and time deposits and other savings products. Of the gross interest rate of 13%, savers received 11.5%, while 1.5% was put into the prize fund. Except during the Asian financial crisis, inflation rates were single digit, and returns positive in real terms. Simpedes turned out to be immensely popular and served as a most effective instrument of resource mobilization.

The other product is a non-targeted general credit product, *Kredit Umum Pedesaan* (Kupedes), open to all and for any purpose. Portfolio diversification is thus ingrained in a single product. Loan sizes started as low as $3[10] up to a maximum of $5,000, towards the end of 2008 increased to $10,000. Its fea-

[10] In 2004 Robinson (2005: 12) reported minimum loans of $25. Loans below $100 are rare nowadays.

tures include simple procedures, short maturities, regular monthly installments mainly from non-agricultural income, flexible collateral requirements (none for small loans up to $500), incentives for timely repayment, repeat loans contingent upon successful repayment of previous loans, and market rates of interest. Loan interest rates were calculated as a monthly flat rate with constant monthly payments, which is easy to comprehend for staff and borrowers. Interest rates amounted to 2% flat per month on working capital loans and 1.5% on investment loans, equal to gross effective rates of respectively 44% and 33% per annum, minus 11% for timely repayment. Net effective interest rates for the majority of borrowers (95% and more) were thus respectively 33% and 22% per annum, covering all costs and risks. With increasing scale and efficiency, interest rates have come down. By 2008 loan terms had become more flexible; and the gross flat rate of interest stood at 1.0% to 1.5% per month depending on loan size; deducting the rebate, the effective annual interest rate stood at 16.5% to 24.75% or approximately 7% to 15% in real terms. The rebate for timely repayment turned out to be a powerful incentive to repay on time. The arrears ratio (≥ 1 day overdue) was 5.4% in 1984, fluctuated over time but on the whole has shown a declining trend, down to just above 1% since 2005 (just like the 12-month loss ratio). The number of loan accounts has grown continually, except during the Asian financial crisis, and reached 4.7 million accounts with an outstanding loan amount of $5.7 billion in 2009.[11] (Appendix 1)

A mandatory loan protection life insurance scheme has been included since inception in all Kupedes loans (regardless of size), covering the unpaid balance in case of death. After a pilot in 2009 BRI is now also offering health insurance to Kupedes borrowers with a loan above 10 million Rupiah ($1,100 at the exchange rate of 31 December 2010) and their dependents. There is a one-time premium of 50,000 Rupiah ($5.50) for each person so insured, due at the time of disbursement. The scheme covers only the first year of the loan period. 40% of all borrowers are enrolled as of April 2010.

Three sources of funds were available to the BRI units at inception: (i) an injection of Rp210 billion ($196 million) of seed capital in 1984 by the Government as start-up liquidity, fully used by 1986; (ii) a World Bank loan of $102 million ($5 million for technical assistance in 1987 and $97 million for onlending in 1989, but reallocated due to surplus liquidity at the units); and (iii) savings deposits (remunerated at positive real returns). As of 1986 the units turned a profit; and in 1988 and 1989 they accounted for 30% of BRI's

[11] The average outstanding loan balance grew from $197 in 1985, $389 in 1990 to $611 in 1995, $300 in 2000, $700 in 2005, $875 in 2008 and $1210 in 2009 (calculated from Appendix 1).

total net income. At the same time BRI was able to show in an impact study that the units have a significant impact on access to credit, also by women, and on poverty alleviation (Yaron, 1992: 99) – despite interest rates well above the break-even point[12].

In 1989, the units broke even in terms of the balance of savings mobilized and loans outstanding and began generating surplus liquidity. Ever since, the unit network has been self-reliant and viable by mobilizing its own resources and generating profits. Disbursement of the World Bank loan in 1989 came thus at a time when the units had outgrown the need for it; the credit line was reallocated to the branch network. Surplus liquidity continued to grow, reaching $2.0 billion in 2008. The total surplus mobilized (and transferred to the branches) from 1989 to 2008 amounted to $24.7 billion[13] – an indicator of successful savings mobilization as much as of limitations in lending outreach.

The number of savings accounts[14] has increased continually since 1984. As of 2005, the BRI units served 32 million savings accounts. During 2006 to 2008 BRI closed inactive accounts, resulting in a reduction to 19.6 million accounts as of 2008; they increased to 21.2 million accounts in 2009. Savings balances crossed the $1 billion mark in 1991 and the $2 billion mark in 1993, fell briefly below that mark at the time of the Asian financial crisis and reached $5.9 billion in 2008 and $8.0 billion in 2009, averaging $377 per account. Net profit of the units amounted to $564 million in 2008 and $787 million in 2009. Self-reliance in terms of fund mobilization and profitability has created the material base for their autonomy and freedom from political interference which so severely afflicted the rest of the banking system up to the crisis of 1997/98. (BRI 1995; BRI reports 1990-2010; Kuiper 2004; Patten & Rosengard 1991; Robinson 2001, 2005; Schmit 1991; Seibel 1989, 1998, 2003, 2005, 2009; Yaron 1992, 2000)

In recent years the units have matured to the point where BRI has been introducing some innovations: customized products, depending on the demand in a given area; flexible loan periods, raised from 12 to a maximum of 74 months; an increasing emphasis on banking services in addition to savings

[12] Yaron et al. (1997) found that BRI could, and suggested that it should, have lowered the loan interest rate of the units, given their high profitability. Until 1997 BRI made no adjustment; but during the Asian financial crisis it kept the interest rate below the (hyper-) inflation rate. In recent years, with increasing loan sizes, BRI has differentiated and lowered the interest rate (Seibel 2005).

[13] Calculated at the respective year-end exchange rates.

[14] As the units offer different savings products, their number includes multiple accounts and does not equal the number of individual depositors.

and loans; IT-based services in addition to personal approach (all units are now fully online); electronic data capture (EDC) through palm tops, enabling credit officers to accept cash in the field; and a line management system of internal control and supervision (see Box 1). (BRI 1990-2010; Seibel 2009)

Box 1: Internal control and supervision of the units

The line management control system includes passive oversight through reports and active oversight on-site. It comprises five organizational levels of oversight:

- Internal control within the unit:
  - Separation of functions to mitigate risks: cash transactions (recording, custody, authorization), loan processing (registration, investigation, authorization) and non-cash transactions (making, checking, signing)
  - Unit manager: daily, on-site
  - To prevent collusion unit managers are rotated every two years
- Branch (supervising 10-35 units):
  - One internal controller (selected from former unit managers, rotated every two years) for every 4 units: 4 days each every month, on-site
  - Micro Business Manager or Assistant Manager (MBM/AMBM): 3 to 4 times per month on-site; monthly off-site through reports
  - Branch manager: on-site once a year and off-site
- Regional office:
  - Monthly off-site and a sample of units annually on-site
- Regional internal audit office:
  - On-site every 18 months or more often if necessary
- Head office Microbanking Division:
  - On-site case by case as problems arise; and monthly off-site

Source: Based on a presentation by the BRI International Visitors Program for the Postal Savings Bank of China, December 2008.

The microbanking units of BRI have grown into the developing world's largest sustainable microbanking system (Robinson, 2005). Concern has variously been expressed over the risk of exorbitant growth rates of microcredit institutions (particularly, most recently, in Andhra Pradesh (Intellecap, 2010; Justin, 2010). Savings-led MFIs – like the BRI units – are unlikely to face this risk; in fact, the average annual growth rates of savings and credit portfolios (in US$ at the respective annual exchange rates) from 1985 to 2009 were a modest 27.2% and 21.0%, respectively[15].

[15] Calculated on the basis of data in Appendix 1.

4. THE MICROBANKING UNITS DURING THE ASIAN FINANCIAL CRISIS

During the crisis of 1997/98 the currency collapsed, and so did the Indonesian commercial banking sector[16], as a result of external regional factors and internal weaknesses. BRI was one of the insolvent banks, pulled down most of all by the failure of its corporate portfolio. From December 1996 to December 1998, total assets in US$ terms (after a drastic devaluation) fell from $14.44 billion to $4.25 billion, gross loans outstanding from $11.23 billion to $5.41 billion, deposits from $8.10 billion to $5.34 billion, and total equity from $0.76 billion to –$3.08 billion; income dropped from $0.14 billion (before tax) to –$3.31 billion. (Seibel, 2009).

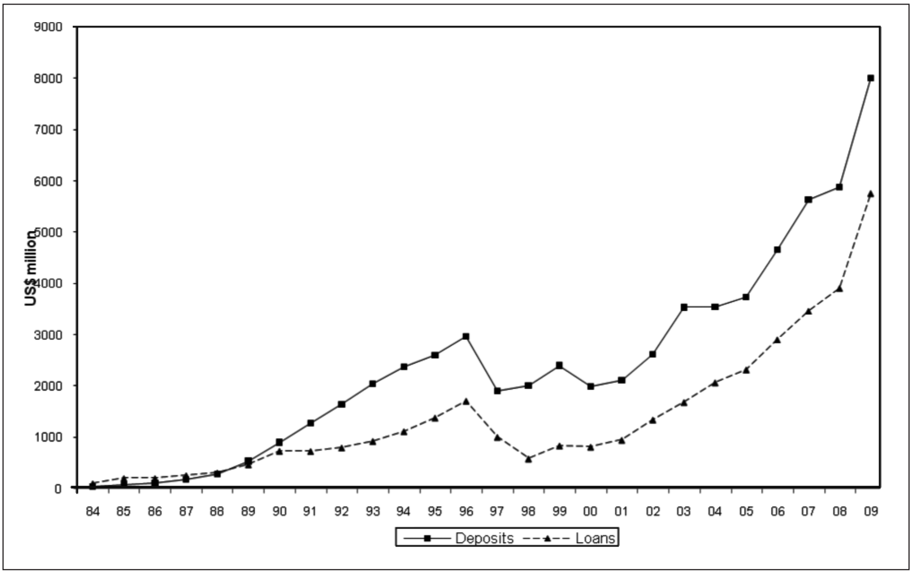
At the eve of the crisis, December 1996, the 4,000 units held 2.5 million loan accounts and a loan portfolio of $1.7 billion, financed through 16 million deposit accounts with a total balance of $3.0 billion (generating $1.3 billion in surplus liquidity). This amounted to 15% of the Bank's loan portfolio and 37% of its deposit balance. More importantly, return on assets (ROA) of the units was 5.7%, compared with 0.7% of the Bank as a whole. This combination of outreach and financial performance of the units had earned the Bank a worldwide reputation of excellence; in fact, its fame was such that many believed that the Bank *was its microbanking network*. It appears that the units' reputation was perhaps a decisive factor motivating the Government to rescue the bank, bringing it back to its original mission as expressed in its name: the People's Bank of Indonesia.

The monetary crisis did affect the units, but in a positive way. In terms of number of deposit accounts (guaranteed by Government), growth continued from 16.1 million accounts in 1996 to 18.1 million in 1997, 21.7 million in 1998, and 24.2 million in 1999, with the rate of growth surging to 19.6% in 1998, compared with 12.4% in 1997 and 11.5% in 1996. During the three-month peak crisis period, June-August 1998, when Indonesia had been most badly hit by both a drought and the financial crisis, 1.3 million new deposit accounts were opened in the units, and an additional Rp2.84 trillion ($354 million) were deposited. In nominal terms, during the initial 12-month crisis period from September 1997 to August 1998, total savings deposits in the units almost doubled: from Rp7.98 trillion to Rp15.13 trillion, an increase by 89.6%; and in all of BRI from Rp17.86 trillion to Rp35.17 trillion, a growth of 96.9% (exceeding the inflation rate of 56%). On a year-to-year basis, deposits

[16] The rural banks (Bank Perkreditan Rakyat, BPR), since 1988 under Bank Indonesia supervision and part of the formal financial sector, were much less affected.

in the units surged by 83.8% in nominal terms from Rp8.8 trillion in 1997 to Rp16.2 trillion in 1998. In US$ terms, due to the massive devaluation of the rupiah, deposits in the units fell from $3.0 billion in 1996 to $1.9 billion in 1997; it took until 2003 to reach, and surpass, the pre-crisis level. Graph 1 shows the precipitous fall in the dollar value of deposits and loans outstanding in 1998. (Appendix 1)

Graph 1: Deposits and loans outstanding of the BRI MBUs, 1984-2009 (in million US$)



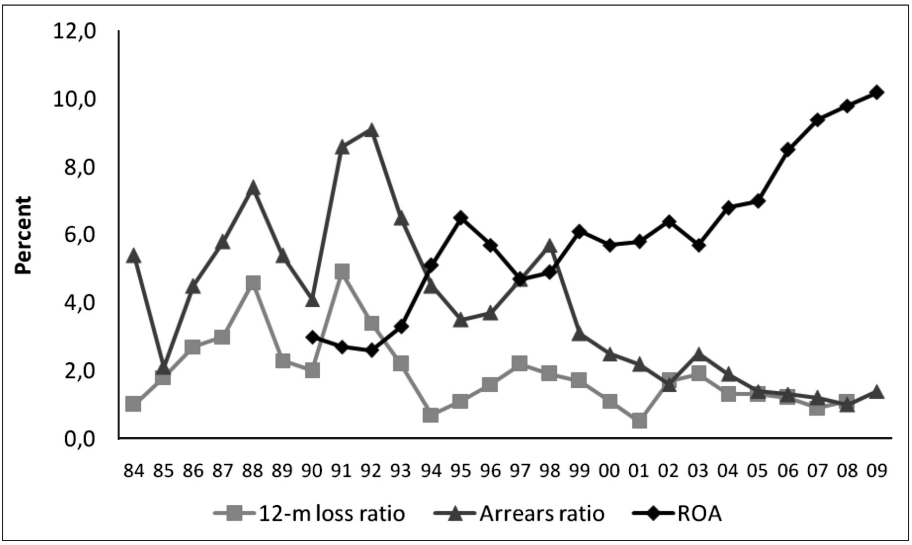
Source: Calculated from data in Annex 1.

In contrast to what many donors expected, willing to provide extra funds for the poor, the number of borrowers with loans outstanding from the units fell from 2.6 million in 1997 to 2.5 million in 1998 and 1999 – not because of a shortage of funds, but because of uncertainty felt by clients over the future. Deposits exceeded loans outstanding by a wider margin than ever. The amount of loans outstanding remained almost constant in nominal terms. In US$ terms, due to the devaluation, there was a substantial decline: from $1.7 billion in 1996 to $1.0 billion in 1997 and a low of $0.6 billion in 1998; recovery to the pre-crisis level was only reached at the turn of 2003/04. (Appendix 1; Graph 1)

The crisis had only a moderate effect on repayment, testifying to the effectiveness of incentives as well as the resilience of the borrowers. There were delays in repayment, indicated by an increase of the non-performing loan ratio (overdue ≥ 1 day) from 3.7% in 1996 to 5.7% in 1998. The contrast to BRI as a whole is striking, with the NPL ratio surging from 10.6% in 1996 to 53.0% in 1998 (Table 1). The 12-month loss ratio of the units increased from 1.6% in 1996 to 2.2% in 1997 and then started declining to an all-time low of 0.5% as of 2001 (Appendix 1; Graph 2). Interesting from a viewpoint of microborrower psychology, there was *a rush to repay* in August 1998, right after the peak of the crisis, leading to an unprecedented negative one-month loss ratio of –0.21%, more than the due amount having been repaid. Given the severely distressed economy, borrowers worried that they might not be able to repay in the future

BRI's microbanking division remained profitable during the crisis. In US$ terms, due to the devaluation, profits were cut in half in 1997; they stayed at that level in 1998 and doubled in 1999. Return on assets hardly budged, declining from 5.7% in 1996 to 4.7% in 1997 and recovering to 4.9% in 1998 at the height of the crisis. (Table 1)

Graph 2: 12-month loss ratio, arrears ratio and return on assets[17] of BRI MBUs, 1984-2009



Source: Calculated from data in Annex 1.

[17] ROA is not available for the period 1984-1989.

5. THE RESTRUCTURING OF BRI

In sharp contrast to the units which continued to thrive during the crisis of 1997/98, BRI as a universal bank collapsed. The bank's ROA declined from 0.7% in 1996 to 0.1% in 1997 and turned sharply negative to –77.8% in 1998 (Table 1), resulting in a negative capital of –\$3.08 billion in 1998 and –\$3.70 billion in 1999. BRI was technically bankrupt.

Table 1: NPL and ROA of BRI and MBUs (in %), net profit of MBUs (in million US\$), 1996-2008

Year	NPL ratio		ROA		Net profit of MBUs
	BRI	MBUs	BRI	MBUs	
1996	10.6	3.7	0.7	5.7	177.5
1997	11.4	4.7	0.1	4.7	89.7
1998	53.0	5.7	–77.8	4.9	88.9
1999	19.9	3.1	–4.8	6.1	167.7
2000	5.0	2.5	0.7	5.7	120.9
2001	4.9	2.2	1.6	5.8	128.9
2002	6.7	1.6	1.8	6.4	186.1
2003	6.0	2.5	4.0	5.7	195.3
2004	4.2	1.9	5.8	6.8	233.5
2005	4.7	1.4	5.0	7.0	250.2
2006	4.8	1.3	4.4	8.5	323.4
2007	3.4	1.2	4.6	9.4	524.3
2008	2.8	1.0	4.2	9.8	563.8
2009	3.5	1.3	3.7	10.2	786.7

Source: BRI financial reports (BRI, 1996-2009).

Like most banks, state-owned or private, BRI could have been closed or merged. BRI would probably not have survived had it not been for the units or had the government decided to spin off the units into a new microfinance bank, one of the options discussed. The units have cross-subsidized the bank in two ways – before, during and after the Asian financial crisis: through the continual transfer of profits from the units to the bank; and by transferring savings mobilized at village and sub-district level to the district-level branches. Over the 14-year period from 1990 to 2003, the year when BRI went public, cumulative net profits of the units amounted to $1.6 billion, adding up to a grand total of $4.3 billion as of 2009 (calculated at the respective year-end exchange rates). Cumulative surplus liquidity generated annually since 1989 amounted to $15.9 billion as of 2003, adding up to $26.1 billion until 2009. Thus, it was the units which ultimately saved BRI: they provided the basis for its reform in 1999/2000 and thereby indirectly for its IPO in 2003. Their success presumably played a key role in the decision to recapitalize BRI: their continually excellent performance since 1984, their vast outreach, the large number of well trained staff and, last but not least, their international reputation – lauded as "the most advanced example of the microfinance revolution" (Robinson, 2001) and "a flagship of rural microfinance in Asia" (Seibel, 2005).

In August 1998, the Government decided to restructure BRI and, in cooperation with the IMF, prepared a complex operational restructuring plan (ORP) in 1999. The plan included BRI's return to its historic mission of MSME lending, with a main focus on microfinance and small business lending, while limiting its corporate lending (hitherto the worst-performing business segment) to 20%. From 1998 to 2000, the portfolio share of the micro loans (up to $5000)[18] managed by the units almost tripled, from 11.1% to 30.3%; and so did salary-based small consumer loans (over $5,000 and up to $20,000), from 7.3% to 21.8%. The share of small commercial loans (over $20,000 and up to $500,000) was cut down from 42.9% to 18.5%; the share of medium-scale loans (over $0.5 million and up to $5 million) went up from 4.2% to 6.7%; and corporate loans (above $5 million) went down from 34.5% to 23.7%[19]. (Seibel, 2009: 16)

The ORP included a loan restructuring division, the separation of credit risk management from relationship management, improvements in information technology and online services, separation of front and back office, integrated settlement and treasury operations, diagnostics of risk management and due diligence, redefinitions of accounting, supervision, reporting and auditing systems. Through loan restructuring and the transfer of bad loans to a *Bad Bank*[20], the bank's NPL ratio was brought down from 53.0% in 1998 to 19.9% in 1999 and 5.0% in 2000, Bank Indonesia's prudential ratio.

In July 2000, new boards of directors and commissioners were installed, with specific performance targets and time frames for the implementation of

[18] Raised to US$10,000 by the end of 2008.

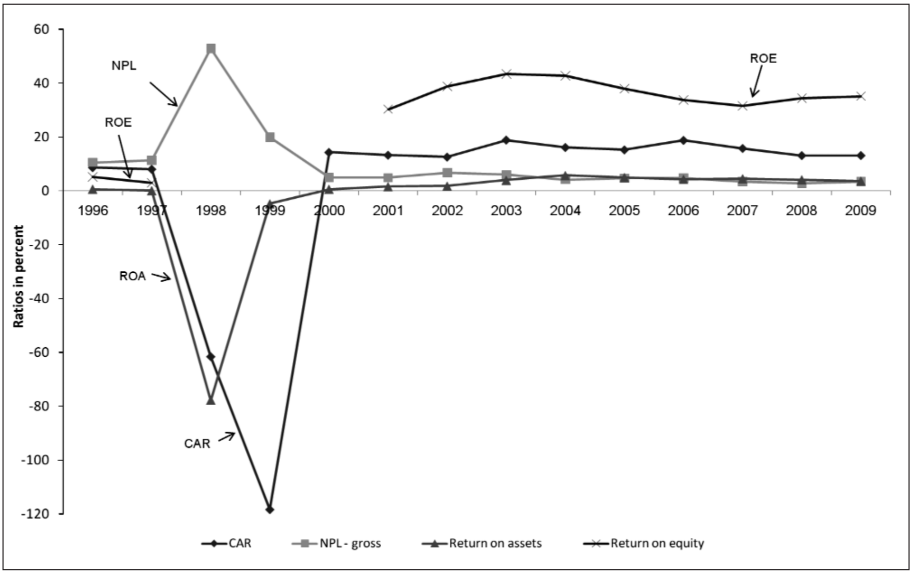
[19] Loan size categories converted at an exchange rate of 10,000 Rupiah to the US$.

[20] 190 major, mostly corporate, bad loans ($2.2 billion) were transferred to the Indonesian Bank Restructuring Agency (IBRA).

the ORP until the end of 2003. Immediately after the installation of the new boards, BRI was recapitalized with an injection of $3.0 billion in government bonds. By the end of 2000 BRI had brought down its NPL ratio to 5%; ROA had turned positive again, reaching its pre-crisis level of 0.7%; all other indicators reached the prudential requirements of Bank Indonesia.

In November 2003 BRI was partially privatized and listed on the Indonesian Stock Exchange, with the Government holding 59.50% of the share capital[21]. The shares at the IPO were oversubscribed 15.4 times. Since then BRI has grown into the most profitable bank in Indonesia, with the largest loan portfolio and the biggest outreach – an outstanding example of successful restructuring of a state bank. By the end of 2009 its customer deposits amounted to $27.0 billion. Its gross loans outstanding amounted to $21.9 billion: 26.3% in microbanking, 20.0% in small consumer, 27.8% in small commercial, 7.3% in medium-scale and 18.6% in corporate lending (BRI, 2010). Its gross NPL stood at 3.5%, net NPL at 1.1%, ROA at 3.7% and ROE at 35.2%. (Graph 3)

Graph 3: Capital adequacy, non-performing loan, return on assets and return on equity ratios (in %) of Bank Rakyat Indonesia, 1996-2009



Source: Seibel (2009, p. 15); updates for 2008 and 2009 based on data reported in BRI (2010).

21 By 2009, the Government's share had declined to 56.78%; 84.15% of the public holdings are foreign, 15.84% domestic (2003: 44.7% domestic, 55.3% foreign) (BRI, 2010, p. 26).

6. THE MICROBANKING UNITS DURING THE GLOBAL CRISIS

2008/09 marks the 25th year of the reformed units. This happens to be the time period when the global crisis hit. It is worth, then, to see how the units have coped. The analysis proceeds in two steps. First, the long-term annual trend of growth and performance of the units will be examined, with particular emphasis on the last five years, 2005-09 (Appendix 1); next, monthly data are used for the period Jan 2008 to Dec 2009 (Appendix 2).

As of Dec 2009, the BRI unit business segment held 21.2 million deposit accounts (up from 19.6 million in 2008, but down from 32.2 million in 2005 due to the cleaning of inactive accounts). During the five-year period the deposit balance grew from \$3.7 billion to \$ 8.0 billion (with a slowing of growth in US\$ terms in 2008 due to a temporary deterioration of the Rupiah)[22]. The number of loan accounts grew from 3.3 million to 4.7 million and the amount of loans outstanding from \$2.3 billion to \$5.7 billion, both without any change in the direction of the trend, with a jump in the number of accounts in 2008 and in the amount of loans outstanding in 2009. (Tables 1 and 2)

Graph 1 shows how the value in US\$ of deposits and loans outstanding grew steadily from 1984 to 1996, slumped (in real terms) as a result of hyperinflation and devaluation in 1997/98, began to recover in 1999/2000 and continued to grow since 2001 and up to 2009, with a slight dip in the curve of deposits in 2008 to a temporary decline of the Rupiah[23].

Monthly data for the period Jan 2008 to Dec 2009, reported in billion Rupiah to eliminate monthly fluctuations of the exchange rate, show a steady growth of deposits and loans outstanding, unimpeded by the global crisis. (Appendix 2, Graph 4)

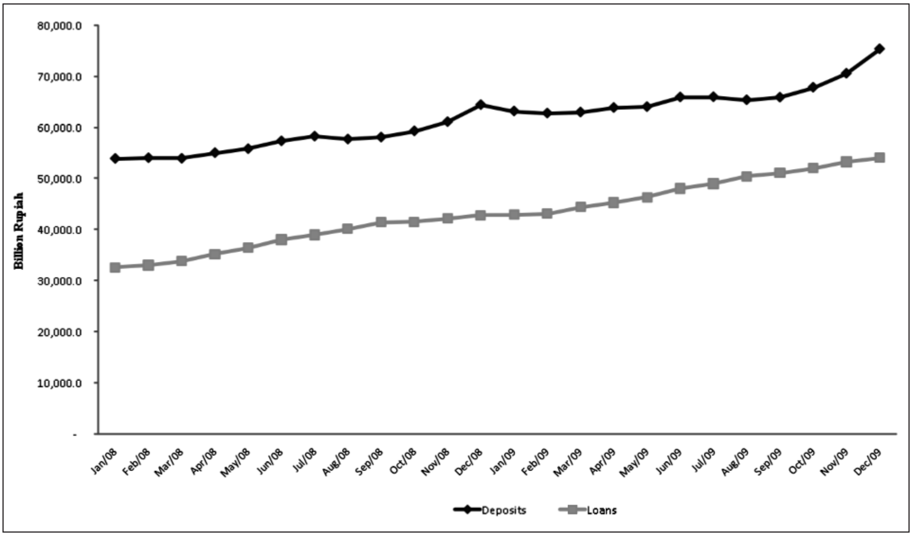
The picture of financial performance is more complex. Net profit, which had surged to \$524.3 million in 2007 from \$250.2 million in 2005, continued to grow and reached \$563.8 million in 2008 and \$786.7 million in 2009[24]. ROA continued to increase every year, from 7.0% in 2005 to 9.8% in 2008 and to an all-time high of 10.2% in 2009. Monthly ROA during 2008 and 2009

[22] The value of the Rupiah to the US\$ fell from 9,419 at the end of 2007 to 10,950 at the end of 2008 and recovered to 9,400 at the end of 2009.

[23] From (December) 2007 to 2008 the value of the Rupiah fell by 16%, from an exchange rate to the US\$ of 9,419 to 10,950, and reached its previous level by the end of 2009 at a rate of 9,400.

[24] The US\$ value of the net profit in 2008 was moderated by a temporary decline in the value of the Rupiah, made good in 2009 by its appreciation back to the exchange rate of 2007. (Appendix 1)

Graph 4: Deposits and loans outstanding of BRI MBUs, Jan 2008 to Dec 2009 (in billion Rupiah)



Source: Calculated from data in Annex 2.

fluctuated seasonally[25] around 10%, but without any apparent relationship to crisis events[26]. (Appendix 2; Graph 5)

The arrears ratio fell steadily from 1.9% in 2004 and 1.4% in 2005 to 1.0% in 2008 and rose to 1.4% in 2009. In monthly terms it stayed mostly around 1.1% throughout 2008, but in 2009 changed to around 1.4%. However, this increase was not due to the crisis, but to a new credit program, Kredit Usaha Rakyat (KUR). This has been offered by the Government[27] to BRI to be incorporated into the units (as of Jan. 2008) as well as into the small commercial business segment (as of Nov 2007), carrying a 70% credit guarantee to reach "new feasible yet 'unbankable' micro and small businesses" (failing to meet BRI's collateral requirements) (BRI, 2010). This marks a break in BRI's steadfast refusal since 1984 to accept any government or donor program into the

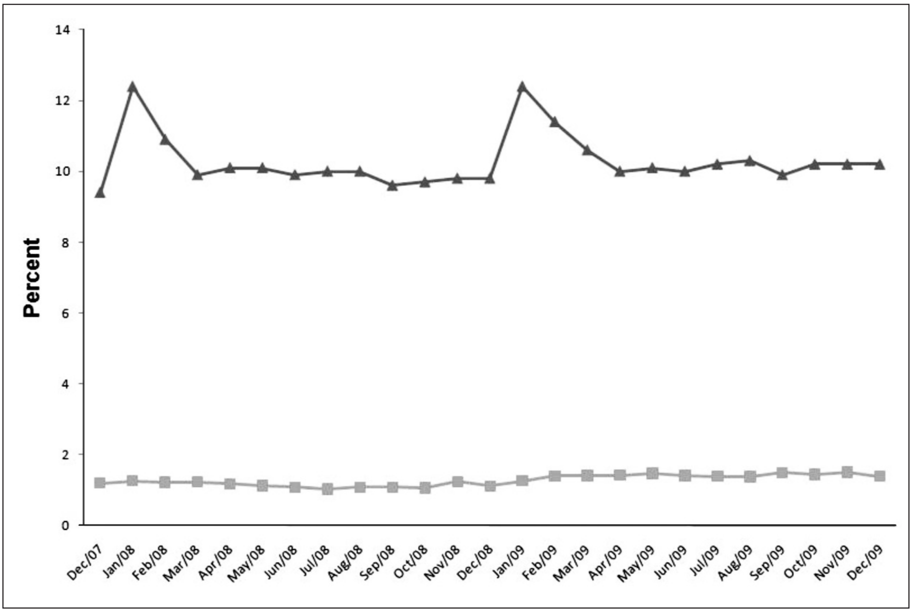
[25] January usually marks a seasonal peak in ROA, which normalizes during the subsequent 2-3 months.

[26] There are no ROE and capital adequacy ratios for the units, which have no capital of their own.

[27] From 1984 to 2007 BRI had resisted any attempt by the Government, to involve the units in special programs, which were then handled by the branches. KUR is the first exception, as BRI feared it would lose potentially good long-term customers to the competition.

operations of the microbanking units[28]. KUR loans outstanding in the units by the end of 2008 and 2009 amounted to $408 million and $303 million, respectively. They are mostly short-term with short-term instalments and started to fall due in 2009. The arrears ratio is 6.0% (aggregated for the micro and small commercial business segments)[29], affecting disproportionally the overall arrears ratio of the units. The poor performance of KUR is unrelated to the crisis. The overall conclusion is thus that there is no significant negative effect of the crisis on the arrears ratio of the units. (Appendix 2; Graph 5)

Graph 5: Arrears ratios and ROA of BRI microbanking units, Jan 2008 to Dec 2009



Source: Calculated from data in Annex 2.

28 BRI decided to accept the KUR program in the units not to leave a potentially profitable future market to the competition. BRI has less of a problem of principle with KUR in the small commercial business segment, which is part of the operations of the branches, where BRI has always cooperated with government and donor programs (albeit at a greatly reduced rate in recent years).

29 Micro and small commercial KUR loans accounted by the end of December 2009 for 58% and 42% of total KUR loans outstanding, respectively.

7. CONCLUSION

The microbanking units of BRI are a heavyweight in microfinance.With a saver outreach of 21.2 million accounts and a savings portfolio of $8.0 billion, they are savings-led; their borrower outreach is 4.7 million and their loan portfolio amounts to $5.7 billion. At relatively moderate and historically declining interest rates, they have achieved a return on assets of 10.2% (2009). Crisis has played a crucial role in their evolution. Just as BRI, the bank of which they are a part, owes its origin to globalization and the resulting crises (during the 19th century), so did the units. They were created in 1969 as a policy instrument for channeling subsidized agricultural credit, following the dominant paradigm of the time. When the oil price fell in 1982, the Government was no longer able to absorb their losses. Confronted with the options of closing or reforming them, a newly appointed management opted for the latter: restructuring and reform.Autonomy, savings-based self-reliance, profitability and inclusive national outreach were the core principles on which the reformed units were founded. Within a few years they started generating ever-increasing profits as well as surplus liquidity.

When the Asian financial crisis hit and the Indonesian banking sector collapsed, the units proved resilient. Safe deposits with positive real returns and easy access to repeat loans for any purpose at market rates of interest, combined with powerful incentives to clients and staff, had made the units the most trusted local financial intermediaries. While other institutions folded under bank runs and mounting defaults, the units succeeded in collecting loan repayments as well as vast amounts of additional deposits. As the savers turned out to be the most effective supervisors of the units (using deposits and withdrawals as an instrument of enforcement), profitability remained high. BRI was one of the insolvent banks, pulled down by the dead weight of its corporate portfolio. The Government's decision to restructure rather than merging BRI with other defunct state banks was to a considerable extent due to the outstanding performance of the unit system and its international reputation. At no other time than during that crisis, aggravated by drought and the downfall of the political regime, have the strength and resilience of the BRI microbanking units, as a model of savings-led microfinance institutions, been more apparent.

The experience of the units has served as a model and driving force in the restructuring and reform of BRI after the crisis of 1998, which is now the most profitable bank with the widest delivery network and largest loan portfolio in Indonesia. Savings mobilization, together with risk management in microbanking over the past 26 years (and also mesobanking all the way up to corporate banking over the past decade [Seibel 2009, pp.19-21]), is an art that the various management and governance teams of BRI have learned and effectively applied. Through its international visitors' program BRI shares this art with other countries (http://ivpbri.com).

The BRI microbanking units are a model of savings-based commercial microfinance to be emulated: (i) They have created sustainable access to a range of financial services (including payment services, money transfer and unlimited withdrawals throughout the country) for ever-increasing numbers of mostly low-income people; (ii) they have laid the commercial and reputational foundation for the restructuring of BRI and its reform as an MSME bank; (iii) this in turn has created the opportunity for customers of the units to graduate to all services of a commercial bank, including small and medium enterprise finance.

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Appendix 1:
Performance of BRI units, 1984-2008 (amounts in million US$)

Year	Savings deposits		Loans outstanding		Surplus Amount	12-month loss ratio	Arrears ratio*	ROA	US$ exch. rate**
	Accounts	Amount	Accounts	Amount					
1984	2,655	39.3	640,746	103.4	–64.1	1.0	5.4	n.a.	1,074
1985	36,563	75.5	1,034,532	203.6	–128.1	1.8	2.1	n.a.	1,125
1986	418,945	107.1	1,231,723	203.7	–96.6	2.7	4.5	n.a.	1,641
1987	4,183,983	174.2	1,314,780	260.4	–86.2	3.0	5.8	n.a.	1,650
1988	4,998,038	284.8	1,386,035	313.3	–28.5	4.6	7.4	n.a.	1,731
1989	6,261,988	534.9	1,643,980	472.1	62.8	2.3	5.4	n.a.	1,793
1990	7,262,509	902.9	1,893,138	736.2	166.7	2.0	4.1	3.0	1,877
1991	8,587,872	1,275.4	1,837,549	730.8	544.6	4.9	8.6	2.7	1,992
1992	9,953,294	1,648.4	1,831,732	799.5	848.9	3.4	9.1	2.6	2,062
1993	11,431,078	2,049.9	1,895,965	927.7	1,122.2	2.2	6.5	3.3	2,110
1994	13,066,854	2,378.2	2,053,919	1,117.3	1,260.9	0.7	4.5	5.1	2,200
1995	14,482,763	2,606.4	2,263,767	1,382.7	1,223.7	1.1	3.5	6.5	2,308
1996	16,147,260	2,975.9	2,488,135	1,710.5	1,265.4	1.6	3.7	5.7	2,383
1997	18,143,316	1,900.4	2,615,679	1,007.6	892.8	2.2	4.7	4.7	4,650
1998	21,698,594	2,011.9	2,457,652	585.3	1,426.6	1.9	5.7	4.9	8,025
1999	24,235,889	2,403.1	2,473,923	839.0	1,564.1	1.7	3.1	6.1	7,100
2000	25,823,228	1,992.2	2,715,609	815.7	1,176.5	1.1	2.5	5.7	9,595
2001	27,045,184	2,114.5	2,790,192	949.4	1,165.1	0.5	2.2	5.8	10,400
2002	28,262,073	2,626.4	3,056,103	1,343.4	1,283.0	1.7	1.6	6.4	8,940
2003	29,869,197	3,538.2	3,100,358	1,683.4	1,854.8	1.9	2.5	5.7	8,425
2004	31,271,553	3,541.4	3,210,678	2,067.0	1,474.4	1.3	1.9	6.8	9,285
2005	32,252,741	3,742.7	3,313,532	2,317.9	1,424.8	1.3	1.4	7.0	9,830
2006	30,907,566	4,659.7	3,455,528	2,904.8	1,754.9	1.2	1.3	8.5	9,393
2007	21,229,085	5,646.4	3,515,812	3,461.3	2,185.1	0.9	1.2	9.4	9,419
2008	19,575,496	5,881.3	4,460,580	3,904.7	1,976.6	1.1	1.0	9.8	10,950
2009	21,214,821	8,014.3	4,742,007	5,752.7	1,426.9		1.4	10.2	9,400

Source: BRI, Annual Statistical Reports of the BRI Units.

* Total payments overdue one day or more in % of total loans outstanding, excluding loans written off.

** End-of-year exchange rates (Bank Indonesia).

1997-98: Asian financial crisis (hyperinflation).

2006-08: Cleaning of inactive savings accounts.

Appendix 2:
Performance of BRI units, Jan 2008 to Dec 2009 (amounts in billion Rupiah)

Month	Savings deposits		Loans outstanding		Arrears ratio	ROA
	Accounts	Amount	Accounts	Amount		
Jan-08	20,771,071	53,873.8	3,488,696	32,574.0	1.3	12.4
Feb-08	23,124,561	54,009.5	3,486,134	33,003.1	1.2	10.9
Mar-08	23,015,031	53,903.4	3,578,062	33,788.6	1.2	9.9
Apr-08	20,906,132	55,000.6	3,736,902	35,163.7	1.2	10.1
May-08	20,167,497	55,775.7	3,874,626	36,411.3	1.1	10.1
Jun-08	20,007,608	57,316.7	4,023,330	37,992.3	1.1	9.9
Jul-08	19,695,349	58,232.4	4,127,997	38,931.0	1.0	10.0
Aug-08	19,525,737	57,672.6	4,216,036	40,116.3	1.1	10.0
Sep-08	19,409,957	58,054.8	4,318,518	41,400.7	1.1	9.6
Oct-08	19,588,413	59,268.5	4,348,302	41,473.8	1.1	9.7
Nov-08	19,665,591	61,072.8	4,415,987	42,189.2	1.2	9.8
Dec-08	19,575,496	64,399.9	4,460,580	42,756.3	1.1	9.8
Jan-09	19,783,453	63,161.5	4,483,796	42,914.8	1.3	12.4
Feb-09	19,751,393	62,755.5	4,530,688	43,086.3	1.4	11.4
Mar-09	19,918,931	62,951.0	4,552,776	44,379.9	1.4	10.6
Apr-09	20,201,807	63,841.7	4,570,632	45,240.7	1.4	10.0
May-09	20,571,327	64,015.0	4,588,872	46,340.6	1.5	10.1
Jun-09	20,563,652	65,897.1	4,639,504	48,019.6	1.4	10.0
Jul-09	20,556,723	65,942.5	4,648,393	48,943.5	1.4	10.2
Aug-09	20,666,113	65,352.5	4,671,503	50,414.1	1.4	10.3
Sep-09	20,856,089	65,857.8	4,680,146	51,102.2	1.5	9.9
Oct-09	21,091,115	67,811.1	4,694,619	52,033.5	1.4	10.2
Nov-09	21,268,791	70,542.9	4,724,381	53,225.3	1.5	10.2
Dec-09	21,492,443	75,334.4	4,860,113	54,075.6	1.4	10.2

Source: BRI, Monthly Statistical Reports of the BRI Units.

Résumé

Pendant trois décennies, la micro-finance a connu une expansion rapide dans le monde entier. On craignait que la récente crise globale puisse avoir conduit à un arrêt ou à une inversion du processus: CGAP a rapporté en 2009 que les portefeuilles de microcrédit de nombreuses IMFs "sont stagnants ou en diminution". Cette étude est basée sur l'hypothèse que les IMF qui sont conduites par l'épargne ont tendance à être résilientes à ces crises, et on présente les unités de la Banque Rakyat Indonesia (BRI) comme un cas. Durant les années 1970 les unités ont servi en tant que canaux de crédit subventionné. Une crise mondiale en 1982 contraint la banque à les fermer ou à les réformer. Avec de nouveaux produits d'épargne et de crédit à des taux d'intérêt du marché, elles sont devenues le plus grand fournisseur de micro-finance. Lorsque la crise a frappé en 1997/98 et en 2008/09 à nouveau, elles ont démontré être résilientes. Par ailleurs, en 1998 on a inspiré la restructuration de la BRI qui était insolvable; aujourd'hui c'est la banque la plus rentable avec la plus large (inclusivement) portée en Indonésie