

BANKING COLLAPSE AND RESTRUCTURING IN INDONESIA, 1997–2001

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Indonesia's banking sector was devastated by the crisis that began in October 1997. Of the largest banks—the seven original state banks and the ten largest formerly private banks—none managed to remain solvent, and those that still operate under their original names do so only because they were bailed out by the government.¹ The number of private banks was halved from 157 to 79: 65 were closed, 9 merged, and 4 nationalized (Table 1). Most of the assets of the banking sector are now controlled by the Indonesian Bank Restructuring Agency (IBRA), which was set up to manage nationalized banks as well as the assets that the government acquired when it took over the liabilities of insolvent banks as a result of a blanket guarantee to bank creditors issued in early 1998.

The net cost to the government of bailing out depositors will probably be at least 40 percent of annual GDP. The exact amount will depend on IBRA's ability to collect doubtful debts and sell off its huge share portfolio. In order to amortize this cost over several years the government has issued a large volume of bonds, the value of which exceeds the total liabilities of the whole banking system at the time the guarantee was issued. Despite the resources that have been poured into the banking sector, however, its weakness continued to impede economic recovery as of mid-2001.

The 1997–98 Banking Crisis

The massive real depreciation of the rupiah in 1997–98, combined with the sharp rise in interest rates and the refusal of creditors to

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¹Indonesia's banks can be classified into five different ownership categories. State banks are owned by the central government, regional development banks (RDB) by the provincial governments, and private banks by the Indonesian private sector. Joint venture banks have both foreign and domestic banks as shareholders, and foreign banks are local branches of foreign institutions.

TABLE 1

BANK MERGERS, CLOSURES, AND SURVIVALS

	Initial	Lost			Remaining		
		Closed	Merged	State and Regional	Private and JV	Nationalized	State and Regional
State Banks	7		3				4
Regional Development Banks	26						26
Private Banks	157	65	9		79	4	
Closed in 1997	16	16					
Nationalized in 1998	4		2			2	
Closed in 1998	10	10					
Audited in March 1999							
Category A	73	1			72		
Category B							
Closed in March 1999	21	21					
Eligible for recapitalization	9				7	2	
Nationalized ^a	7		7				
Category C	17	17					
Joint Venture Banks	32	2			30		
Audited in March 1999							
Category A	15				15		
Category B	17	2			15		
Total	222	67	12		109	4	30

^aThe seven private banks nationalized in 1999 were subsequently merged with Bank Danamon, which had already been nationalized in 1998.

roll-over loans, led to the insolvency of many Indonesian businesses and banks.² At the beginning of November 1997, the Indonesian government entered into its first crisis support agreement with the IMF and simultaneously closed 16 small private banks that were experiencing liquidity problems and were seriously in breach of various prudential regulations. This exacerbated the public's loss of confidence in the banking system because, in the absence of clearly stated criteria for closures and of information on the soundness of the remaining banks, there was great uncertainty about which banks might be closed next. At the time, the government guaranteed deposits in the closed banks only up to an amount of Rp20 million—then equivalent to about \$6,000.

Several of the remaining private banks continued to experience liquidity problems in the last quarter of 1997, and Bank Indonesia (BI, the central bank) supplied them with large amounts of last resort loans. Late in January 1998 the government tried to restore confidence by issuing a blanket guarantee of all deposits and other liabilities (except equity and subordinated debt) at domestically incorporated banks. Although the government initially intended to terminate this guarantee at the end of January 2000, it now seems unlikely to do so before setting up a self-funded compulsory deposit insurance scheme, which is not expected to be introduced until 2004.

In January 1998, IBRA was set up to perform three main roles. One is to oversee the restructuring or liquidation of weak banks so as to limit the fiscal costs of the government's blanket guarantee. Its second role is that of a large state-owned banking conglomerate. It acquired this role because it had to take responsibility for the troubled private banks that the authorities took over but did not close down. IBRA's third role is that of an asset management company. It was given the task of managing the very low quality (category 5) loans that, as described later, the government stripped from all banks that were recapitalized. It also acquired the assets of the banks that were closed down, many of which were low-quality loans. Lastly, it has acquired large, and often controlling, parcels of shares in some of Indonesia's best known companies. This happened in two ways. First, in the banking panics of 1997–98 BI refused to provide emergency liquidity support unless bank owners deposited shares as collateral, or issued personal or corporate guarantees that their banks would repay. In the

²Although the rupiah recovered much lost ground in late 1998, the rupiah price of the dollar remained nearly five times higher in mid-2001 than prior to the crisis. Interest rates had returned to pre-crisis levels by late 1999.

case of banks that failed, IBRA took over their liabilities to BI, along with the collateral and the guarantees that had secured them. Second, controlling shareholders in banks that had violated prudential regulations faced strong pressure to surrender shares to IBRA to avoid prosecution under the banking law of 1992, which contained very severe penalties in the form of lengthy terms of imprisonment and heavy fines for violations of the prudential regulations (McLeod 1992).

Despite the blanket guarantee, several private banks continued to experience liquidity problems throughout the first half of 1998, in response to which BI provided large amounts of last resort loans. It became clear subsequently that some banks continued to make large loans to affiliated companies, which used them to repay foreign borrowings or to speculate against the rupiah. In April 1998 IBRA took over management control of six private banks and one state bank, and a further seven small private banks were closed. In May 1998 it had to take control of Bank Central Asia (BCA), then the largest of all the banks, in response to a severe run on its deposits. In August 1998, three of the private banks under IBRA's control were closed, and the remaining four were effectively nationalized pending further action.

The Government's Bank Restructuring Strategy

As the crisis deepened in mid-1998, it became apparent that a policy of closing down all insolvent banks would wipe out a large proportion of the entire banking sector. The government and the IMF therefore drew up plans for recapitalizing some of the insolvent banks and merging or closing down the rest. These plans appear to have been strongly influenced by those adopted by Sweden to resolve its 1991–94 banking crisis (Ingves and Lind 1997).

All seven state banks had to be recapitalized. Four of them were merged to form Bank Mandiri, which became Indonesia's largest bank, with 30 percent of all bank deposits. The three remaining state banks were recapitalized separately.³

³One of these, Bank BNI, is actually a publicly listed company with significant (but not majority) private sector ownership. Nevertheless it is still classified as a state bank in the official banking statistics. A new state-owned export credit agency, Bank Export Indonesia, was established in August 1999, but it is not strictly a bank, since it is not licensed to accept deposits from the public (*Jakarta Post*, 27 November 2000).

In the case of insolvent, or undercapitalized, private and joint venture banks, the government had to choose between immediate sale to a strategic investor, liquidation, and partial or full nationalization.⁴ Its first step was to arrange for all the surviving nonstate-owned banks to be audited by a group of internationally reputed accounting firms, which estimated the amount of capital needed to recapitalize each bank and sorted them into three categories:

- Category A: those that did not need to be recapitalized;
- Category B: those deemed to be potentially worth saving, but in need of recapitalization;
- Category C: those that were to be liquidated.

At the onset of the crisis, the government was in the process of raising the minimum CAR from 8 percent, which is the norm for industrialized countries under the Basle Capital Accord (www.bis.org/publ/bcbsc002.htm). By September 1997, the specified minimum was already 9 percent, and this was scheduled to increase to 10 percent by September 1999 and to 12 percent by September 2001. In the event, in order to reduce the amount of new equity needed to recapitalize the banks, the CAR was instead reduced to only 4 percent in February 1999. Although the government announced that the former 8 percent minimum would again apply with effect from the end of 2001, it has not proposed the reinstatement of the more ambitious 12 percent target. The cutoff points between the categories were then set in terms of the CAR estimated by the auditors. Category A banks were defined to be those with a CAR above the new minimum of 4 percent, and the category C banks were those with a CAR of less than minus 25 percent. Those potentially eligible to participate with the government in recapitalization (the category B banks) were those with a CAR of less than 4 percent but more than minus 25 percent. In the remainder of this section we deal only with these category B banks. In the event, none of them had a positive estimated CAR. Subordinated debt in these banks was therefore written off.

Provided that their managers and principal shareholders passed the central bank's "fit and proper test," and that they were able to propose an acceptable business plan, the private shareholders of category B banks could choose whether or not to participate in recapitalization.

⁴A prerequisite for minimizing the government's losses under any of these alternatives was to ensure that the legal environment provided creditors with remedies sufficient to deter default by those capable of repaying loans. Despite its efforts to establish effective bankruptcy courts, however, the government has not yet managed to provide such an environment (Lindsey 1998, 2000).

TABLE 2
BALANCE SHEET OF HYPOTHETICAL RECAPITALIZED BANK
(BILLIONS OF Rp)

Assets		Liabilities and Equity	
Loans and other risky assets	250	Deposits	340
Government bonds	80	Government equity	8
Cash	20	Private equity	2
		Total equity	10

If they chose not to participate, their banks were nationalized and they received nothing in return. If instead they wished to preserve an interest in their banks, they had to supply cash equal to at least 20 percent of the capital needed to raise the CAR to 4 percent. The remaining amount was to be supplied by the government in the form of newly issued bonds.

By way of illustration, consider a bank with deposits of Rp340 billion, and total assets (loans, cash, and other securities) valued by the auditors at Rp250 billion, implying negative equity of Rp90 billion. On the assumption that cash and government securities, which have a zero risk weight,⁵ were a negligible part of total assets, a capital injection of Rp100 billion would have been needed to raise the CAR to 4 percent. Under the government's bank recapitalization plan, the private shareholders would have had to contribute at least Rp20 billion in cash if they wished to participate, while the government would have contributed up to Rp80 billion in bonds. Following recapitalization, and assuming that the private shareholders had not contributed more than the minimum necessary, the bank's balance sheet would have been as shown in Table 2.

Of the Rp10 billion of equity (at book value), Rp8 billion would have been held by the government and Rp2 billion by the private shareholders. Therefore, if the bank's risky assets turned out to be worth the Rp250 billion estimated by the auditors, the private shareholders would have voluntarily contributed Rp20 billion in cash to acquire shares worth only Rp2 billion. Three things could have induced them to accept such an apparently unattractive offer: first, the

⁵The CAR is the ratio of capital to risk-weighted assets: the weights attaching to each asset category depend on its level of risk. For present purposes, the most important categories are loans, which have a 100 percent weighting, and cash and government securities, which have a zero weighting.

auditors may have underestimated the value of risky assets; second, the original owners stood to obtain most of the proceeds of category 5 loans—the most severely impaired loans, which were stripped from banks in the process of their recapitalization—if and only if they participated in recapitalization; and third, in addition to their own new shares, private owners who participated in recapitalization also received call options over the government's shares.

Initially, we abstract from category 5 loans, new deposits, and new lending and focus only on the incentives created by these options. For each bank, the number of options issued was equal to the number of shares acquired by the government. Their exercise date was set three years after recapitalization and their exercise price was set equal to the issue price of the new shares, plus an allowance for accumulated interest during these three years. The total number of new shares was set at 100 times the number of shares already in existence prior to recapitalization, and the issue price of the new shares was calculated to ensure that the value of new equity injected into each bank was enough to raise its CAR to 4 percent, given the auditors' estimate of the value and average risk-weight of its existing assets.⁶ Since the old shares were reduced to a negligible share of the total, we ignore them from now onwards.

The incentives created by the call options given to the original owners can be clarified by considering separately both the case in which the options are not called, case 1, and also the case in which they are called, case 2. In both cases, the total net cost (to the government and the private shareholders taken together) of recapitalizing the bank is the amount of capital that has to be injected to raise the value of equity from something negative to zero. As long as new equity earns a normal rate of return, there is no cost in raising equity from zero to any positive level. The ex post cost of recapitalization, measured at the exercise date of the options, is therefore the initial value of deposits (plus accumulated interest), minus what assets turn out to have been worth—that is, actual recoveries, plus the market's implicit valuation of outstanding loans.⁷

Case 1. Suppose that at the exercise date, the share price turns out to be less than the issue price, plus accumulated interest. In this case, the private shareholders would not exercise their options. The total cost to them of participating in recapitalization would turn out to be

⁶For simplicity, we assume that all of the bank's assets prior to recapitalization carried a 100 percent weighting—that is, that the average risk-weight was 100 percent.

⁷Deposits is used here as an abbreviation for deposits and other liabilities, other than equity.

their share in the amount of new capital injected, multiplied by the total net cost of recapitalization. Both the government and the private shareholders clearly lose in this case: their shares are worth less than their issue price, plus accumulated interest, and the options turn out to be valueless.

Case 2. Now suppose that the share price at the exercise date turns out to exceed the issue price, plus accumulated interest. In this case, the private shareholders would exercise their options and would clearly gain from having participated in recapitalization: their shares increase in value faster than the interest rate and their options are in the money. It is also clear that the government just breaks even: when the options are called, it resells its shares at their issue price, plus accumulated interest.

The two cases can be summed up as follows. In the case of a bank that turns out to have been insolvent, original owners who choose to participate in recapitalization end up sharing the cost of bailing out depositors with the government in proportion to their share in the newly injected equity. In the case of a bank that turns out not to have been insolvent, private shareholders who participate in recapitalization end up by recouping the full amount of the ex post value of the bank's positive equity, and the government just breaks even.

It follows from this that it would not have been sensible for the original owners to participate unless they felt there was a very good chance that their bank was merely illiquid and not really insolvent. Given the parlous state of Indonesian banks in 1999 it is unlikely that there were many category B banks in this condition. It is not surprising, therefore, that most banks were taken over and recapitalized by the government alone or closed down. One result was excessive government involvement in the recapitalized banking sector; another was that many banks were needlessly shut down whereas, as we argue in the final section, they should have been sold as going concerns.

Category 5 Loans

As part of the auditing process, the most severely impaired non-performing loans were stripped from every recapitalized bank and transferred to IBRA. If the owners chose not to participate in recapitalization, the proceeds of these category 5 loans would go to the government. However, if the owners did participate, they would be nominally entitled to the entire proceeds of category 5 loans, net of collection costs, but would be required to use the full amount to exercise some or all of their call options. If the call options are in the money they will be exercised anyway, but if the share price in period

1 turns out to be, say, 10 percent below the exercise price of the options, the private shareholders will actually gain only Rp90 for every Rp100 of category 5 loans recovered, because to receive this amount of category 5 loans they will have to exercise options to pay Rp100 for shares worth only Rp90.

The treatment of category 5 loans does not alter the conclusion of the preceding subsection that private shareholders only benefit from participation if the bank's assets, now defined to include category 5 loans, turn out to exceed the value of deposits. The essential difference between category 5 loans and other assets is that if the share price in period 1 turns out to be not much less than the initial issue price, so that private participants in recapitalization only just fail to break even, they will gain almost 100 percent of recoveries of category 5 loans, whereas they will gain only 20 percent of recoveries of other assets if they contribute only 20 percent of the new capital needed to recapitalize the bank. A possible rationale for giving private shareholders a much higher share in the net proceeds of category 5 loans than in the proceeds from other loans is that most of the category 5 loans may be the result of within-group lending. Repayment of such loans is partly at the discretion of the owners of the conglomerates that controlled both the banks and the entities to which they lent; they would have little incentive to exercise that discretion under the implied tax rate of 80 percent.

New Lending: Recapitalization and Moral Hazard

In this subsection we relax the assumption that banks do not undertake any new lending and deposit-taking, and investigate the influence of the recapitalization arrangements on the choice of projects that they lend to. It is well known that, like deposit insurance, government guarantees create moral hazard. The smaller a bank's capital, the greater is the incentive for its owners to lend guaranteed deposits to finance risky projects undertaken either by firms in the same group or by unrelated firms (provided that the lending rates are appropriately high): if the projects succeed, the bank's owners make profits that are not shared with the government; but if they fail badly, the government shares in the loss. The smaller the bank's original equity, the bigger the government's share in the loss. Setting a minimum CAR mitigates this problem by making the owners of banks put at least some of their own equity at risk, as a buffer between the uncertain value of assets and the deposit liabilities guaranteed by the government.

Four features of Indonesia's recapitalization arrangements exacerbated the problem of moral hazard. First, the minimum CAR for all banks was lowered from 9 percent to 4 percent. Even a 9 percent CAR implies an extremely high ratio of debt (deposits) to equity by comparison with what is regarded as acceptable in the nonfinancial corporate sector, and almost guarantees that moral hazard will be a serious problem in developing countries, where financial skills are lacking, legal systems weak, and economic fluctuations relatively large (Fane and McLeod 1999: 408–9). This new CAR requirement was relaxed even further in June 2000 by allowing banks to include their loan loss reserves in measured capital (*Jakarta Post*, 16 June 2000), despite the fact that loss reserves are an estimate of losses the banks expect to incur—whereas capital for the purpose of calculating the CAR is supposed to be available to meet unexpected future losses.

Second, the minimum CAR following recapitalization was really less than 4 percent, because the banks were allowed—required is perhaps more accurate—to value the government bonds issued to recapitalize them at their nominal value, which substantially overstated their true value because they carried below-market interest yields (McLeod 2000: 27–29). When capital is low, any overvaluation of assets has a strongly magnified effect on capital; for example, in the numerical example in Table 2, a 10 percent reduction in the estimated value of government bonds would reduce the estimated value of equity by 80 percent.

Third, the fact that the private shareholders have call options over the government's shares provides them with a further incentive to gamble. If risky investments succeed, the call options will be in the money and the benefits will accrue to the private owners, whereas if they fail, the government will share in the losses. The moral hazard induced by the call options is all the greater because the government owns most of the shares in recapitalized banks and has issued call options over all of them.

Fourth, since up to 80 percent of the capital in the jointly recapitalized banks may be owned by the government, the 4 percent CAR greatly exaggerates the capital staked by the private owners, who continue to control the management of the bank. It is clearly only the risk of losing their own capital that can help deter private owners from using government guaranteed deposits to finance excessively risky projects. The minimum ratio of *private* capital to risk-weighted assets, which is the measure relevant to limiting moral hazard, was reduced from 9 percent to just 0.8 percent.⁸

⁸This is calculated as the product of the 20 percent minimum private share in total capital and the minimum total CAR of 4 percent.

TABLE 3
GOVERNMENT BONDS NEEDED TO RECAPITALIZE THE BANKS

	Private	State/RDB	Total
Variable nominal interest rate bonds	288.4	176.0	464.4
Inflation-indexed (Bank Indonesia)	198.3	20.0	218.3
Interest rate linked to SBI rate	90.1	129.4	219.5
Dollar-indexed ("hedge") bonds	0.0	26.6	26.6
Fixed nominal interest rate bonds	51.9	127.5	179.4
Total government bonds	340.3	303.5	643.8

SOURCES: Bank Indonesia (unpublished); IBRA (unpublished).

The Cost of Recapitalizing the Banks

In its Letter of Intent to the IMF in April 1998, the government estimated that the value of government bonds needed to recapitalize banks to an 8 percent CAR would be about 15 percent of GDP. A major component of this total was the repayment of the liquidity support provided by BI to banks subsequently taken over by IBRA. In the event, the banks were recapitalized to a CAR of only 4 percent, and both the cost and the time taken will be very much greater than originally estimated: by December 2000, the total amount of bonds that had been issued for this purpose had already reached Rp644 trillion (Table 3), which is equivalent to 58 percent of GDP for 1999.

Some of the recapitalization bonds have a fixed nominal interest rate, others have variable nominal rates. The government originally announced that variable interest bonds would be used to restore banks' equity to zero, and fixed interest rate bonds would be used to raise their CAR from zero to 4 percent.⁹ On this basis, Table 3 implies that the net fiscal cost of the bailout would be the Rp464 trillion of variable interest rate bonds issued, minus whatever IBRA can recover from disposing of its asset portfolio. However, this is an underestimate, both because IBRA's expected recoveries include those from category 5 loans, some of which will accrue to private shareholders,

⁹Besides deposits, the liabilities of failed banks included Rp164.5 trillion of last resort loans from BI. The government also owed BI Rp53.8 trillion for temporary cover of the blanket guarantee. The government paid off BI for both these types of claims by issuing it with Rp218.3 trillion of variable interest rate bonds with a nominal interest rate 3 percent higher than the CPI inflation rate. These bonds are included in the Rp464.4 trillion of variable rate bonds issued in total (see Table 3).

and because some of the fixed rate bonds were in fact used to restore banks' capital to zero.¹⁰

In mid-2000, IBRA controlled assets with a book value of about Rp383 trillion (excluding its shares in nationalized and jointly recapitalized banks) (Feridhanusetyawan 2000: 12). Of this total, about Rp289 trillion comprised loans and other assets transferred to it from banks, while the remainder, Rp94 trillion, comprised shares acquired through shareholder settlements.¹¹ The recovery rate on these assets is estimated by IBRA to be of the order of one-third to one-half, so total recoveries should be of the order of Rp150 trillion, which is equivalent to Rp100 trillion in present value terms.¹² Subtracting this from the Rp484 trillion of variable bonds issued implies an ultimate net fiscal cost of Rp384 trillion—about 40 percent of 1998 GDP, or roughly \$40 billion at the September 2001 exchange rate of around Rp9,500/\$.

Relative Performance of State and Private and of Large and Small Banks

State Banks and Private Banks

Table 3 implies that the gross costs to the government for bailing out the private and government banks, as indicated by the value of variable interest rate bonds issued, are Rp288 trillion and Rp176 trillion, respectively. But the private banks initially held far more deposits than the government banks (Rp183 trillion compared with Rp100 trillion in June 1997); as a cost per unit of deposits, the ratios are 1.57 and 1.76, respectively. The ultimate bailout cost to the government per initial unit of deposits will probably be significantly higher for state banks than for private banks, however, for two reasons. First, IBRA expects the recovery rate on loans and other assets transferred from failed private banks to be much higher than for those taken over from state banks; and, second, by taking over collateral on failed last resort loans, as mentioned above, IBRA has acquired ownership or control of a large volume of assets of major shareholders of many of the failed or jointly recapitalized private banks (a possibility

¹⁰Pangestu and Goeltom (2001: 168, 171).

¹¹See earlier discussion. IBRA has recently been pushing for a new round of agreements with former controlling shareholders in which it hopes that additional assets will be given over. If the political will were sufficiently strong, the overall cost to the government of the bailout could probably be significantly reduced by this approach.

¹²The present value of Rp100 in cash recoveries in three years' time, discounted at, say, 14 percent per annum, is about Rp67.

that does not arise in the case of the state-owned banks), the sale of which augments recoveries overall.

Large and Small Banks

The policy of the government and the IMF has been to consolidate the banking sector by forced mergers, rather than allowing market forces to determine its size structure. The apparent belief of the government and the IMF that bigger is better is not supported by recent experience, however. All of the large private banks were brought down by the crisis, whereas the smaller ones have fared much better, on average. This is clear from market share data on particular groups of banks.¹³ The 73 private banks that were classified in March 1999 as category A (not needing further immediate action in relation to capital adequacy) had an average market share of 0.07 percent each, whereas the other 84 in existence just prior to the crisis (which have all been either closed, nationalized, or jointly recapitalized) were more than seven times larger, with an average market share of 0.50 percent each.

Average market share data are also available for a number of sub-groups of these 84 troubled banks. Among those closed, the first 16 (closed in October 1997) had an average market share of 0.16 percent each; the next 7 (April 1998) had 0.06 percent; the next 3 (August 1998) had 1.60 percent; and the last 38 (March 1999) had 0.13 percent. Of those nationalized, 4 (April and May 1998) had an average market share of 3.78 percent, and 7 (March 1999) had 0.36 percent. Finally, the 9 banks listed as eligible for joint recapitalization in March 1999 had an average market share of 1.33 percent. In short, of all these troubled institutions, only one small subgroup of 7 banks was of similar size to the 73 that did not require immediate remedial action; all the others were considerably larger.

A possible explanation for the relatively worse performance of the large banks is that banks that believed they were “too large to be allowed to fail” were more willing and able to undertake excessively risky investments than small banks that could be liquidated with little risk of a political backlash.

¹³These data are derived from Government of Indonesia (1999: paragraphs 27–31) and Enoch et al. (2001: Appendix 1). The term “market share” is used a little loosely here, as the first source reports shares of deposits, while the latter reports shares of liabilities (presumably, net of shareholders’ funds).

Overview and Policy Appraisal

As a percentage of GDP, the amount of government bonds needed to recapitalize the banks is more than four times the proportion initially estimated, and the net fiscal cost of bailing out the banks will probably be about a third of annual GDP—and about four times larger than the total amount that had been lent to Indonesia by the IMF by mid-2001. The herd behavior of investors following the collapse of the Thai baht in July 1997 contributed to the timing of this disaster, but its main cause was that Indonesian banks flouted the prudential regulations on within-group lending and had far too little capital, given that their assets were not globally diversified and that the weak and corrupt domestic legal system provides little protection for creditors. As shown above, small banks performed far less badly than large ones during the crisis, and private banks fared less badly than state banks. In view of all this, it is highly paradoxical that the restructuring plan devised by the IMF and the government reduced capital requirements, nationalized many banks, and forced mergers among several of the banks that survived.

We believe that the fiscal cost of meeting the government's blanket guarantee could have been reduced, while strengthening the banking sector and reducing moral hazard to acceptable levels, if, instead of devising a special bank recapitalization plan, the government had dealt with the general banking sector collapse by following the prudential rules that would be appropriate for dealing with the actual or incipient insolvency of a single bank in otherwise normal circumstances.¹⁴

We subscribe to the arguments advanced by Kaufman (1994) and others that these rules should be based on setting a high level of the "minimum normally acceptable CAR," henceforth the "minimum CAR." For banks that satisfy the minimum capital requirement, regulation should be limited to making sure that the CAR is correctly reported; but those that do not meet the minimum CAR should be subject to constraints, monitoring regimes, and penalties that become progressively more strict, the greater the extent to which the CAR is below the minimum. These rules should also set out the procedures for dealing with banks that are insolvent, or nearly insolvent. The time allowed for banks to restore the CAR to the minimum level should be shorter, the further the bank's CAR is below the minimum: the bigger the problem, the more urgent should be the required response. In a

¹⁴Our rationalization for some prudential regulation is the familiar argument that few governments, if any, can resist the political pressures to bail out banks when a panic occurs.

crisis, it is particularly important that these graduated responses to loss of capital should be followed and not replaced by a once-off restructuring plan.

Our rationalization for some minimum capital requirement is to limit the moral hazard created by explicit deposit insurance or implicit government guarantees. Dowd (1999) notes that this does not establish that the result is better than *laissez-faire*. The trouble with announcing a *laissez-faire* policy of never bailing out banks—as the Indonesian government did repeatedly before the crisis—is that it is seldom, if ever, credible: everyone is likely to believe that as soon as a crisis occurs the government will cave in to the political pressures to issue a deposit guarantee, as happened in Indonesia in February 1998. Only a constitutional guarantee could make *laissez-faire* credible, and even that might well be inadequate, given the ease with which supreme courts can find ways around constitutional constraints when it is politically expedient to do so (Fane 1998).

In our view, the minimum CAR should always have been at least 16 percent. Instead of reducing it to 4 percent, the government should have kept to its earlier plan under which it was to rise gradually to 12 percent by September 2001, but added a further increase to 16 percent by, perhaps, September 2002. Similarly, banks that failed to meet the minimum CAR should always have been subject to corrective action provisions that were not biased against private sector participation in bank recapitalization, and that relied on market tests, rather than on arbitrary rules, to decide whether they should be liquidated, merged, or recapitalized.

Following the valuation of the banks by outside auditors, government supervisors should have been appointed on a full-time basis to monitor banks that just failed to meet the minimum CAR, and administrators should have been appointed to take over the management of those banks that were almost, or actually, insolvent. The owners of a bank that was solvent, but that failed to meet the minimum CAR, should have been given perhaps three months to devise a plan to raise the necessary capital and a further three months in which to do so. The owners of a bank with negative estimated equity, or of one that was unable or unwilling to meet the minimum CAR by the specified date, should have had their bank compulsorily sold at auction (as provided for in Law 7/1992 on Banking as amended in 1998), and been paid the net proceeds from the sale, if any.

Once the government had decided to sell a bank, a period of three to six months should have been allowed before the sale, in order to seek out potential buyers and give them time to conduct due diligence checks. Rather than participation in recapitalization being re-

stricted to the former owners, the auctions should have been widely advertised and all potential foreign and domestic investors, including the former owners, should have been eligible to bid, subject to passing a test of probity and competence. Under our proposal, all buyers would have been required to specify whether they planned to operate the bank as a going concern or to liquidate it. In the former case, they would have had to inject enough new equity in the form of cash to raise the CAR to the minimum level upon acquisition. Continuing enforcement of the minimum CAR would have prevented the stripping of assets from recapitalized banks by their new owners.

Reserve prices should have been set, but at levels substantially below the auditors' valuations so as to lessen the probability of ownership of the banks falling into the government's hands. One reason for wanting to avoid continuing government ownership is to avoid political interference in the operation or liquidation of banks.¹⁵ A second reason is that government officials do not have the same strong incentives to make a success of bank operation or liquidation as would private sector entities with their own capital at stake. These are the likely explanations for the fact that reviews of the state banks by international accounting firms in 1998 found that they "were all deeply insolvent" (Enoch et al. 2001: 61). The poor performance of state banks was not a new phenomenon.¹⁶ Given this, it was ironic that the government brought in state bank managers to run the large private banks taken over by IBRA in April 1998. The result was that "most had to be replaced in the following months" (Enoch et al. 2001: 76).

Likewise IBRA, as a huge state-owned holding company, has proven vulnerable to outside pressures and has had insufficient incentives to make rapid progress. It has been strongly criticized for "being slow in starting major asset disposals. . . . Sales were far slower than, say, in Korea or in Thailand" (Enoch et al. 2001: 81–82). At the end of 1999, the intention had been to sell BCA and two other banks by mid-2000, while Bank Danamon (into which seven small banks taken over by IBRA had been merged) was to be sold in 2001; by this stage IBRA was to have divested itself of all its banks. In the event, by

¹⁵Enoch et al. (2001: 59–60) note, for example, that the state-owned Exim Bank lost about Rp20 trillion (\$2.1 billion at an exchange rate of Rp9,500/\$) in the foreign exchange market, possibly (and very plausibly, in our view) as a result of the authorities using it in a failed attempt to support the rupiah.

¹⁶McLeod (1999: 281) briefly documents the state banks' history of often having to be saved from bankruptcy by injections of capital by the government. Enoch et al. (2001: 60) also mention that the state-owned Bank BNI "had been recapitalized repeatedly over the previous 20 years."

late 2001 less than one-third of BCA had been sold, and the divestment of Danamon was not in sight. IBRA's performance in relation to loan recoveries and the divestment of companies under its control has been no more satisfactory.

In the case of a bank whose value as estimated by bidders was negative, the auction would have been equivalent to the government calling for tenders to take over the assets and liabilities (other than equity and subordinated debt). These banks would not necessarily have been liquidated. As in the case of solvent banks, this decision would be left to the successful bidder, subject to the requirement that if the bank were to continue to operate, new equity sufficient to bring the CAR up to the minimum level would have had to be injected immediately upon acquisition. In cases in which the government had to pay new owners or liquidators to take over insolvent banks, it would have paid in cash, but sold enough bonds to prevent the bank bailout resulting in excessive money creation.

Subject to all banks having to meet the CAR requirement, the sale of banks to the highest bidder would have minimized the cost of meeting the government's blanket guarantee by realizing the full value of firm-specific investments that are wasted if banks are needlessly liquidated. Examples of such investments include much of the on-the-job experience of bank personnel, much of the cost of management information systems and other software developed in-house, investments in building up branch networks other than those that can be recovered by the sale of the buildings themselves, and investments in advertising and brand name promotion to capture market share for both loans and deposits. Even in cases in which liquidation was the appropriate outcome, our proposal would have had the great advantage of being carried out quickly and by the private sector.

The government's blanket guarantee created a liability to creditors of insolvent banks that it could not avoid by liquidations or nationalizations. Under our proposed approach, market tests rather than bureaucratic rules would have decided which banks should have been liquidated and which were worth keeping in operation, and the government would have avoided unnecessarily taking over the ownership of many of the banks that were not liquidated. The responsibility for managing category 5 loans in private banks would have stayed with the private sector. The government would have sold bailout bonds in the open market, rather than injecting them into the banks at unilaterally determined, artificially low interest rates. Recapitalized banks would have been financially stronger and less subject to moral hazard problems because they would not have ended up with overvalued bonds and correspondingly overstated equity.

The actual recapitalization arrangements exacerbated the problem of moral hazard by reducing the CAR. This policy may have been adopted partly to minimize the amount of bonds needed to recapitalize the banks and partly to avoid a possible credit squeeze. If the first factor was relevant, it should not have been, because the net fiscal cost of meeting the 1997–98 collapse was independent of whether banks were recapitalized to a CAR of 4 percent, 8 percent, or 16 percent. Setting too low a CAR merely increased the likelihood of another collapse, thus raising rather than lowering the likely ultimate net fiscal cost. We also reject the second factor, because providing banks with incentives to use guaranteed deposits to finance excessively risky projects is not a sensible way to counter the risk of a credit squeeze, even if such a risk existed.

The actual arrangements also needlessly raised the net fiscal cost of the blanket guarantee in several ways. The right to participate in the recapitalization of a bank as an ongoing private concern was restricted to its former owners. The requirement that these former owners had to bear the full cost of previously accumulated losses before they could earn any net profit from their new investments further inhibited private sector participation in recapitalization. The most severely impaired loans were compulsorily shifted to the public sector, and only IBRA was allowed to undertake liquidations. As a result, too many banks were nationalized, too many were merged, too many were liquidated, and liquidations were done by the public sector, not the private sector.

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