

Indonesia's Financial and Corporate Sector Reform

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By

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Abstract

Crisis in 1997/1998 lead the Indonesian financial sector into chaos and required bailout from the Government to maintain the stability of banking system. This paper reviews the evolution of banking sector since 1970s to the period before crisis to analyze the response of banks to the Government policies and the impact of those policies on the fragility of banking system. In general, deregulation created more fragile operation on banks because of the absence of proper banking supervision. Inability of banks to be immune from foreign exchange and interest rate volatility during crisis is the best example that banks in Indonesia were not equipped with prudential tools with respect to market risk.

Additionally, this paper also discusses the progress of banking and corporate sector restructuring in Indonesia in order to provide the current condition of the banking sector. However, banks still find problem to sell their recap bonds and extend credits for corporate sectors after recapitalization program has been carried out. This condition will deteriorate the banks' capital and lead to insolvency. Government needs to stimulus the recovery of banking and corporate sector to ensure that second round banking crisis can be prevented. Post crisis is the best time for government to re-shape the structure of financial sector in order to develop a stable financial industry in Indonesia. This paper also highlights the future financial structure in Indonesia.

1. Introduction

Financial sector restructuring has been adopted in many countries to improve the stability of financial system, especially in the period of post crisis. The approach of restructuring may be different for each country due to the country specific condition; such as macro economic fundamental, corporate sector structure, political climate, culture, and accounting system. This paper shows and analyzes the financial reform and restructuring in Indonesia to assess the weaknesses of the financial industry prior to crisis and to suggest the structure of Indonesian financial sector in the future. The aim of this paper is to provide benefit for the readers concerning lesson to be learnt from Indonesian experiences.

Bank restructuring in Indonesia has been conducted since 1983 with the main purpose was to reduce the government involvement in stimulating economy and improve the capability of commercial banks in mobilizing savings and deposits. The deterioration of foreign reserves in the beginning of 1980 due to the reduction of oil prices was the main reason for government to encourage banks being self reliance in carrying their role as intermediary. Prior to 1983, Bank Indonesia (BI) had adopted credit ceiling and interest rate control. BI also provided credit liquidity support to banks for credits extended to customers. The most significant reform was released in 1988 (PAKTO) with the main purpose was to provide banks more freedom to compete in the industry. The banking sector grew rapidly without proper regulation and supervision from BI. This condition leads to the fragility of Indonesian banking industry in the period of 1988-1997. Banking crisis in 1997/1998 was the evidence that the banks were unable to protect themselves from financial problem due to the depreciation of Indonesian Rupiah (IDR). Finally, Government needs to bailout banks through recapitalization program, which is now still underway.

This paper will be organized in the following structure: Section 2 outlines the banking sector pre-crisis in Indonesian; Section 3 outlines the banking sector post crisis; Section 4 discusses the literature review of bank restructuring; Section 5 shows and analyzes bank restructuring in the period of post crisis; Section 6 outlines the framework and progress of

corporate restructuring; Section 7 shows the structural reform in the area of financial sector; Section 8 discusses the future financial structure in Indonesia; and Section 9 concludes the discussion.

2. Banking Sector Pre-crisis

This section discusses the banking sector from 1970s to 1997 (before crisis) by focusing the policy measures and the impact on banking industry. To provide the progress in the banking sector after each reform, the discussion in this section will be divided into 3 separate sub-sections covering the period of 1970-1983; 1984-1987; and 1988-1997. Another reason is that the reform in each period has a different focus and objective.

2.1. Period of 1970-1983

Booming period in the 1970s until in the beginning of 1980s brought Indonesian Government less paid attention to the restructuring of the financial system. During that period, Government budget relied on the revenues from oil and gas exports. However, the oil prices dropped in the end of 1979s and beginning of 1980s, which lead to the negative trade balance in Indonesia at level in 19981/82 and 1982/83. The growth of Indonesian exports, imports and trade balance from 1978 to 1983 can be shown in the following table

Table No.1
Growth of Exports, Imports, and Trade Balance from 1978 to 1983 (in million USD)

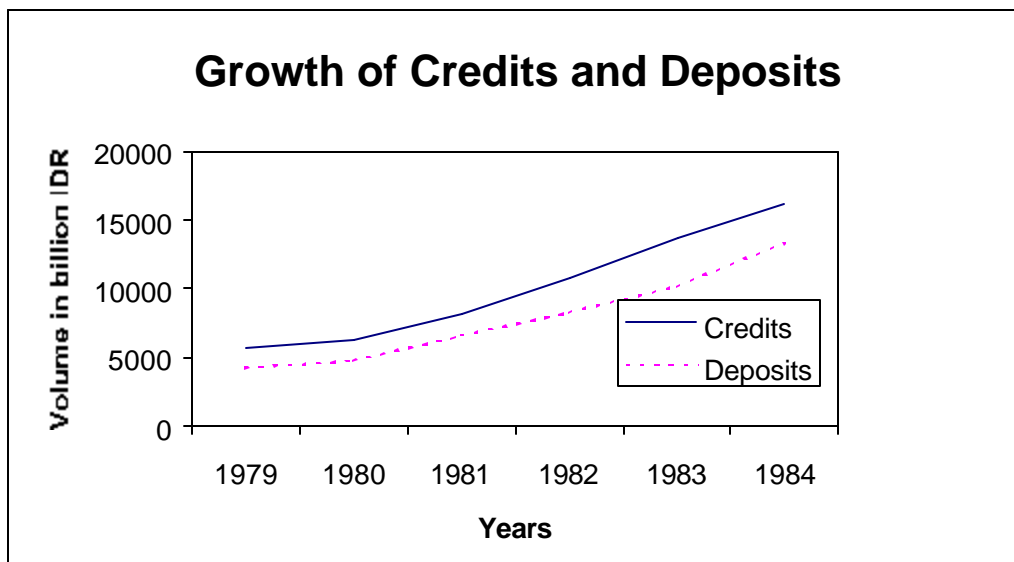
	1978/79	1989/80	1980/81	1981/82	1982/83
Exports	7,989	13,146	16,188	13,931	11,084
Imports	-7,543	-9,028	-11,837	-14,561	-15,490
Trade balance	446	4,118	4,351	-630	-4406

Sources: Annual Report, Bank Indonesia, 1981/82 and 1982/83

BI applied credit ceiling and interest rate control for banks before June 1983 package reform. The aim of this measure was to ensure that banks in Indonesia were dedicated to their functions as agent of development. Banks relied on the liquidity support from BI as

sources of funds. Financial positions show that total deposits is below total credits for the period of 1979-1984 (Graph No.1). Under the liquidity support scheme, banks obtained a certain margin interest for extended credit to borrowers. However, this incentive was only for state banks and selected private banks, which satisfy certain minimum criteria related to soundness rating. This incentive also discouraged banks to find sources of funds from public because the deposit interests were less competitive compared to interest rates for liquidity support scheme. Deposit interest rate for IDR denominated currency was 15 % per annum at state banks and 18% per annum at private banks while subsidized interest rate from BI was ranging between 3-6% per annum. Lending rate for government credit scheme was between 6-13.5% per annum at state banks and 9-20 at private banks. Lending rate for normal credit was ranging between 15-21% at state banks and 21-36% at private banks. A bank was better off using funds from BI rather than from public because the bank was free from default risk and received an interest rate subsidy (BI, 1984). Because of this policy, subsidized credits from government accounted for 75% of total bank credits.

Graph No. 1



In 1984, total of extending credits was IDR 16,135 billion while deposits was IDR 13,337 billion. The different between credits and deposits was covered by credit liquidity from BI, which accounted for IDR 2,292 billion in 1984 or 3.22% of Indonesian GDP in 1983. Most credits were guaranteed by credit guarantee schemes (an government agency) to

ensure that all subsidized credits would be safe for banks and BI. Banks were less exposed to credit risks, foreign exchange risk and interest rate risk. Operational risk was the most significant risk on Indonesia banks for the period of 1970-1983. Banking industry was very safe and stable due to government support. However, this stability was sensitive to the capability of government to continue stimulating corporate sector through subsidies.

2.2. Period of 1983-1987

However, after the balance of payment deterioration in mid-1981 to first quarter of 1983, Government was unable to afford paying subsidies to real sector due to limitation of foreign reserves. To prevent from further deterioration of foreign reserves, Government devaluated the USD/IDR exchange rate from IDR 700 to IDR 970 on 30 March 1983. Government also begun to introduce a number of changes in monetary and banking policy reform in 1983 with the main purpose is to restore external and internal balance and support continued growth. These policies included: (a) reduce government subsidies; (b) delay large public investment projects; (c) adopt financial reforms; (d) re-shape tax structure and administration. In this discussion, we focus on the financial reform and the impact of this reform to banking industry.

Under the June 1983 reform, BI still provided credit liquidity support for small-scale credits and high priority credits to help weak and small enterprises in improving their role in the economy and non-oil and gas exports. This policy was also intended to speed-up the spreading of wealth in Indonesia. Non-priority sectors would be fully financed by using deposit funds and credit liquidity for non-priority projects would be removed gradually. This measure caused banks to seek other alternatives of funds to replace the BI liquidity support extended to large borrowers. In other words, banks would manage their own funds to comply with minimum reserve requirements without using interest rate subsidies from Government.

BI had paid interests on excess reserves in attempt to give incentives for banks not increasing their lending. This practice was continued for sometimes after the adoption of the June 1983 reform. In fact, the rate was raised from 10-13% per annum in September 1983. This policy was also designed to discourage banks to transfer their excess liquidity to overseas (to prevent capital flight). However, this policy was gradually removed after

oil prices dropped in the beginning of 1980s, which lead to the deterioration of government revenues. Government decided to improve liquidity management for banks by reducing the government supports, such as interest rate subsidies and credit liquidity supports.

To improve the smoothness of reserve management for banks, BI introduced discount window facilities and Bank Indonesia Certificates (SBI) to help banks to maintain their liquidities, especially maintaining 15% reserve requirements. SBI is used to absorb excess liquidity of banks, while discount windows facilities is to provide a mechanism for banks to borrow funds from BI when they are short of liquidities. With these instruments, BI could manage the reserves in the banking system indirectly through open market operation. The rationale of adopting these instruments was to stimulus banks to shift their excess liquidities to SBI and cover their shortage of liquidities using discount windows facilities. However, this scenario was not working smoothly and resulted in high volatility on interbank call money interest rates, reaching 90% per annum in September 1984. This condition was, mainly, driven by small amount of the depreciation in IDR in a few days. On the other hand, people were still traumatic with devaluation in March 1983. As a response to this situation, Government intervened the foreign exchange market causing huge drained in foreign reserves from BI. This condition reduced banks' liquidity and lead to the pressure on IDR interest rates.

The sources of funds in interbank call money were from state banks. Because the interest rates on interbank call money were lower than that in deposits, most of private banks were better off using sources of funds from interbank call money. The discount window facilities from BI were not interesting enough for private banks because these facilities would create a negative point on the performance of banks. When the excess reserves on state banks were deteriorating in September 1984, private banks found problem to obtain other funds to replace interbank call money from state banks. This condition made the interest rates on interbank call money increased in September 1984. Eventually, BI was able to persuade banks to use discount window facilities.

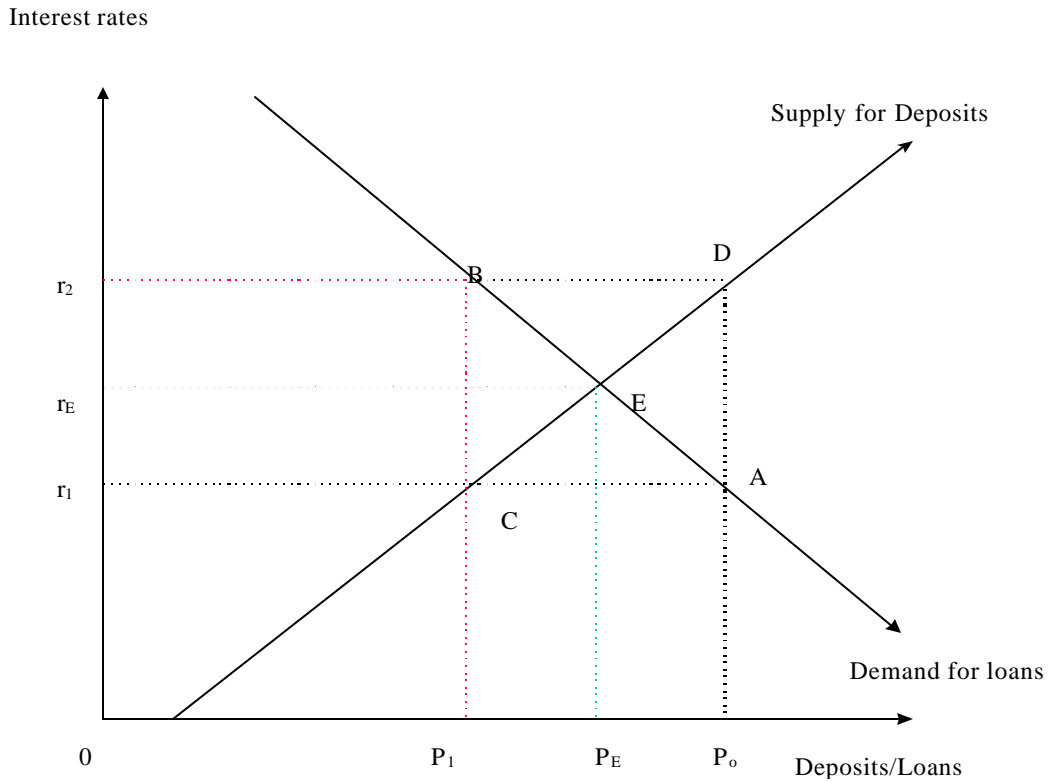
To prevent such condition occurs in the future, BI just allowed banks to borrow funds from interbank call money with a maximum 7.5% of deposits. Additionally, BI introduced Money Market Commercial Paper (SBPU) as an instrument to control money

supply. Banks should use this paper as an alternative investment when they have excess liquidities or sources of funds when they are short of liquidities. BI should buy this instrument to provide liquidities in the banking system. In 1985, these two instruments (SBI and SBPU) were used by central banks to control reserves in banking system. SBI is designed as an instrument to absorb excess liquidities from banking system and SBPU is designed as an instrument to add liquidity to banking system. Discount window facilities were intended to back up the shortage of liquidity in banking system.

The implementation of June 1983 reform changed the way of management operating the banks. Banks should compete to improve deposits as one of the efforts to maintain their loan portfolios. Otherwise, banks should reduce their loans when BI reduced the subsidies. The interest rate on deposits was increased from 18 % in March 1983 to 20 % in March 1984. This strategy gave more incentives for depositors to get higher interest rates.

Cost of intermediary changed after the implementation of the June 1983 reform due to the reduction of subsidized credits and the removal of the interest rate on statutory reserves. In theory, the cost of intermediary can be shown by the following figure.

Figure No.1
Intermediary Cost



Sources: Heffernan (1996)

This figure shows the various alternatives for pricing using the assumptions that deposits are the only source of funds and loans are the only form of investment. The market interest rate (r_E) occurs at the equilibrium level between the demand for loans and the supply of deposits. At r_1 , the demand for loans, in money terms, is OP_0 and the supply of deposits is OP_1 . Let us start by assuming the lending rate equals the deposit rate (i.e. the banks operate a zero margin). At r_1 , there is an excess demand for loans (P_1P_0) because the interest rate for loans is the same as the interest rate on deposits (i.e. banks obtain a zero margin). If this is the case, we can increase the supply of deposits and reduce the demand for loans by increasing interest rates for deposits and loans. Equilibrium occurs at point E where the demand for loans and supply of deposits is the same, at OP_E . At the

equilibrium point, the interest rate is r_1 . At r_1 , banks also obtain a zero margin, but there is no excess demand or excess supply. The next scenario is the interest rate at r_2 where the demand for loans is OP_1 and supply of deposits is OP_0 . If the interest rate is at r_2 , there is excess supply of deposits (P_1P_0) because the interest rate on deposits is the same as the interest rate for loans. To obtain a margin, banks must adopt a higher interest rate for loans than for deposits. Let us assume that the interest rate for loans is at r_2 and the interest rate for deposits is at r_1 . The demand for loans and the supply of deposits will be the same at OP_1 . Therefore, there is no excess demand for loans or excess supply of deposits and banks can obtain an interest rate margin of $(r_2 - r_1)$. The margin in money term equals to $[(r_2 - r_1) \times OP_1]$ or the area of r_1CB_2 shown by Figure No.1. Many alternatives for pricing can be applied depending on the margin imposed by banks, the supply of deposits and the demand for loans.

The difference between the interest rate on deposits (r_1) and the interest rate for loans (r_2) is called interest margin. Banks, as intermediaries, need the margin (i.e. intermediary costs) to finance non-deposit costs, the cost of capital, the risk premium on loans, tax payments, and the institution's profit (Heffernan, 1996). The addition of a capital requirement leads to a higher cost of capital. When the banking industry has achieved the optimum level of economies of scale as well as economies of scope (i.e. optimum level of efficiency where the demand and supply remain fixed at the equilibrium level), the additional cost of capital will be passed to borrowers by increasing loan interest. Alternatively, banks can reduce the deposit interest as a second choice. The main reason is that the bank needs a certain margin to exist as an intermediary.

Assuming that the increase of deposits should be used to increase loans, statutory reserves and other non-earning assets. In mathematical form, the additional assets can be expressed in the following:

$$t_0 - t_1 = d_0 - d_1 = (r_0 - r) + (l_0 - l_1) + (p_0 - p_1)$$

where,

t = total assets

d = deposits

r = reserve requirement

l = loans

p = non - earning assets

Replacing the incremental with ∂ (delta), we can get the following equation:

$$\partial t = \partial d = \partial r + \partial l + \partial p$$

Simulating the reserve requirement and non-earning assets (∂r and ∂p), we can get the following equation:

$$\partial d = \mathbf{a}\partial d + \partial l + \mathbf{b}\partial d$$

where,

\mathbf{a} = minimum reserve requirements

\mathbf{b} = proportion of non - earning assets

To simplify calculation, we remove ∂ for the next equations. Incremental of loans (l), we can obtain from following equation:

$$l = d(1 - \mathbf{a} - \mathbf{b})$$

Assuming i_l is the interest rate on lending and i_d is the interest rate on deposits, interest income to deposit ratio (r) can be solved using the following equation:

$$\begin{aligned} r &= \frac{(i_l l - i_d d - cd)}{d} \\ &= \frac{i_l d(1 - \mathbf{a} - \mathbf{b}) - i_d d - cd}{d} \\ &= i_l(1 - \mathbf{a} - \mathbf{b}) - i_d - c \end{aligned}$$

where c is the overhead cost of intermediary.

Lending rate can be solved from the following transformation:

$$i_l = \frac{(r + i_d + c)}{(1 - \mathbf{a} - \mathbf{b})}$$

Finally, the spread margin, which is the different between lending and deposit interest rates, can be obtained ($i_l - i_d$). The illustration above have been widely used by practitioners in banking industry as one of the tools to set interest rates for loan customers. However, this mathematical approach can be modified by incorporating more

variables in determining interest rates, such as risk premium to cover default risk of a borrower.

Assuming that the demand for loans is sensitive to interest rates, if banks increase loan interest rates, the default risk of credits will increase as a result of only high-risk borrowers would apply for credits. Sound borrowers, who have lower risks, may seek other alternative financing with lower interest rates, such as issuing bonds and new stocks. Finally, the demand for loans may decrease as a result of higher loan interest rates to cover the margin associated with additional minimum capital requirements.

The abolition of interest rate on excess reserves at BI increased the intermediary cost for banks. To keep intermediary cost remain constant, banks had to shift their excess reserves from BI to interbank call money or loans. This scenario encouraged banks to maintain the level of statutory reserve as low as possible to reduce cost of intermediary. The shifting excess reserves from BI to loans or interbank call money brings banks to expose the higher probability of borrowers' default and increase the fragility of Indonesian banking Industry. Efforts to reduce the fragility can be imposed by requiring banks to adopt prudential risk management. However, the prudential regulation related to risk management was not developed yet in Indonesia.

Private banks expanded their credits in non-government credit scheme after the removal of credit ceiling in 1983. However, state banks were still the main holders of market share due to the incentives from government to hold state enterprises accounts and channeling the government credit scheme with interest rate subsidies. The rapid expansion of credits on private banks was not balanced with the growth of deposits. Interbank call money was the main source of funds for private banks and state banks were the main suppliers. State banks shifted their excess reserves to interbank call money because of the gradual implementation of a zero interest rate for excess reserves at BI. Additionally, banks were reluctant to use discount windows facilities from BI because these facilities could affect the rating performance. This condition implied that there was lack of reserve management on private banks. Therefore, mechanisms to disburse temporary funds from BI for illiquid banks did not work properly. After banks were suffering liquidity crisis in September 1984, BI introduced money market certificates (SBPU) by allowing banks to issue commercial papers when they were short of liquidities and sale them to BI or other banks.

This instrument was intended to channel temporary funds from BI and other banks for illiquid banks. The market share of each group of banks in 1983 and 1987 is in the following table

Table No.2
Market Share of Each Group of Banks in 1983 and 1987

	1983				1987			
	Assets	Deposits	Public sector loans	Private sector loans	Assets	Deposits	Public sector loans	Private sector loans
State Banks	75.6	81.5	99.3	70.9	71.2	86.7	99.5	61.8
Private FX Banks	8.2	6.7	0.2	9.1	11.8	6.6	0.1	15.5
Foreign Banks	8.3	11.8	0.1	7.9	6.1	6.6	0.1	6.1
Private Non-FX Banks	4.6	0	0	7.6	7.9	0	0.1	13
Regional Dev. Banks	3.2	0	0	4.4	3	0	0.3	3.7

Sources: Bank Indonesia Annual Report 1983 and 1987

After the implementation of June 1983 reform, state banks still dominated the market share in total assets, deposits and loans. However, share of private Fx banks on loans to private sector increased from 9.1% in 1983 to 15.5% in 1987 as a result of abolition of credit ceiling. Share of state banks on deposits increased from 81.5% in 1983 to 86.7% in 1987. This condition shows that safety was the main consideration for depositors even though the interest rate of state banks was lower. It is also evidence to support argument that state banks were suppliers while private banks were the borrowers in money market, in attempt to improve credit portfolios in private sector. This intermediary system was not efficient because the state banks served as an intermediary role between depositors and private banks. Borrowers in private banks paid un-necessary intermediary cost for state banks if depositors were confidence to private banks.

Finally, this discussion concludes that private banks struggled to maintain their liquidities in the period of 1983-1987 due to the rapid expansion of loans. Borrowing interbank call money from state banks was the best short-term solution for private banks to improve liquidity. The stability of banking industry was sensitive to the volatility of interest rate risk and credit risk due to high credit expansion by private banks.

2.3. Period of 1988 – 1997

Bank reform in Indonesia continued by introducing a series of reform packages in the period of 1988 – 1990. The aim of the reform packages was to improve the effectiveness of intermediary roles of banks in financial systems and to improve the stability of banking systems. In general the reform packages covered the following areas: (a) promoting fair competition among banks by allowing new entry, widening the net work, reducing segmentation between state banks and private banks, and giving more independence in making decision; (b) promoting more prudence in banking regulation such as adoption of net open position (NOP), Basle Capital Accord of 1988 to assess the adequacy of capital, and legal lending limits; (c) promoting the effectiveness of money market instruments and; (d) shifting from relatively fixed to more floating interest and exchange rates. These reform packages were issued in four editions, namely, October 1988 package (PAKTO), December 1988 package (PAKDES), March package 1989 (PAKMAR), and January 1990 package (PAKMAR).

Prior the adoption of PAKTO in 1988, the banking industry was very restricted with support from government funds through credit liquidities. The industry was very sound with ammunition from government. When the government money was limited due to the deterioration of revenue from oil and gas exports, the banking industry was encouraged to reduce their dependency from government by allowing banks to have more chance to mobilize deposits through relatively free competition. However, the free market would need appropriate regulations to ensure that prudential operation was in place. Therefore, PAKTO contains some of new regulations with respect to capital adequacy and legal lending limits. The detailed of this regulation is shown in the Appendix 1

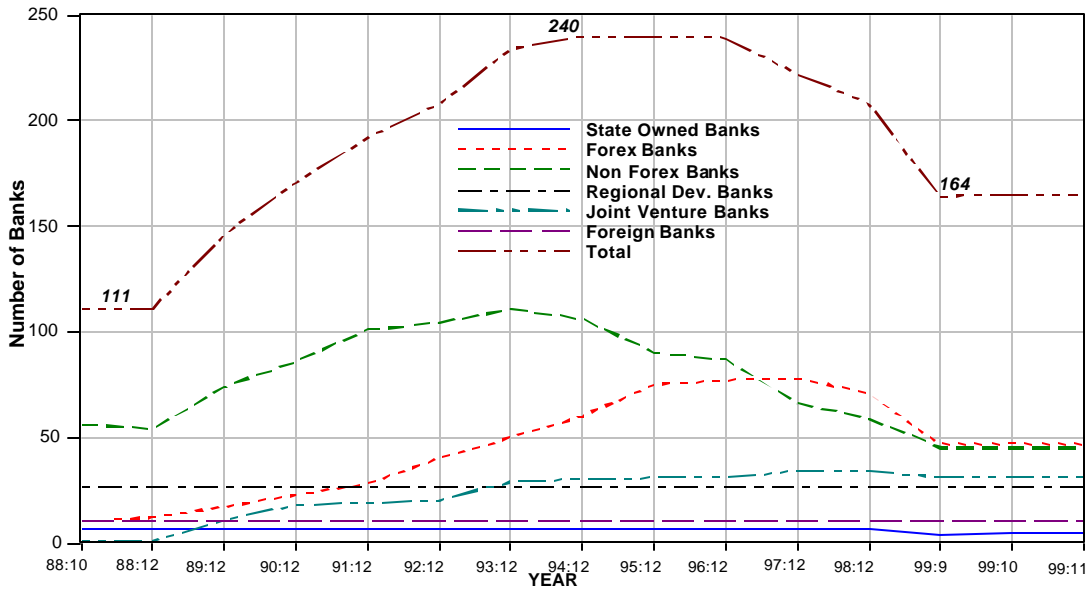
BI had adopted the measurement of CAR in the period prior the implementation of PAKTO. However, the approach of calculating CAR was still based on credit portfolio and gearing ratio (the minimum percentage of capital over total deposits). This approach implied that the capital was intended to cover the losses on loans and to back-up the claims from depositors. The similar approach had been adopted in many countries in the world prior announcement of the Basle Capital Accord of 1988 (The accord 1988). This accord has been adopted by almost all countries in the world to assess the adequacy of capital including Indonesia, which is stipulated in PAKTO. This accord assigns a certain risk weights for each loan category. CAR is calculated based on the percentage of capital

base over risk-weighted assets. The accord suggests that banks were required to reach, at minimum, 8% CAR until year 1992. There was strong criticism from practitioners and academicians concerning the pitfalls of Basle Accord. Hall (1995) argued that the Accord assigns the % of risk weights from 0% to 100% without giving strong argument to allocate the same risk weights to each borrower because the risk of each borrower falling in the same category must be different. Hall (1995) also argued that the Accord ignores interest rate, foreign exchange and price risk. These risks may be significant for banks with active trading.

After the implementation of PAKTO, a number of applications for new banks licenses addressed to BI was very high, normally coming from strong companies or group of companies that have been waiting for sometimes to enter the banking industry. The application was mainly based on the experiences in the past that banking business was profitable without considering what the banking industry in the future is. Within two years after the implementation of PAKTO, BI granted licenses 73 for new commercial banks and 301 for branches. The rapid growth of banks and branches encouraged banks to be more aggressive to offer incentive for deposit customers with less consideration of the out let for these funds. Finally, private banks normally lend their money to internal group without a sound credit analysis. This practice lead the high level of NPL in banking Industry.

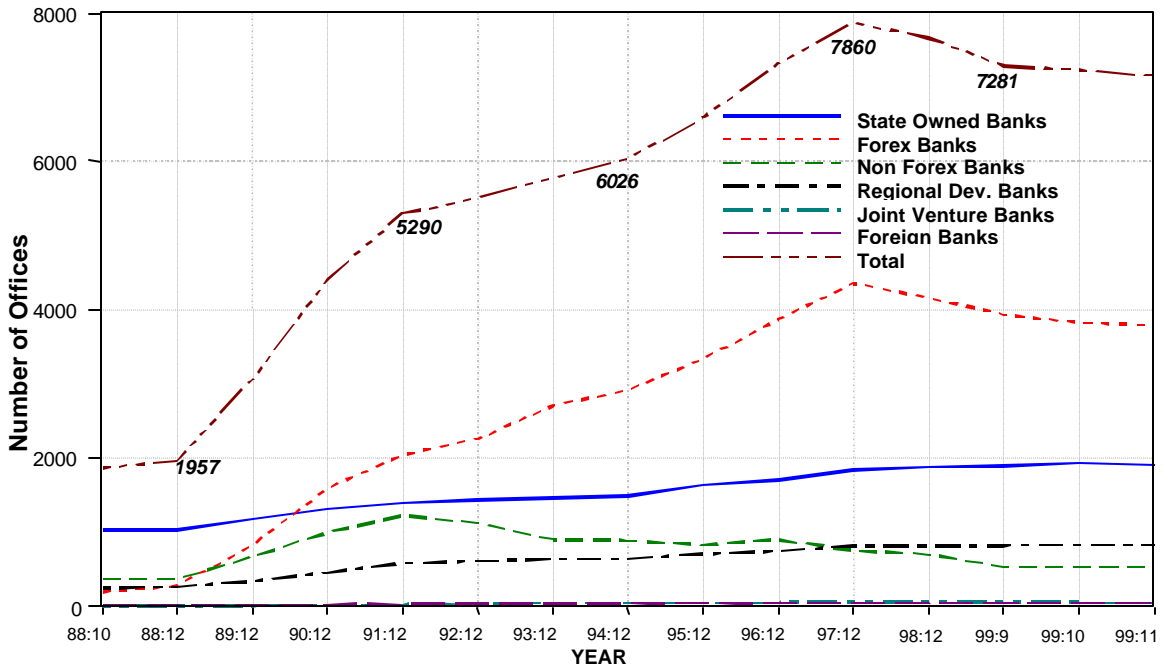
Graph No. 2

The Growth of Total Number of Banks



Graph No. 3

Number of Offices

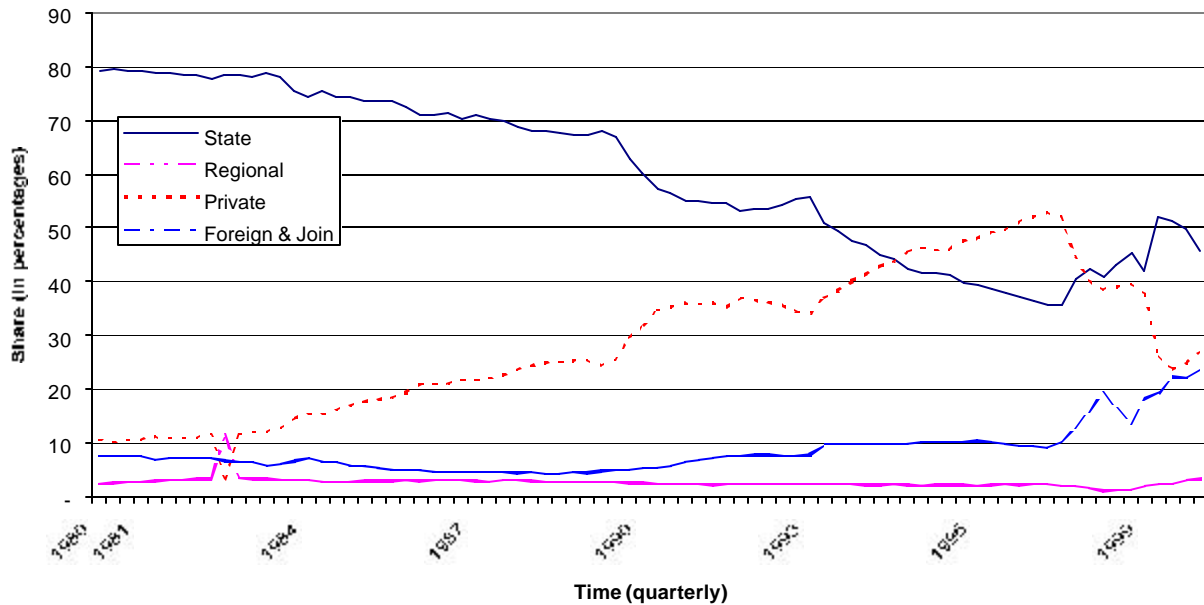


There was shifting market share from state banks to private banks. This condition was intended to response the rule that state banks enterprises are allowed to deposit their money at private banks and obtained credit from private banks. The graph of market

share between group of banks is shown by Graph No.4. The share of state banks in loans decreased gradually from 79.35% in June 1980 to 45.85% in March 2000.

Graph No.4.

Share on Loans from June 1980 - March 2000



Sources: Bank Indonesia Annual Reports from various editions

With such development, there were risks associated with such rapid growth in private banks. The central bank is unlikely to have the resources to monitor a large banking system, and may fail to spot problems before they turn into crises. Most likely, there was a lack of trained staff and executives in private banks due to the rapid expansion..

Interbank call money was the main sources of funds for private banks and the main suppliers in the money market were state banks. Obtaining the incentives from government was the main competitive strategy for state banks until 1990s. On the other hands, private banks were struggle to compete with state banks in offering interest rate to deposits customers. Therefore, private banks just relied on funds from interbank call money and state bank role was mainly channeling excess funds from depositors and government to private banks. This intermediary channel was not effective and creates a higher intermediary cost for borrowers. Additionally, private banks were significantly

sensitive to interest rate volatility. When the interest rate of SBI was very low in the early of 1990 and proceeded by reduction on deposit interest rates. This condition eventually drained foreign reserves from BI in the period of January – May 1990. To stop the bleeding, BI increased interest rates and was followed by increasing of time deposit interest rates.

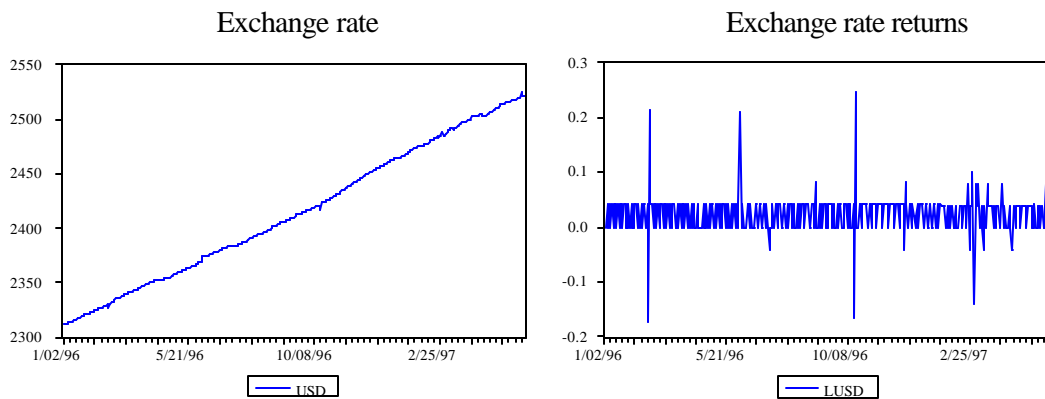
The reduction of liquidity credits from BI, announced in January and took effect in April 1989, led banks to increase foreign borrowing to maintain their liquidities. Banks increased foreign exchange swap to BI to avoid violation of the rule of NOP. High unhedged positions for offshore loans were the main problems in Indonesian banks in the period of pre-crisis. BI had adopted managed floating for exchange rate for the period before crisis, which implied that government would maintain the depreciation of IDR with a maximum limit (It was announced that the depreciation would not more than 10% per year). This policy, implicitly, said that government guaranteed the depreciation of IDR would not break the limit 10% per year. The argument of this policy was to provide a certainty for business people to make estimation for the future with regard to the volatility of IDR exchange rate. However, this policy created moral hazard for banks to rely on more funds from overseas, which required lower interest rates and lend these funds in IDR denominated currency to obtain a higher margin. According to Nasution (1998), the ratio of foreign borrowings of commercial banks to their assets rose from 9.5% in 1993 to over 18% in March 1998.

With indirect guarantee from government that exchange rate depreciation would not more than 10%. In other words, the currency risk of offshore loans would be 10% per year (See Graph No.5). Assuming a bank lend the funds in IDR denominated loans with 25% per year, the spread was still high. For example, if interest rate on offshore loans was 8% and overhead cost was 3% per year, the spread would be 4% per year (ie. $25\% - (8\% + 3\% + 10\%)$). Hedging for offshore borrowing was not necessary due to the certainty of IDR exchange rate in the future. Therefore, most offshore borrowings in banks and corporate sectors were kept unhedged. In fact, Government failed to support the spread in managed floating regime and, eventually, exchange rate was soaring in 1998, reaching at the level of IDR 15000 in 1998. This condition led to the economic turmoil in Indonesia in 1997 to 1998.

Graph No.5

USD/IDR Exchange Rate and Returns

(Period May 1996 to May 1997)



Sources: Bank Indonesia

BI adopted fixed foreign exchange rate and pegged with USD in 1970s. Under the exchange rate control, foreign exchange rate risk was very low, but banks were exposed with the risk of devaluation. The spirit of banks reform in Indonesia was to liberalize exchange rate and interest rate control. Therefore, in March 1989 BI introduced NOP to prevent banks from excessive foreign exchange rate risk exposure. Banks were allowed to hold, at maximum, 25% of aggregate currency over capital base. This rule had been revised several times and, eventually, current version allows banks to hold, at maximum, 20% NOP calculated per currency over capital base. Violation with this rule is subject to a penalty, including reduction of sound ratings.

2.4. Fragility of Indonesian banking industry in the period of 1988 – 1997

2.4.1. Problem loans

Credit quality on banks had been deteriorating for many years prior to the crisis in 1997. Lack of credit analysis was the main problem for state banks because most of the credit policies were intervened by government and/or top government officials. Non-performing loans at private banks were normally related to internal group of banks, even though there was legal lending limit for credits. Enforcement on the legal lending limit regulation was very weak from BI due to lack of independency. The governor of BI was a member of

cabinet minister, therefore, the policy of BI was mostly inline with the efforts to support fiscal policies from government. Graph No.6 shows the growth of loan quality from July 1997 to October 1999.

In February 1993, Booz Allent & Hamilton, one of the management consulting firms in the USA, released a report, which forecast that problem loans of Indonesian banks would account for between 5% and 20% of total outstanding credits (Tempo, 1 June 1994). The report also said that ROA of state banks had declined to the lowest point in 1992 and would be negative in the period of 1994-1995. This projection was accurate when the ROA on state banks was -0.16 in 1994. The growth of problem loans increased gradually from 6% in 1990, 11% in 1991 and 17% in 1992 respectively (Tempo, 1 June 1994). This problem loan was the main source of failed banks in the period of 1990s.

Table 3
Classified Credit for the Period of 1995 - 1999
(Percent)

	1995	1996	April 1997	December 1997	December 1998	December 1999
Total Credit (Rp. Trillion)	267	331	350	450	545	277
	Classified credit as a share of total %					
Sub-standard	2.7	2.6	2.8	2.6	10.4	10.2
Doubtful	2.4	3.3	3.5	2.5	15.2	12.8
Bad-Debt	3.3	2.9	2.3	3.2	23	9.9
	Distribution of Classified credit by bank ownership %					
State-owned Banks	72.7	67	65.9	52.7	38.9	52.6
Private Banks	16.3	22.8	24.5	42.3	52.7	23.1
Provincial Development Bank	5.5	4.9	4.8	0.43	0.1	1.2
Foreign and Joint Venture Banks	5.5	5.3	4.8	4.6	8.4	23.2
	Classified credit as percentage of total credit by bank ownership %					
All Banks		10.4	8.8	8.3	48.6	32.9
State-owned Banks		16.6	13.4	4.4	18.9	17.3
Private Foreign Exchange Banks		3.7	4.3	2.8	21.1	7.3
Private Non-Foreign Exchange		13.8	1.1	0.7	4.5	0.3

Sources: Data for the period of 1995 to April 1997 was derived Nasution (1998) and for the period of December 1997 to December 1999 was derived from BI data base.

2.4.2. Banking regulation and supervision

Under the existing regulations, the authorities have experienced difficulties in detecting problem banks at an early stage. My view is that banking regulation in Indonesia still contains a number of deficiencies.

First, risk-based capital requirements, which rely solely on credit risk, fail to assess the true risk in banks. Theoretically, bank risks comprise not only credit risk, but also interest rate risk, foreign exchange risk and other risks. This situation leads banks to ignore risks, which are not covered in the CAR. There are many internal reasons for banks doing so, such as lack of knowledge of risk management and it is being too expensive to add more capital. This study finds that current capital requirements ignore interest rate risk and

foreign exchange rate risk, with the result that banks would probably break the trigger of the minimum capital requirement if these were included in the assessment.

Second, under the BIS risk-based capital regulation², all loans to non-banks have the same risk weights. Good-quality loans attract the same risk weights as bad in the assessment. In an extreme case, a bank may not get any revenue from doubtful loans, yet the authorities require the same capital for both good and doubtful loans. This example also shows that the expected cash flows for the doubtful loans may be zero, unless the bank sells any collateral taken, but the current minimum capital adequacy regulation does not cover this issue. In addition, bank managers still find loopholes to escape the regulation. For example, bank managers may accrue interest revenues in their accounting system. Although, under this treatment, the payment of interest looks plausible on the borrowers' account balances, there is, in fact, no fresh money coming into the bank. This situation is not accounted for by the minimum capital adequacy regulation. Finally, some banks, apparently, have negative economic values of capital without the awareness of the regulatory authorities.

Third, under the BIS risk-based capital regulation, capital is measured on a book value basis. Actually, the economic values of capital change continuously in line with changes in the values of assets and liabilities. The economic values of assets and liabilities change as a result of changes in asset quality, volatility in interest and foreign exchange rates, and the change in values of intangible assets. The real value of capital can be expressed by market share prices.

Fourth, the risk assessment methodology used fails to capture the actual performance of the management. There are two issues here. First, the methodology lacks the ability to capture management behaviour. Second, there are insufficient guidelines for bank supervisors to assess management performance. In too many cases, immediately before being declared as a "problem" bank, the management had been given a good score in management appraisal. Later on, the authorities became aware that the information delivered to them was biased. This shows that bank supervisors failed to carry out their tasks properly.

² The Indonesian government has adopted the BIS minimum capital adequacy requirements since October 1988.

Fifth, earnings ratio assessment is just based on the accounting record and the link between the ratio and capital is not considered. The accounting ratio method is incapable of assessing the capability of banks to produce earnings in the near future. As we have already discussed, some banks can accumulate unrealised interest revenues in their accounting system. In this case, earnings ratios fail to capture the true performance of banks.

While other criticisms may be levelled against the BIS proposal (BIS, 1988) we have enough evidence to say that current capital adequacy regulation is imperfect. Therefore, banking regulation in Indonesia needs to be re-evaluated and adjusted in the direction of further enhancing prudence. Nasution (1998) criticized that the October reform in 1988 required legal and accounting system, which could not be built promptly in Indonesia. The disclosure was poor in banking sector due to the weak implementation of accounting standard. It was reasonable to suspect that the condition was established on purpose to provide loophole for bribes and corrupt in government agencies. This condition is possible as Government intervened state banks in the selection process of credit to customers.

As we have already mentioned, the rapid growth in the number of banks, offices, and their exposures, a shortage of professional managers and deficiencies in bank supervision are potential sources of banking crises. In fact, several banks have suffered financial problems, for example Bank Umum Majapahit, Bank Pertiwi, Maranu Bank, Bank Bukopin, Bank Sampurna, Bank Duta, Bank Summa and Bapindo. The central bank officially announced that these banks had financial problems although the public did not know the exact number of banks which suffered similar financial problems because of asymmetry of information in the banking industry. Bapindo's failure was the latest in a series of crises in 1994 that have heightened fears of a financial breakdown. The next subsection will discuss in more details concerning the bank failures cases in Indonesia.

2.4.3. Bank failure cases in Indonesia before 1997 crisis

The fragility of banking industry in Indonesia occurred due to the complexity of operation and a large number of banks as well as their branches. Banks offered more diversified product, such as derivatives. However, the supervisory approaches and the skill of bank

supervisors could not be improved instantly to anticipate the development in banking industry. Therefore, BI found difficulties to detect the problem banks from the early stages and, finally, some banks suffered financial problems in 1990s. The following discussion highlights some of problem bank cases in Indonesia.

Bank Umum Majapahit suffered problems in 1987 because the owners engaged in insider transactions using illegal CDs. The dishonesty was exposed when they failed to meet their liabilities. Certain unauthorized borrowers were also involved. Depositors claimed their refunds, and the case was eventually reported to the central bank. In this situation, the bank is officially responsible for all liabilities whether the deposit certificate is original or counterfeit. Dishonest managers were responsible for insider transactions because all transactions were labelled with the name of the bank. Bank Indonesia restricted the bank to participating in clearing activities, and some depositors took the bank managers to court. Finally, a consortium of other banks took over the bank with the aim of maintaining public confidence in the banking system in Indonesia. However, its re-opening was put on hold until the government revoked its licence in November 1997.

The Pertiwi case exploded in 1986 because of two major reasons that were interrelated, namely, loan concentration and mismatch of funding. The case began with loan concentration. The majority of its loans were concentrated on properties when there was a price boom in the late 1970s when, as we know, the Indonesian economy was booming because of high oil prices in the 1970s. When the oil price dropped in the early 1980s, demand for housing automatically went down because the government maintained tight liquidity in order to ensure that the government kept enough foreign reserves to back up its balance of payments. As the mortgage demand dropped in a period of tight liquidity, the revenues of housing construction firms fell far below estimates and repayments to the banks were delayed. Banks with long funding positions suffered from lack of liquidity as a result of the shorter term of deposits. Banks with strong group companies did not encounter any problems because other group members provided funds instantly. But, for the weak group companies, the group members did not have the capability to support the banks. Finally, the management of the bank declared the bank illiquid when the rush occurred. Bank Indonesia closed the bank's operation until the bank settled the claims from the clearing system. Finally, other banks took over all assets and liabilities under

guidelines from the central bank with the aim of preventing instability in the banking system.

The Pertiwi's case caused the Maranu Bank to suffer a lack of liquidity as a result of a large amount of inter-bank loans to Pertiwi. When Pertiwi suffered a lack of liquidity, Maranu had the same problem; moreover, the deposit customers knew about the case and panic could not be avoided. As a general rule, the banks, which failed to cover the claims from the clearing system, were restricted to continuing their participation in the clearing system. Therefore, Bank Indonesia removed Maranu from the clearing system before the bank was taken over by other banks.

The three bank failures that we have discussed above occurred before the banking reform of 1988. Even after the reform, the Indonesian authority had experience of bank failure. Even banks which were amongst the 10 largest banks in Indonesia failed.

The first large bank to fail was BUKOPIN. This bank suffered from significant doubtful credits without any secure collateral. The case was not exposed openly by the authority to the media because the bank is a cooperative bank, working on behalf of the government to elevate the performance of small scale business cooperative firms in Indonesia. The bank was rescued by Bank Indonesia to prevent it from collapse.

The second large bank to fail was Bank Duta, a private bank, which had 73.39 percent of its shares held by three charities chaired by President Suharto (Schwarz, 20 September 1990). At first, nobody believed that Bank Duta had suffered a crisis. Financial reports showed a conservative performance with credits accounting for Rp.1,700 billion (approximately US\$0.85 billion) of Rp.2,300 billion (approximately US\$1.15 billion) of total assets, but the capital base was only US\$164 million (Vatikiotis, 13 September 1990). Further, to Bank Duta, it appeared that reserves for loan-losses were below those of other private banks. Nobody suspected, not even the authority, that the idle funds were invested in trading activities. Regulation restricts national private banks to running a net foreign exchange position not more than 25 percent of capital. Indonesian bankers said that Bank Duta must have run an open foreign exchange position of around US\$1-2 billion -equals to between 609,7% and 1,219.4% of capital base- before the collapse and the bank also speculated in the US\$/IDR exchange rate both its own account and on

behalf of individual clients. That trading was not recorded properly, and thus not reflected in the financial reports. The bank thus maintained large exposures in foreign currency positions; therefore, when exchange rates moved in an adverse directions, the bank was illiquid and unable to settle claims from creditors. Finally, the bank announced on 4 October 1992 that losses resulting from foreign exchange trading had reached US\$ 419.6 million (Schwarz, 18 October 1990). Ronald Stride, a Booz Allen & Hamilton Vice President who advised several Indonesian banks, said:

"Indonesian banks, unsophisticated in foreign-exchange markets, have been on the losing side of a zero-sum game and they are getting out"
(Tempo, 18 Oct. 1990).

The statement above reveals that banks in Indonesia did not have enough experience in foreign exchange trading compared to other traders in the markets. Finally, charities chaired by the President of Indonesia, Suharto, rescued the bank with fresh-money and replaced the management. Dicky who was a managing director in charge in trading was sent to jail on a corruption charge for running dishonest foreign exchange transactions.

The third large bank to fail was Bank Summa in November 1992. The bank was formed in 1988 from an existing bank - Bank Agung Asia - in the same year when deregulation triggered an explosion in the number of new bank licences approved. The slowdown in property demand in 1990 was the main source of the crisis. The bank was faced with a financial crisis because of large loan exposures to shareholders' group companies which were involved mostly in properties. The bulk of this debt was the result of loans to finance Summa Group's involvement in the Indonesian property market from 1989-90, when real-estate prices were at their peak. The Summa Group, which was set up in the late 1970s, was interested in insurance, leasing, office development, hotels and plantations. Most of Summa's non-performing loans were made to Summa Group, headed by the eldest son of Soeryadjaja (the owner of Bank Summa). According to the Far Eastern Economic Review, more than half of Summa's non-performing loans were made to companies within the Summa Group, (Azman, 1992).

The problem banks also include some medium or small banks such as Bank Sampurna. The bank was established after the banking reform of 1988. The source of problems also

came from doubtful credit to shareholders' group companies. Bank Danamon, a top 10 private bank, took over the bank in early November 1992. There may have been some other problem banks in Indonesia, but the information has not been revealed to the media.

The last case exposed to the public before the banking crisis in 1997 was Bapindo, a state bank, in 1993. The case was officially published at the parliamentary hearing by the financial authorities, namely, the Minister of Finance and the Governor of the central bank. One of the parliamentary members had been asking about the performance of a Bapindo borrower, Golden Key, which was suspected of having financial problems. The borrower had outstanding credit of Rp.1,300 billion (US\$ 650 million) from Rp.9,600 billion (US\$4,300 million) of total credit or 13.5%. The bank's capital was Rp.700 billion (US\$350 million). Therefore, the credit of the borrower was 140% of total bank capital. Actually the ROA of the bank had shrunk from 2.1% in 1987 to 1.8% in 1988, 1.1% in 1990, 0,31% in 1990 and 0.26% in 1993.

2.4.5. Crisis in 1997

The banking crisis in 1997 occurred as a result of the gradual fall in the Indonesian rupiah (IDR) exchange rate since July 1997. The USD/IDR exchange rate dropped from IDR2,450 per US dollar in July 1997 to IDR11,000 per US dollar in March 1998. The IDR depreciated significantly in March 1998 when the IMF released a negative report on the Indonesian budget deficit. The depreciation of the IDR caused people to have less confidence in it and to convert their deposits from IDR to US dollars or to other strong currencies. The more people wanted to buy US dollars, the more US dollars disappeared.

The crisis began in July 1997 when the IDR/USD exchange rate was IDR2,450. The first attack caused the IDR to sink to the level of IDR 2,511. In response to the speculation, Bank Indonesia (BI) increased the spread for US dollars (ie. the difference between buying and selling rates) from 8% to 12%. The widening of the spread had been used by BI several times to curb speculation in IDR. The spread was only 2% in April 1995, but rose by 3% in February 1996, to 5% in July 1996, and to 8% in September 1996. The widening of the spread in April 1995 was to prevent a rush into dollars because of the death of Mrs. Suharto, while other widened spreads were intended to counter rushes into dollars because of the rumours concerning devaluation of the IDR. However, this strategy was no longer valid in the period after July 1997. The demand for US dollars

was very strong and the intervention band of BI (ie. the market spread at which BI has to intervene) was not effective in slowing down the demand. The exchange rate of the IDR was still unstable, strengthening for a few days by a few points and then depreciating again. To avoid a further wasting of reserve funds, BI cancelled the intervention band and let the IDR float on the market when the exchange rate stood at IDR2,800 to the dollar.

The exchange rate turmoil affected significantly the weak banks which had already suffered financial problems before the crisis. Finally, the government revoked the permit of 16 private national banks on 1 November 1997, closed 7 banks in April 1998 and 38 banks in March 1999. The sources of problems for those banks were mainly illiquidity and insolvency as a result of credit defaults, fraud and liquidity mismatches. With their liquidity mismatched, these banks were sensitive to the rush to dollars. None of those banks' financial problems occurred because of losses in foreign exchange trading (*Gatra*, 8 November 1997). Bad loans occurred in internal group companies where the amounts had already breached the lending limits. The exchange rate turmoil affected indirectly the liquidity of banks through the rush to draw money to be placed in other banks or overseas banks.

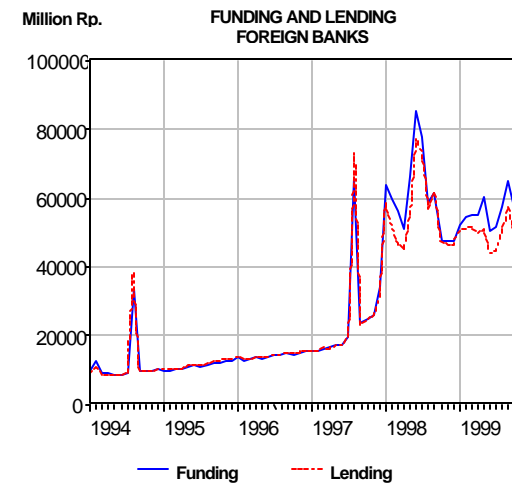
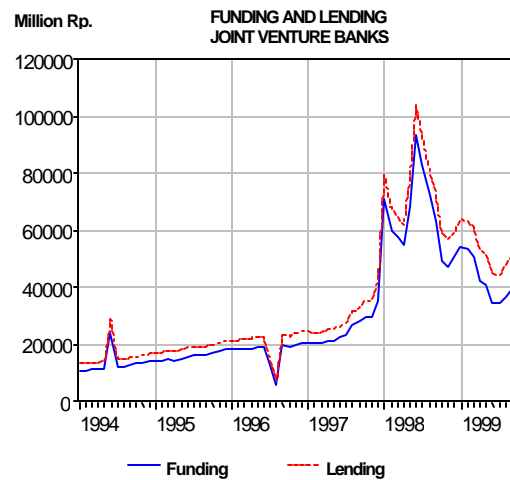
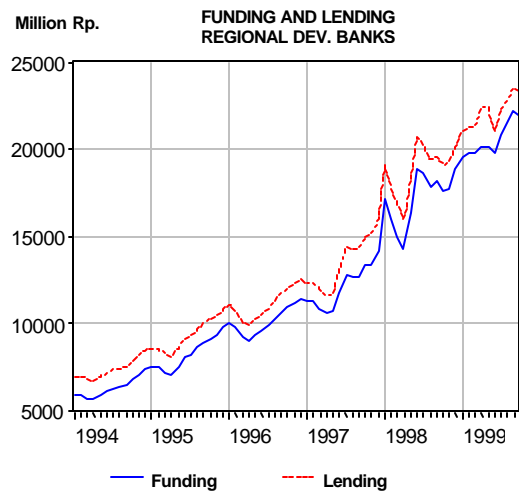
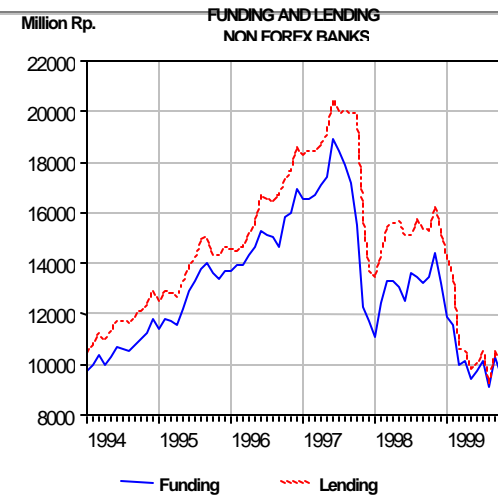
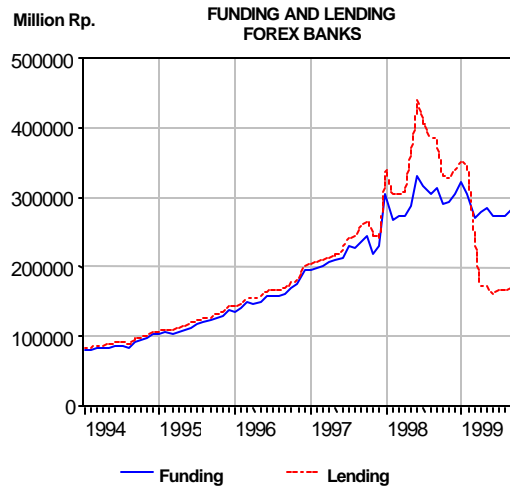
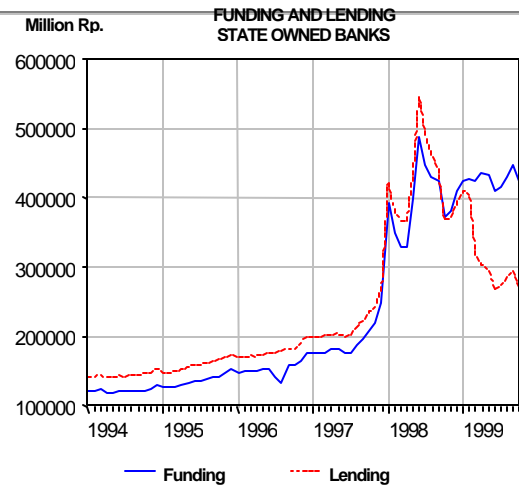
In another initiative, the government formed the Indonesian Bank Restructuring Agency (IBRA) at the end of January 1998. The role of IBRA includes: (1) Verifying customer claims under the blanket guarantee scheme; (2) Disposing assets of take over banks; (3) restructuring and selling transferred loans from banks; (4) divesting the government ownership of recap banks.

In April 1998, there were 54 banks under the control of this agency, which comprised four state banks, 11 regional development banks and 39 national private banks. The criterion of a sick bank is either when emergency funds from the central bank amount to more than 200% of the capital base or the risk-based capital adequacy ratio (CAR) is less than 5%. To restore public confidence in the banking system, the government announced its intention to fully protect depositors' money. Most of the sick banks suffered illiquidity and insolvency as they posted huge credit defaults and suffered large withdrawals. The only bank which suffered significantly from foreign exchange trading losses was Bank Exim, a state bank.

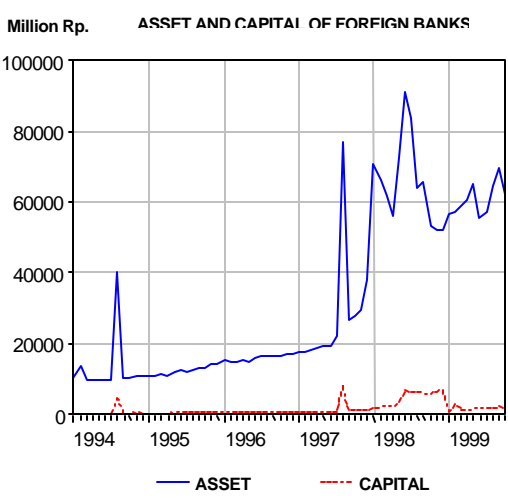
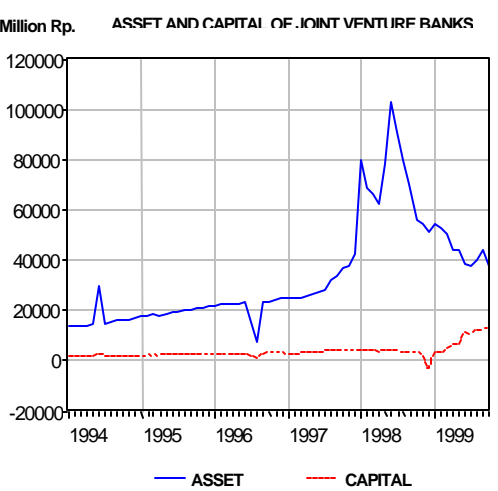
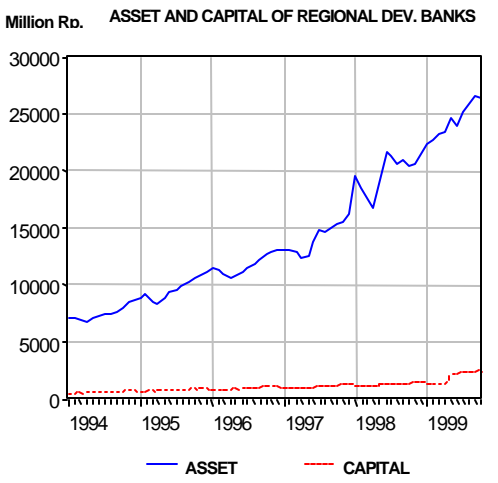
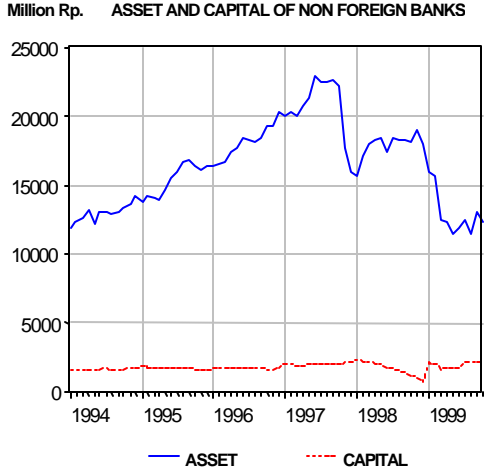
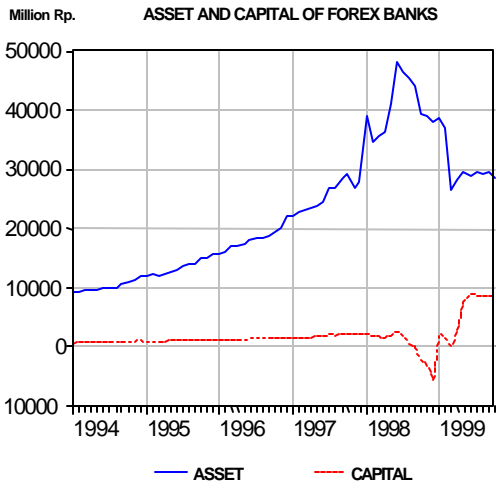
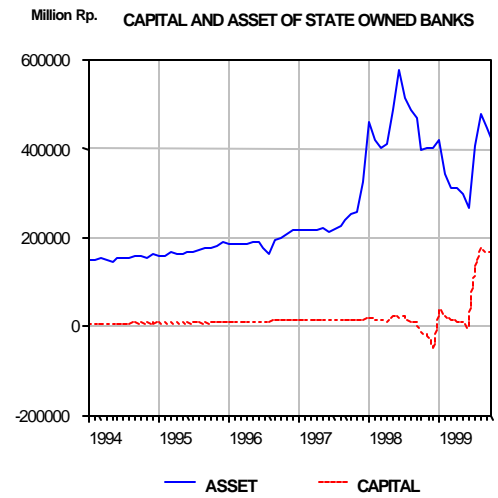
From the banking crisis in Indonesia, we can conclude that the depreciation of the IDR did not directly cause bank failure in Indonesia except in the case of Bank Exim. However, the exchange rate turmoil made depositors less confident in the banking system in Indonesia and encouraged depositors to put their money in foreign currencies in overseas banks. Finally, the small and medium sized banks suffered the most. For large banks, problems normally arose because of defaults by borrowers, which made the banks illiquid or insolvent. Bank Exim, a state bank, is the only bank, which got into trouble because of losses in foreign exchange trading

From these experiences, it can be seen that the Indonesian banking industry suffered problems mostly because of default by credit borrowers. Most cases cited above indicate that the sources of the problems were credit default mixed with significantly unmatched funding positions; some of them because of fraud mixed with large credit default (such as Bapindo); and some of them because of foreign exchange losses (such as Bank Duta and Bank Exim). Graph No. 6 and 7 provide the growth of bank operation from 1994 to December 1999.

**Graph No.6
Growth of Loans and Deposits**



**Graph No. 7
Growth of Assets and Capital of Banks**



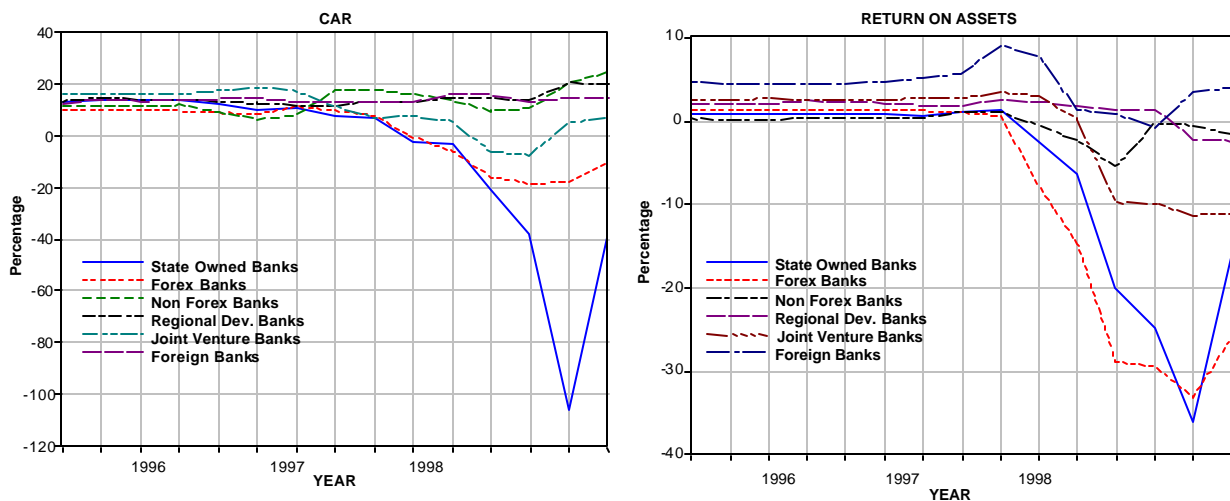
3. Banking Sector Post Crisis

Currency crisis in 1997 caused the performance of Indonesian banking industry was at the lowest level in history. Return on assets of banks dropped sharply from 1.22 % at the end of 1996 to -18.76 % by end of 1998. Banks posed high losses in the period of 1997 and 1998 because of the following sources:

- Indirect guarantee from government in managed floating regime lead to high un-hedged position at banks and the deterioration of IDR value on un-hedged positions made huge losses on banks.
- Currency crisis created problem on corporate sectors that affected also banking industry
- Lack of confidence to banking system forced banks to borrow funds from other banks and raising interest rates to restore public confidence to banking system increased the interest rate costs for interbank call money.

The growth of CAR and ROA for each group of banks can be reflected in Graph No.8.

Graph No.8
Growth of CAR and ROA



Initially, Government closed 15 banks in 1998 to eliminate the problem. However, the closure of banks made the condition getting worse while people drew their deposits and relocated them to overseas. Most of banks suffered negative balances at central banks. Liquidity support from central banks was eventually given to allow banks still opened. BI

had granted around IDR 150 trillion to cover negative balance of bank accounts at central banks during crisis. BI claims that the liquidity supports need to be paid by Government. However, there was dispute between BI and government to verify the figure of liquidity support for banks. This issue is still in the process of investigation by the Indonesian Supreme Audit Board.

To restore public confidence, Government announced to guarantee the whole claims to banks and increased SBI interest rates, reaching 60% per year in 1998. This policy restored the public confidence successfully, however, this solution is just for the liabilities by giving high returns for depositors. However, this policy made an additional problem related to the capability of loan borrowers to pay interest rates. They could not afford to pay interest to banks and, eventually, non-performing loans at banks increased significantly (See Table No.3 above). This policy implied that government shifted part of bank losses to loan borrowers. Additionally, BI adopts forbearance in minimum requirement of CAR from 8% to 4% in 1998 because most of banks suffered huge losses during crisis. However, this forbearance just for the period up to 2001 and 8% minimum CAR will be restore at the end of 2001. McLeod (2000) argues that the rationale to reduce the minimum of CAR is unclear.

4. Literature review on bank re structuring

Governments always adjust banking policy and regulation to improve the stability and the effectiveness of financial system to respond the development of the financial industry. The adjustment could be in the form of forbearance or more stringent regulation depending the target that the Government to achieve. The adjustment may affect the structure of banking industry due to the adjustment of banks' policy to be fit with new rules and regulations. Restructuring is the best term to replace the adjustment of government policy and regulation in financial industry.

Restructuring is the only solution to achieve financial system recovery after crisis. This approach has been adopted in many countries, such as Mexico in 1991/92, Argentina in 1980 and 1989, Chile 1981-1983, and Eastern Europe in 1988. However, restructuring and reform did not always provide good ultimate results for economy. Commitment from all parties involved in the economy plays important roles in the success of restructuring.

The restructuring program will be effective if we can identify accurately the sources of the crisis. Work by Long (1987) and Hinds (1988) argued that macro economic imbalance such as large fiscal and balance of payments deficits, sharp changes in relative prices, external shocks, and policy errors can lead to weak financial structures, large portfolio losses. Finally, this condition causes distressed borrowing, bank runs, capital flight, monetary and price instability.

However, the structuring will be successful if the restructuring of real sector has been completed, otherwise bank will lend money to loss making corporations. Without corporate sector imbalance, recapitalization of the banking system would only invite another financial crisis. If it is the case, restructuring program will be difficult to bring the recovery of the economy.

On the other hand, restructuring of corporate sector can be accomplished if there is transfer losses from debtors to creditors. The negotiation often takes a long time to reach the best solution for both creditors and debtors. Incentive from government in the form of tax relief and guarantee may speed up the process of corporate restructuring. For external debt, transferring of domestic losses to external sector as external debt forgiveness or unilateral repudiation may be the feature of restructuring as has been adopted in Mexico case in 1992.

Therefore, Caprio, Atiyas, and Hanson (1994) suggest the procedures of restructuring in banking industry, which consists of diagnosis, damage control, loss allocation, and rebuilding profitability and creating the right incentives. These steps may be overlapping each other in practice. To provide more detailed concerning the procedures of restructuring, the following section will review the steps of restructuring. However, the discussion just focuses on the diagnosis and the solution.

4.1. Diagnosis

Before the restructuring program is approved, the diagnosis tasks need to be accomplished to identify failed institutions, measure the losses and identify the sources of insolvency. Information from the diagnosis will be used to address the best approach for restructuring. Government may face a lot of problems in diagnosis process. The

following discussion outlines the key issues in the diagnosis of financial crisis and lesson to be learnt from experiences.

To identify the failure, normally we refer to the adequacy of capital. However, the approach of calculating the adequacy of capital plays important role to produce the accurate measure. The information on adequacy of capital provided by banks may not provide a better picture to reflect the true condition of banks. Therefore, we need to verify the information provided by banks to obtain the real condition. Regulatory authorities may face with several constraints, which may cause inaccurate results in identifying failed banks.

Failed banks have moral hazard not to reveal the losses because they fear government intervention or a run on banks. This condition leads to the inaccurate level of adequacy of capital. Government is also reluctant to deal with problem banks, since the main tax revenue of the Government is from banks or the main sources of financial deficit are from banks. It is also possible that banks are controlled by political interest. If it is the case, identifying and resolving problem banks will be political issues rather than technical issues.

Technical issue may emerge regarding the way we calculate the adequacy of capital. Book value of capital is not the best approach to be used as an indicator to calculate the adequacy of capital (Hall 1994; Kane, 1985). Economic capital is believed as a better measure of the adequacy of capital. The reason is that book value doesn't give the real value of capital because this approach ignoring the current value of assets and liabilities. Book value of capital assumes that the value of assets and liabilities remains constant, however, the value changes overtime especially for the value of financial instruments. Loans to customers must be re-valued by including the value of collateral to obtain the market value of loans. Another example is the position financial market instruments (trading book), which can be sold in the market at any time because the market is very liquid. For non-financial instrument position (banking book), the current value of position still can be calculated using net present value of future cash flows. Since the current value is larger than book value, therefore, banks can recognize this different as unrealized losses. Finally the profit and loss of banks will increase. If we apply this concept, many banks may still solvent based on book value capital. However, more banks

may be considered as failed if we apply economic capital. Banks and government must agree on the approach to identify the value of assets and liabilities in calculating losses before the recap program is started.

In traditional banks, losses from credits is the most significant components of the deterioration of capital. Standard procedures to measure the losses of credits will be approved by banks and regulatory authorities. The assessment of losses on credits normally applies certain parameters, such as the delinquency of payments on interest and installment. For more sophisticated banks, losses from foreign exchange and interest rate related transactions may pose a significant amount. The un-matched on foreign exchange and interest rate related positions can be used to measure the potential losses of foreign exchange and interest rate related position by applying the estimation of volatility on foreign exchange and interest rate returns (JPMorgan, 1994).

In general, insolvency occurs when the economic of capital is negative. However, each country may adopt different limit as a determinant of insolvency. The cut off limit needs to be discussed thoroughly throughout the parties involved.

4.2. Distress solution

In distress situation, Government may intervene ailing banks to transfer their losses to customers using interest rates instruments. In general, there are two approach to handle losses at banks, namely, flows and stock solution. Flows policy is intended to reduce the losses at banks and shift the losses indirectly to government or customers by using interest rate mechanisms. Government can absorb ailing bank losses by adopting interest rate subsidy. This policy will have high monetary costs because liquidity support for loss-making banks will be expansionary in nature and this policy is contradiction with the need of tight money policy when the economy is in the process of structural adjustment.

Bank losses also can be shifted to either borrowers or depositors. The popular technique is to permit high spreads. Ailing banks can manage the interest rate in such away to shift the losses to borrowers or depositors. The choice depends on the policy whether government wants to protect borrowers or depositors. High lending interest rate will give banks more returns, but corporate sector will loss, while lower deposit interest will creates losses for depositors. High lending interest rate is appropriate if the real sector is

strong enough to absorb losses, otherwise will create a new problem in real sector. If it is the case, ailing banks suffer not only from the liquidity because of lack confidence to banking system, but also deterioration of loan quality due to high interest rates. In 1980-81, Korea applied lower interest rates for lending and depositors because of heavy industrialization program in that period.

Another flow solution is to permit bank involve in outside their traditional business such as engaging in securities business and insurance. In general, flow solutions work well if the level insolvency is small. The best indicator for this is when the level of capital adequacy is below the statutory level but it is still positive.

Stock solution techniques consist of three techniques to handle the capital of banks. First, Government can improve the capital adequacy of banks by injecting funds from public or private. This approach is appropriate for banks, which are viable in the long run. Second, Government can close the non-viable banks through deposit protection agency to settle depositors' money. Third, carve out bad debts and replace them with Government bonds or central bank liabilities. We can apply different approach for different agency. The third approach has been adopted in the USA by establishing the U.S. Resolution Trust Corporation (RTC) and in Spain by establishing Spanish Guarantee Fund (SGF).

Indonesian Government adopts combination between flows and stock solutions. Flow solution was applied when the government increased interest rate in 1998 with the aim to restore public confidence. The increase of interest rate caused the interest rate on lending was soaring and, finally, the borrowers failed to pay interests. Stock solution was applied when the Government issued recap bond and gave the bonds to banks as capital injection.

In restructuring mechanisms, there are other approaches called market based solution and government intervention. Market based solution consists of shareholder capital injection, sale or merger, privatization, liquidation without deposit compensation while government intervention consists of nationalization, liquidation with deposit insurance, asset recovery trust, and bank "hospital".

Market based solution does not create any cost to tax payers. This solution assumes that depositors can absorb risk by themselves without government intervention. In many

countries, government is responsible for small depositors under deposit protection scheme. Large depositors, presumably, have capability to take care the risk on banks. Therefore, they are responsible to absorb the risk of failed banks. The treatment on the failure of Bank of Credit and Commerce International (BCCI) in 1991 in the UK is the best example of the application of this approach. Government intervention requires public funds to intervene the process of recovery in the financial system. With respect to this approach, Indonesian government adopts Government intervention solution.

4.3. Supplementary policies

Bank restructuring requires certain conditions to ensure that banks can restore their intermediary functions and improve their solvency. Capital injection to banks without fresh money is just to increase book value of capital. Banks still have problem with liquidity since the government securities or bonds are not marketable. Therefore, banks still need: fresh money to improve liquidity, borrowers to obtain revenue, and proper supervision to ensure that the prudential practices are in place. In many cases, Government just issue bonds to bailout banks with the expectation that banks can sell bonds in secondary markets to get fresh money. There is no guarantee that the secondary market is able to absorb the bonds in the period of post crisis.

Proper banking supervision is required to ensure that banks is operated under prudential rules and good governance is in place. However, the normal regulation, which is applied to normal condition, doesn't stimulus the recovery of banking intermediation. Sundarajan (1992) suggests condition required to achieve the recovery of banking system that cover the following:

- A minimal system or prudential regulation including enforcement
- Key monetary control reforms and support change in money market
- The speed of liberalization of interest rates and credit controls depends on the pace of fiscal and external policies in achieving overall macro economic balance
- A wide range of central bank operational reform including policy research, foreign exchange market operations, prudential regulation, clearing and settlement systems, public debt management, and accounting and bank reporting systems.

The condition above, in general, is intended to restore the intermediation function of banks, increase solvency, and good governance in banks. Application the above condition

depends on the commitment of all parties involved in government. Since the political pressure is too strong against the application of proper rules, the improvement of bank solvency cannot be achieved.

Many countries gave forbearance in regulation to speed up the process of recovery. German Federal Government guaranteed former eastern state-owned enterprises debts and restricted new entry into banking sector by imposing high capital and licensing standard (Meinecke, 1991). Korean Government also applies Government guarantee to ensure that loans to corporate sector has low risk and to default risk of the borrowers. Japanese Government spent JPY 8.6 trillion of public works spending and JPY 2.1 trillion of lending for small firms and private capital investments (Sasaki, 1994). Furthermore, The Cooperative Credit Purchasing Company was established by 162 financial institutions with a capital of JPY 7.9 billion to buy land from banks' collateral portfolio at book or below market prices, thus allowing banks to relief on the write-off of non-performing loans.

5. Bank restructuring and recapitalization programs in Indonesia

Bank restructuring covers recapitalization programs, development of secondary market for government bonds, corporate restructuring and enhancement of banking supervision. Each component is necessary to ensure that the stability of banking system will be accomplished. The following section discusses the policy measure related to the components of restructuring.

5.1. Recapitalization programs

Government has recapitalized 36 banks comprising 4 state banks, 20 private banks and 12 regional development banks worth IDR 412,306 billion or USD 51.5 billion (1 USD= IDR 8,000) as of July 2000. One more bank (Bank Bali) is still in the process of recapitalization completed by end of this year worth IDR 4,610 billion or USD 0.58 billion. Additionally, Government also issued bonds worth IDR 164,536 billion or USD 20.56 billion to replace the government debts generated from BI's liquidity supports for problem banks during crisis. Total recap bonds from the Government accounts for 60% of Indonesian GDP in July 2000, which is the highest of restructuring cost with respect to

GDP in history. Hawkins and Turner (1999) inform that the highest restructuring cost was in Chile worth 41% from GDP in 1981-1985.

Even though public confidence has been restored, majority of banks in Indonesia suffered significant losses during crisis. The bank owners were unable to inject banks with fresh money to cover bank losses. If this condition were continued, it would invite chaos in the economy and the cost would be even higher. Finally, Government decided to promote the stability of banking system by implementing recapitalization program just for viable banks. This program was intended to prevent further losses for the government and to ensure the stability of banking system in the future. Therefore, government only allows viable banks to exist in the banking industry and closed for non-viable banks with the cost of the government.

Banks were classified into three categories based on the adequacy of capital (CAR). CAR $> 4\%$ is identified as category A; CAR $>25\%$ to $\leq 4\%$ is identified as category B; and CAR $\leq -25\%$ is identified as category C. A viable bank is identified as bank with minimum CAR of 4% (A category banks). Banks with CAR below 4% are required to improve their CAR through recapitalization program to ensure that the recovery can be achieved without any difficulties. However, only banks with CAR -25 to 4% (B category banks) are allowed to join the recapitalization program. Banks with CAR below -25% (C category banks) needs to improve their CAR to B category as one of the requirements to join the recapitalization program. If C banks failed to improve their CAR to at least B category, the banks would be suspended from the operations or taken over by government. BI hired international auditing firms to conduct due diligent on Indonesian banks. The results of due diligent can be shown in the following table.

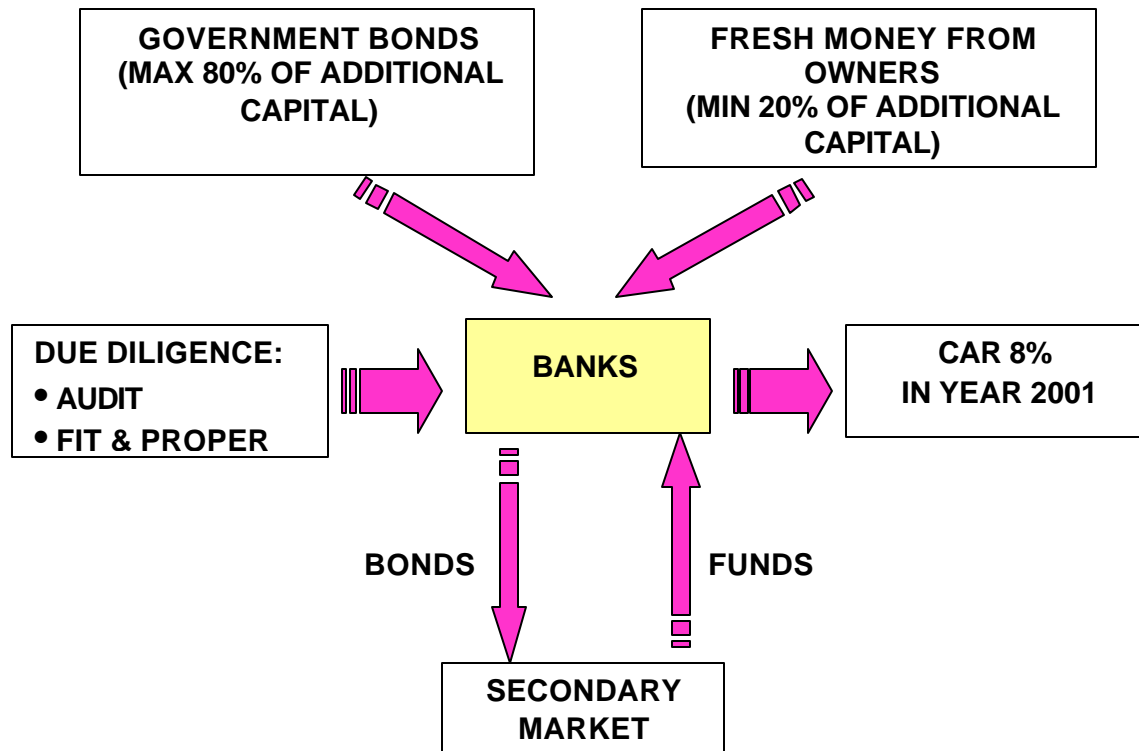
Table No.4
Results of Classification Based on Due -diligence

Group of Banks	A Category	B Category	C Category	Total
National Private Banks	74	16	38	128
State Owned Banks	-	-	7	7
Regional Development Banks	15	8	4	27
Joint Banks	30	-	2	32
TOTAL	119	24	51	194

A bank with category below C is allowed to join the recapitalization program since the owner can improve the bank category to B level. Eventually, government suspended 38 C category banks from their operation in March 1998 and took over 13 banks in 1998 to 1999. Government adopted too big to fail policy for not closing systematically important banks to avoid the chaos in the economy because these banks employed a large number of employees. Closing to these banks may increase un-employment and guarantee cost for Government.

To recapitalize banks, Government also requires the owners to inject 20% of required additional capital with fresh money and the Government issues government bonds worth 80% of additional capital (see figure no.2). The recap banks will hold the bonds on their assets and government ownership on their liabilities. This mechanism improves the accounting capital of banks. However, the economic value of capital is not always the same as the accounting value, depending the market value of bonds. If the market value of bonds is below par, the depreciation of bonds should reduce the economic value of capital. To reflect this, BI requires banks to re-price their bond trading portfolios based on market price.

Figure No.2
Government Capital Injection Mechanism



Recap banks need to convert their government bonds into cash before extending credits to restore their roles as intermediary. Government and BI have established a secondary market for the government bonds to stimulate banks to obtain fresh money from selling bonds since February 2000. Unfortunately, the liquidity of the market is still very low due to lack of investors who interested in buying Indonesian bonds. Transaction in the market is still very low even the price is at discount (96%) in March 2000. Recap banks are reluctant to sell their bonds at discount because this discount will be recorded as loss and affects to the adequacy of capital. Additionally, the money from selling the bonds may not be absorbed by corporate sector at the moment because corporate sector restructuring is still under way. Finally, recap banks are still better off to hold up rather than selling the bonds.

Before the recapitalization program takes effect, Government requires banks to make 100% loan loss reserves for non-performing loans to make the book value of these loans is

nil and transfer these non-performing loans to IBRA. These loans will either be restructured or sold by IBRA to investors. Restructured loans will be transferred back to banks to settle the government bonds with the agreed market prices. The proceeds of selling loans will be used by IBRA to buy back the government bonds. Therefore, the success of loans work out at IBRA will be the key success factor in bank restructuring.

5.2. Enhancing of banking supervision

Bank Indonesia has been setting some possible targets to persistently improve its supervisory framework on an on-going fashion, which will address various aspects, among others, namely, improving good corporate governance, strengthening banking supervision, stimulating conducive banking environment.

To promote the conduct of good corporate governance, Bank Indonesia has introduced several rules, among others pertaining to the following attempts:

- to enhance the competence and integrity of the bankers through the implementation of Fit and Proper Test upon the bank's shareholders and management.
- to require the bank to appoint a Compliance Director, holding the responsibility to ensure the bank's compliance with the existing regulations.
- to hold up the consistency of law enforcement through the institution of Banking Investigation Special Unit, which is proposed to evidently discover the violations against banking rules in order to identify the root of the problem and coerce prompt repressive actions.

It is fully aware that the banking crisis was stemmed from the weaknesses in the performance of banking supervision. In coping with such unfavorable condition, Bank Indonesia has been focusing its exertion toward these following aspects:

- harmonization of bank supervision organization, particularly the structure and responsibility.
- betterment of bank supervision management, including but not limited to the rise of supervision efficiency and transparency, enhancement of supervisor competence, accountability and recognition, as well as reward and enforcement.
- employment of risk-based supervision
- rectification of prudential regulations with emphasis on risk control

The efforts to create safe and sound banking system should be followed by the strategic measures as to produce conducive banking environment, through:

- Establishment of deposit insurance program as financial safety net, which will be a coming crucial agenda to replace the existing blanket guarantee, expected to come into effect by 2004.
- Involvement of Public Accountant Firm in assisting the banking supervisory tasks so that Bank Indonesia may obtain early and objective information on problems encountering the bank.
- Reactivation of Banker's Association that may function as partner of Bank Indonesia in developing national banking system and overseeing the bankers conduct. Such effort is proceeded through training and surveillance over the members of association, as well as providing needed counsel.

Other efforts have been adopted to improve the stability of banking system, such as introducing a new banking act (Act No.10 of 1998) as the amendment of Banking Act No. 7 of 1992 and a new central bank act (Act No. 23 of 1999) as the amendment of Central Bank Act No.13, 1968. Amendments on the Banking Act No. 10 of 1998 cover in the following items:

- Transferring the authorization on bank licensing from Minister of Finance to Bank Indonesia.
- Relaxing the maximum of foreign ownership on Indonesian incorporated banks up to 99%.
- Encouraging the development of Sharia Banking
- Narrowing of bank secrecy to cover, only, the information on deposits (name and amount) instead of the whole assets and liabilities
- Adopting more comprehensive and stricter criminal sanction, and determination of the minimum level of criminal sanction
- Establishing a deposit protection scheme in 2004, at the latest.
- Establishing a temporary special agency to assist the banking restructuring program.

The above amendments were intended to improve the stability of banking system in Indonesia.

The amendments on the Central Bank Act include the following items:

- Bank Indonesia is provided with a broad capacity, authority, independence, and a single clear-cut responsibility to stabilize the national currency
- The independence encompasses areas in legal, personnel, institution, objective, functions, management, budget and transparency substances
- Bank Indonesia is structurally positioned outside the Government hierarchy, holds full autonomy in performing its functions, and can not be intervened by the Government and other parties.
- In line with the independence, Bank Indonesia is required to uphold accountability for its performance toward the public, as well as to the President and the Parliament.
- The banking supervision function will be vested with an independent supervisory agency, established by the end of 2002 at the latest.

Additionally, Government also introduced the Act of Foreign Exchange Traffic and Exchange Rate System. (Act, No.24 of 1999). This Act gives legal basis for the monitoring of the foreign exchange traffic and the enforcement of prudential provisions. The Act requires banks to submit a report containing the movement of financial assets and liabilities between resident and non-resident to Bank Indonesia. Complete, accurate, and timely information of foreign exchange traffic is the key information to support the prompt monetary policy response, which primarily is directed at preserving the stability of national currency. Therefore, banks should equip its reporting system with the adequate supporting facilities to accommodate such requirement.

BI has developed a plan to improve the compliance of banking supervision with international norms. Detailed action plan will be fully implemented in year 2002 under assistance of IMF.

6. The Framework and progress of corporate sector restructuring in Indonesia

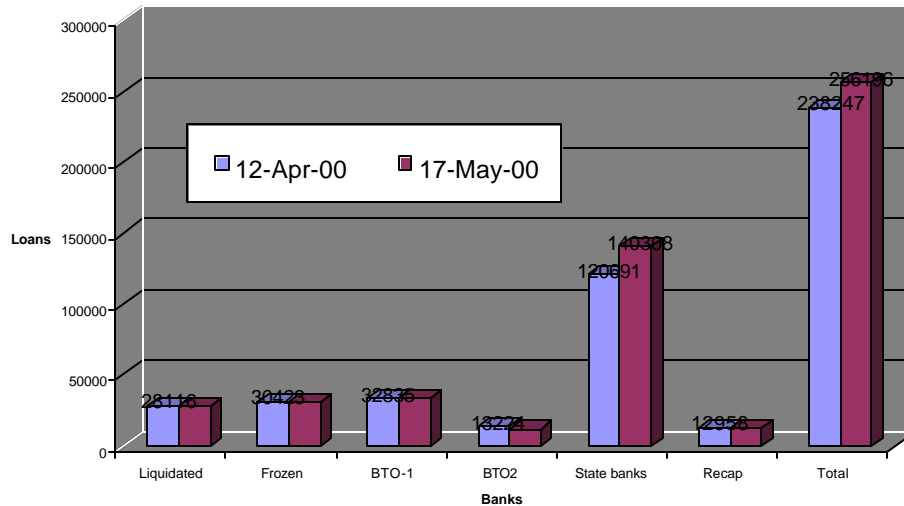
Recapitalization program with government bonds is intended to improve the solvency of banks. However, banks require fresh money to improve their liquidities and good quality of borrowers to improve their intermediary role and, eventually, increase profitability of

banks. The scenario of this recapitalization program includes the establishment of secondary reserves for government bonds. This market will provide mechanism for banks to sell their bonds to the market and receive fresh money. To provide good quality of borrowers, government adopts restructuring program of corporate sectors through Indonesian Bank Restructuring Agency (IBRA), Jakarta Informal Task Force (JITF) and Credit Restructuring Task Force (CRTF). IBRA is responsible to restructure loans, which have been transferred from banks while CRTF just focuses on credit restructuring on banks' portfolio, and JITF is responsible to provide one stop service of loan restructuring, which cannot be handled by IBRA and CRTF restructuring schemes.

IBRA has received loans from banking sector since when it was established (1998) worth IDR 256,195 billion as of 17 May 2000. These loans were received from liquidated banks, takeover banks, frozen banks and recap banks. There are some good quality of loans, which were transferred from banking sector. However, the loan quality from recap banks is normally bad. IBRA has set up an Asset Management Credit unit to workout and restructure loans. The loan portfolio at IBRA can be shown in the following graph:

Graph No.9

Loans Relocation to IBRA (in billion IDR)



Sources: IBRA Monthly Report, July 2000

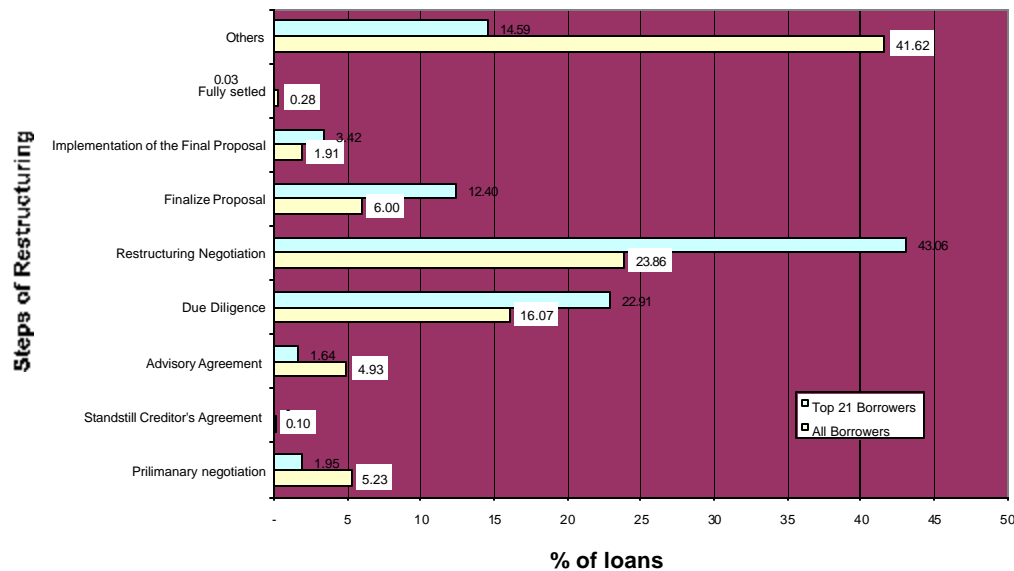
To apply the best solution for the loans, IBRA adopts the following policies (IBRA, 2000):

- Rescheduling and providing assistance if the borrowers have positive cash flows and intention to repay the loans. The objective of this treatment is to ensure that the loans can be improved to be performing loans.
- Restructuring the tenor, interest, principle or a combination of the three for the borrowers with negative cash flows but have intention to repay the loans.
- Liquidation for the borrowers whose business have no prospect but still have intention to repay the loans
- Declaring bankruptcy or liquidation for the borrowers with negative cash flows and no intention to repay the loans
- Selling assets for the borrowers with positive cash flows but no intention to repay the loans

The proceeds from loan work out will be used by IBRA to buy back the government bonds in the future and the restructured loans will be offered to banks. To have a better focus, IBRA identifies top 21 borrowers who account for 35.11 % of total loans or IDR

83,939 billion. The progress of loan restructuring at IBRA can be shown in the following graph:

Graph No.10
Progress of Loan Restructuring by IBRA



The process of debt restructuring found some problems to come up with an agreement between debtors and creditors.

7. Structural reforms in the areas of financial sector

Financial institution in Indonesia consists of banks, non-bank financial institutions, insurance companies, capital market institutions, brokerage firms, pension funds, pawnshops, and micro credits. Banks play major roles in providing intermediation in Indonesia. According to Act No.23 1999, BI is responsible for supervising banks. Other financial institutions are under supervision of Ministry of Finance. In general, regulation in banking industry is more stringent than that applies for other financial institutions in Indonesia.

The structural changes in financial sector may be driven from the amendment of the Central Bank Act No. 23, 1999. Article 34 mentions that banking supervision tasks will be transferred to an independence agency in year 2002, at the latest. This agency will be

responsible for supervisory (including examination) tasks on banks and other financial institutions. This mega supervisory authority will be established to improve the effectiveness of supervision in Indonesia. However, BI should keep its role as the regulatory authority for banks including licensing. This approach may need some efforts for government to ensure the smoothness of the coordination between the regulatory and supervisory bodies for banks. Others countries put the regulatory and supervisory roles in one institution, such as FSA in the UK and APRA in Australia.

Additionally, Government will establish a deposit protection scheme to replace the blanket guarantee in year 2004, at the latest. Theoretically, the protection scheme is intended to protect small depositors and reduce moral hazard for banks to operating in high risk transactions. Therefore, the scheme coverage will be limited for small depositors and risk- based premium should be adopted.

8. Future Indonesian Financial Industry

Crisis and restructuring program may lead to a new structure on banking system in Indonesia. Bank closures and recapitalization program will affect to the number of banks and the ownerships. Additionally, new regulations and supervisory approaches to comply with international standard may change the structure of the industry. This discussion focuses on the structure of the financial industry with respect to the number of banks, ownership, branching, and the role of non-bank financial institutions including capital market development.

8.1. Number of banks

The number of banks has been decreased since the crisis in 1997 (see Table No.5) from 240 in 1997 to 153 in August 2000. Detailed information on the number of banks can be shown in the following table.

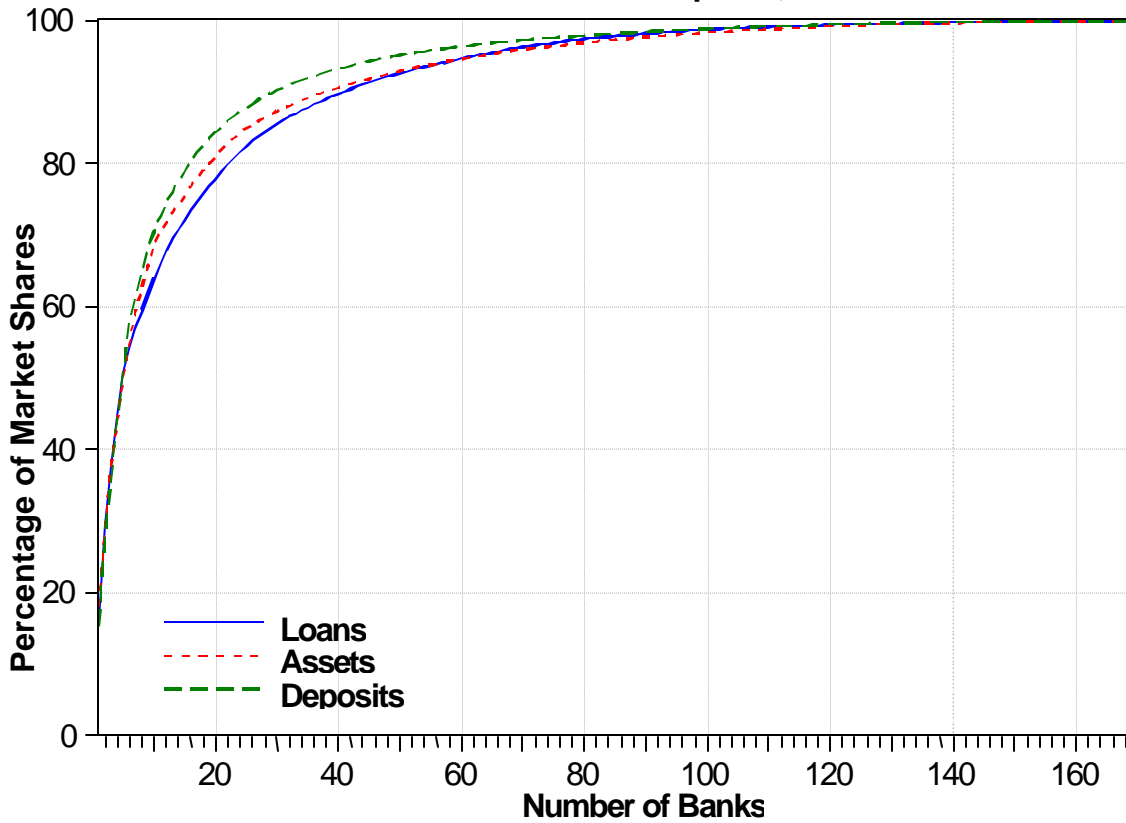
Table No.5
The Number of Banks

Group of banks	Oct- 97	Evolution Nov-97 – Agustus-00			August
		Liquidated , Suspended, Take Over	Merger	New Banks	2000
State banks :	7	-	4	2*)	5
Private Fx banks	115	34	14	-	67
- A Category	-	-	-	-	28
- Recap banks	-	-	-	-	6
- Take Over	-	-	-	-	4
- Ex Joint venture	-	-	-	-	29
Private non-Fx banks	79	33	1	-	45
- A Category	-	-	-	-	44
- Recap banks	-	-	-	-	1
Regional Development banks	27	1	-	-	26
- Recap banks	-	-	-	-	12
- Non-recap banks	-	-	-	-	14
Foreign banks	10	-	-	-	10
Total	238	68	19	2	153
The number of Offices	7781				6658

*) Bank Mandiri dan Indonesian Export Bank

Based the experiences from the last crisis, small banks were more immune to the crisis. Most of problem banks were large banks with wide network because the banks were highly exposed to credit and market risks. The small number of large banks with wide network and small unit banks in the regional and district area is the best structural policy for the future. The number of banks is slightly to decrease if small banks will be encouraged to merge and the entry requirement will be tighten. However, BI is not going to intervene directly using power to ward the achievement of reducing the number of banks instead of imposing tight requirement to establish a new banks and to open branches and enforcing the exit policy regulation for insolvent banks. By end of 1999, top 20 banks in Indonesia in which include 5 state banks account for almost 80% of market share in total assets, loans, deposits as shown in the following graph. The remaining of 20% share is allocated to 133 small banks.

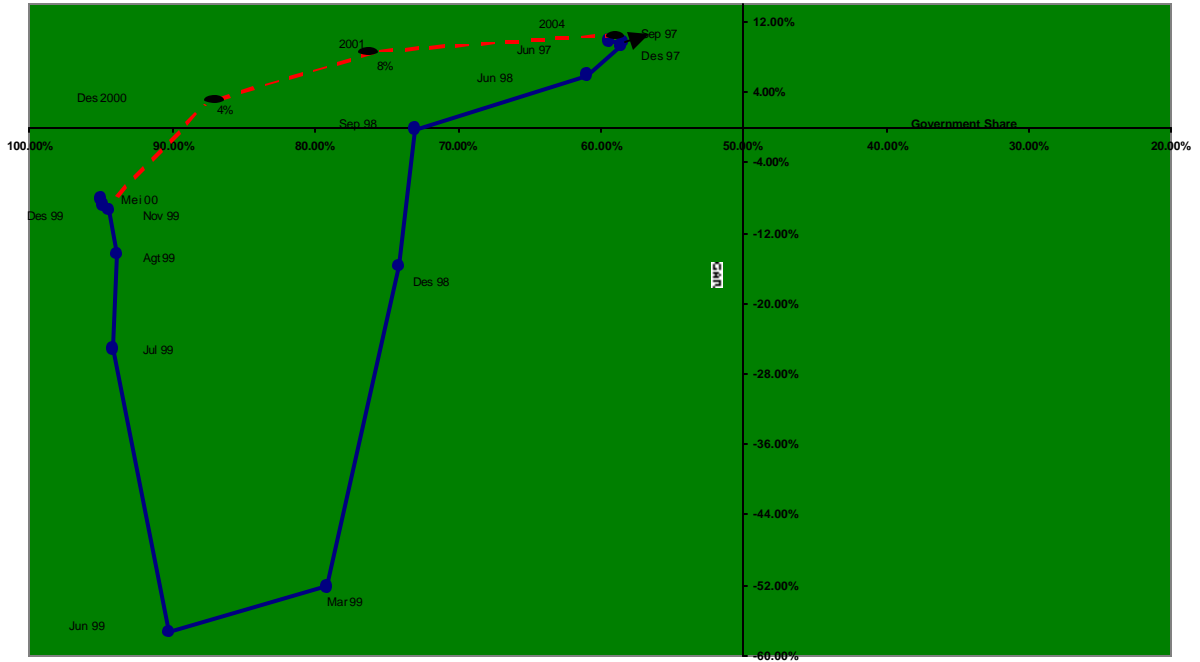
Graph No.11
Cumulative Market Shares on Deposits, Loans and Assets



8.2. Ownership

The ownership of government on banks increased significantly after the recapitalization program was imposed. However, this ownership is intended for temporary basis and will be divested after 5 years, at the latest. However, the divestment of government ownership can be accomplished if the performance of banks is profitable and sound. The failure of this divestment may affect to the government budget to repay the bonds. The evolution of government ownership and the improvement of capital can be shown by the following graph.

Graph No.11
Evolution of CAR and Government's Share on Banks



Based on the above graph, CAR of banks improves in line with the improvement of government ownership on banks. The ownership through recap bonds will be fully divested in year 2004, at the latest.

8.3. Role of non-bank financial institutions and capital market

Banking sector in Indonesia dominates the intermediary role in financial sector. This condition is common in developing countries where the development of non-bank financial institutions and capital market is still in early stages. Share of bank assets in total financial sector assets accounts for 91% at the end of 1998, which is the highest after Argentina (Hawkins and Turner, 1999). The role of capital market and stock market in financial sector in developed country is higher than that in developing countries. Table 6 shows the structure in banking industry from various countries at the end of 1998.

Table No.6
Role of banking industry in financial sector

Countries	Number of large and medium domestic banks³	Bank claims on government⁴	Share of bank assets in total financial sector assets	Share of state owned banks
Indonesia	..	2 ⁵	91	85
Korea	14	3	38	28
Malaysia	15	7	78	7
Philippines	14	23
Singapore	5	17	71	0
Thailand	9	0	77	29
Argentina	8	32	98	30
Hungary	2	42	91	..
Australia	7	6	49	0
Germany	87	44	49	0
Japan	116	11	48	15
USA	182	15	23	0

Sources: Bank Restructuring in Practice, BIS Policy Paper, 1999, p. 9

The role of non-bank financial market and capital market needs to be improved in Indonesia to ensure that the problems in banking sector would not significantly affect to the economy as a whole. Supervision and regulation for non-bank financial institutions must be similar to that in banking sector to avoid the moral hazard in non-bank financial institutions due to more relax regulation and supervision.

³ Number of banks ranked in world's top 1000

⁴ Banks' holdings of government paper as a percentage of banks' deposits

⁵ This figure increased to 25% in December 1999 after the recapitalization program and the increasing of investment in BI certificates

9. Conclusions

- 9.1. Indonesian government adopted rapid liberalization in financial sector, especially in banking sector in 1988. Proper regulation and supervision are necessary to ensure that market liberalization is still in the prudential corridors. However BI was unable to provide proper regulation in relatively free competition in banking sector. The regulation to prevent banks from losses due to volatility in foreign exchange and interest rate is the most important in the liberalization of foreign exchange regime. Consolidated banking supervision is also important to prevent banks from losses due to the failure of affiliated companies. These regulations have been proposed in Basle Core Principles for banking supervision. However, these regulations were not applied in Indonesia. Additionally, BI was struggling to enforce the regulation (legal lending limits) due to the lack of independency from the Government. The condition above created the fragility of Indonesian banking system. However, a master plan has been developed to improve the compliance of the regulation to international standard.

- 9.2. Government shifted the losses in banking sector during the crisis to real sector through the increasing of interest rates and to tax payers through the issuance of bonds for recapitalization program. However, the intermediation role of banking sector finds some problems to recover after the recapitalization program has been carried out. The recapitalization program itself couldn't restore the intermediation functions for banks if there is no buyer for the bonds and real sector is unable to absorb loans from banks. Secondary market of Government bonds is not liquid and the corporate sector restructuring finds a lot of problems due to political instability and uncertainty including legal framework, which causes less confidence for borrowers and investors to continue their business and pay their loans.

- 9.3. Banks have no incentives to improve their loans since the price of Government bonds is still at discount, which should be recorded as losses and reduce their CAR level. On the other hand, banks needs to improve and maintain their CAR position to achieve 8% at the end of year 2001. Additionally, excess reserve on banks couldn't be absorbed by corporate sector since the corporate restructuring is

still underway. Therefore, stimulus and guarantee from Government are necessary to spark economic activity and restore investors' confidence that business in Indonesia will be safe and sound in the future. Theoretically, forbearance is also one of the tools to restore the economic activity. However, the prudential regulation has been relaxed during the crisis, such as CAR 4% and the delay of imposing penalty due to the excess of legal lending limits.

- 9.4. Based on the lesson to be learnt from the crises, the future structure of financial system in Indonesia needs to be developed by stressing the following points:
- Provide more role for non-bank financial institutions in intermediary, especially capital market, bond market and investment companies.
 - Develop an independent supervisory agency to responsible in supervising all financial institutions in Indonesia
 - Imposing a consistent exit policy in banking sector to ensure that sound banks remain in the market.
 - Preventing banks to expand their branches unless they have enough internal control and information system to keep the operation in control.
- 9.5. However, political stability is one of the requirements to convince the investors that Indonesia is safe for investment, and finally reduce the risk premium of conducting business in Indonesia. To stimulus the recovery of real sector, a joint effort between all government agencies is necessary to develop a breakthrough for economic activity.

Appendix I
October Package (PAKTO) of 1988

1. New entry

- Capital requirement for a new commercial bank establishment is IDR 10 billion
- Capital requirement for a new rural bank establishment is IDR 50 million
- The owners of commercial and rural banks must be Indonesian or Indonesian Incorporated companies
- Foreign banks together with Indonesian or Indonesian companies can establish joint commercial banks in Indonesia. The maximum of foreign ownership is 85%.
- No new entry for foreign bank branches and non-bank financial institutions

2. New branches

- A national bank can establish a new branch if the bank, at minimum, was classified as a sound bank 20 times within the last 24 months. Sound rating was established every month.
- The existing foreign banks can open branches in 7 major cities if the export credits account for at least 50% of total credits

3. Foreign exchange banks

- Branches of foreign exchange banks automatically have authorization in foreign exchange transactions
- A new foreign exchange license could be granted for a domestic bank if the bank, at minimum, was classified as a sound bank 20 times within the last 24 months and the minimum total assets is IDR 100 billion

4. Other measures

- State enterprises may put 50% of deposits with private national banks or non-bank financial institutions with the maximum is 20% for each bank.

- The maximum legal lending limits imposed on banks and NBFIs is 20% of capital base to a single borrower and 50% of capital base to affiliated companies or borrowers
- Reserve requirements on banks lowered from a range of 5-15% to 2% of liabilities to third parties
- Limit on interbank borrowing is eliminated
- Final withholding tax of 15% imposed on the interest of time deposits
- Banks and NBFIs can issue new shares in capital market
- Swap premium to BI will reflect the price in the market.

December Package (PAKDES) of 1988

1. Allows the establishment of private securities exchanges
2. Permits licensing of wholly-owned Indonesian firms and joint ventures in the financial service activities, namely, leasing, venture capital, securities trading, factoring, consumer finance and credit cards with maximum of 85% on foreign participation. The existing firms must adjust their capital within 2 years.
3. Banks are permitted to set-up subsidiaries for leasing and venture capital and to engage in factoring and credit cards without applying separate licenses.
4. Capital requirements for single activity is in the following:
 - Wholly owned by Indonesians in factoring, securities trading, credit card and consumer finance is IDR 2 billion and leasing and venture capital is IDR 3 billion
 - Joint ventures in factoring, securities trading, credit card and consumer finance is IDR 8 billion while leasing and venture capital is IDR 10 billion

5. Capital requirement for multi-activity is IDR 5 billion for wholly owned by Indonesians and IDR 15 billion for the joint venture.

March Package (PAKMAR) of 1989

1. Eliminating the ceiling on offshore borrowings by banks and NBFIs
2. Restricting Banks and NBFIs to hold maximum net open foreign exchange position equal to 25% of capital base
3. Announcing of schedule for removal of subsidy on interest rates for export credits within the year
4. Excluding rural banks to comply with PAKTO provisions
5. Eliminating existing requirement that medium and long term bank loans must be approved by BI
6. Allowing BAPINDO (the Indonesian development bank) and NBFIs to hold all types of equity
7. Allowing commercial banks to hold equity in financial activities with certain limits and hold equity in other firms only with approval of the Minister of Finance
8. Assigning NBFIs and BAPINDO as under writing authorities and prohibiting banks from engaging in underwriting activities.

January Package (PAKJAN) 1990

1. Abolishing most of subsidized credits from BI to banks
2. Abolishing credit insurance by ASKRINDO (a government agency) except for the following credits: loans to BULOG (a government logistics agency) for food stocks, investment credit for development banks, NBFIs and plantations, working

capital credits for farmers, and cooperative loans. Interest rates on remaining government credit scheme increased to near-market levels and insurance scheme is optional at market rates.

3. National banks were required to allocate, at minimum, 20% of their loan portfolio to small business (the company or individual with the assets less than IDR 600 million)

Appendix II

Indonesia : reform in the banking industry, 1983 - 2000

Policy measures	Before reform	After reform	Date	After crisis	Date
I. Competitive measures					
[1] Entry of new banks					
(a) Private banks	Moratorium since 1970	Permitted	October 1988	Permitted	November 1998
(b) Foreign banks	Moretarium since 1970	Permitted to enter as joint venture	October 1988	Permitted to enter	
[2] Branching power					
(a) Private banks	Restricted ^a	Permitted to sound banks	October 1988	Permitted	November 1998
(b) Foreign banks	Restricted to Jakarta	Permitted to seven cities (later Batam)	October 1988	Permitted	
[3] Foreign exchange license	Restricted ^a	Eligible for sound banks	October 1988	Permitted	November 1998
[4] Types of loans					
(a) State banks	Mainly the extended subsidized credit programs as set and refinanced by Bank Indonesia	The scope and coverage of the subsidized credit programs are reduced	June 1983 27 January 1990		
(b) Private banks	Free to set	20% total credit must be extended to small business ^b	October 1988		
(c) Foreign banks	Free to set	50% total credit must be extended to export-related activities	October 1988		
[5] Types of saving and deposit schemes					
(a) State banks	Set by Bank Indonesia	Free to set	1 June 1983	Government set rates guaranteed by the government	March 1998
(b) Private banks	Free to set	Free to set			
(c) Foreign banks	Free to set	Free to set		Government set rates guaranteed by the government	May 1998
[6] Deposits of the public sector	Restricted to state banks	Restricted to state banks	October 1988		
[7] Deposits of the state enterprises	Restricted to state banks	Up to 50% with private banks	October 1988		
[8] Deposit rates					
(a) State banks	Set by Bank Indonesia	Free to set	1 June 1983		
(b) Private banks	Free to set	Free to set			
(c) Foreign banks	Free to set	Free to set			
[9] Loan rates					
(a) State banks	Controlled by Bank Indonesia	Free to set	1 June 1983		
(b) Private banks	Free to set	Free to set			
(c) Foreign banks	Free to set	Free to set			
[10] Credit ceilings					
(a) State banks	Set by Bank Indonesia	Eliminated	1 June 1983		
(b) Private banks	Set by Bank Indonesia	Eliminated	1 June 1983		
(c) Foreign banks	Set by Bank Indonesia	Eliminated	1 June 1983		
[11] Foreign exchange power (limited to licensed banks)	Subjected to ceiling set by Bank Indonesia	Net open position ^c	November 1989		
[12] Reserve requirements (RR)	15% of deposits (differentiated between bank deposits and deposits in foreign currencies)	2% of deposits 3% of deposits 5% of deposits in rupiah and 5% of deposits in foreign currencies	October 1988 24 December 1995 11 September 1996	[a] 5% of deposits in rupiah and 3% of deposits in foreign currencies [b] Administrative sanction was changed from 0.1% to 0.04% per day. Administrative sanctions for RR in rupiah: - 150% of JIBOR overnight for each violation; - 200% of JIBOR overnight/violation if more than working days; - 400% of JIBOR overnight/violation if more than 14 working days;	20 October 1997 7 October 1997 6 March 1998

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Policy measures	Before reform	After reform	Date	After crisis	Date
[13] Entry to new activities			December 1988 ^d		
(a) Leasing	Not regulated	Subsidiary			
(b) Venture capital	Not regulated	Subsidiary			
(c) Securities trading	Not regulated	Not for own account, not as broker/dealer			
(d) Factoring	Not regulated	Directly			
(e) Consumer finance	Not regulated	Directly			
(f) Credit cards	Not regulated	Directly			
(g) Underwriting shares ^e	-	Prohibited			
(h) Custodian	Not regulated	Approval required for capital market		Otherwise can do as part of usual	
(i) Trustee and guarantor	Not regulated	Approval required for capital market			
(j) Securities administrative age	Not regulated	Prohibited			
(k) Investment manager	Not regulated	Subsidiaries			
II. Prudential measures					
[1] Earning assets quality	Consisting of loans with the classification of current, substandard, doubtful, and loss.	Consisting of extended credit, securities, equity participation and placement. Extended credit includes NPA and factoring.	February 1991 May 1993	Consisting of extended credit, securities, equity participation and placement, and all transactions recorded in off-balance sheet. Classification : pass, special mention, substandard, doubtful and loss.	12 November 1998 27 February 1998
[2] Provision for earning assets losses	None	[1] 1% of all earning assets 3% of current after deducted by collateral 50% of doubtful after deducted by collateral 100% of loss after deducted by collateral [2] 0.5% of current 3% of substandard after deducted by collateral 50% of doubtful after deducted by collateral 100% of loss after deducted by collateral [3] 0.5% of current 10% of substandard after deducted by collateral 50% of doubtful after deducted by collateral 100% of loss after deducted by collateral	February 1991 May 1993 29 March 1994	[1] General reserves : 1% of total earning assets Special reserves: 5% of special mention after deducted by cash collateral 15% of substandard after deducted by cash collateral 50% of doubtful after deducted by cash collateral 100% of loss after deducted by cash collateral [2] General reserves : 1% of PABE Special reserves: 5% of special mention 15% of substandard after deducted by collateral 50% of doubtful after deducted by collateral 100% of loss after deducted by collateral	27 February 1998 12 November 1998
[3] Capital Requirements					
Paid-in capital					
(a) Commercial banks					
(i) Private banks	-	Rp. 10 billion Rp. 20 billion Rp. 50 billion Rp. 100 billion	October 1988 October 1992 October 1988 October 1992	Rp. 3 trillion	May 1999
(ii) Joint Venture banks (minimum 15% Indonesian ownership)	-				
(b) Rural banks		Rp. 20 million	October 1988	Rp. 2 billion in Jakarta, Tangerang, Bogor, Bekasi dan Karawang Rp. 1 billion in the capital city of a province Rp. 500 million outside abovementioned areas.	May 1999

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Policy measures	Before reform	After reform	Date	After crisis	Date
Capital Adequacy Ratio (CAR)	Not specified in a certain number.	5% by the end of March 1992 7% by the end of March 1993 8% starting from the end of December 1993 7% starting from the end of March 1993 8% starting from the end of December 1993 ^a	February 1991 May 1993	4% Provision for non performing loans will be deducted from June 2000 weighted assets.	12 November 1998
(4) Legal lending limit	None	(%) of bank capital Individual Group 20% 50% 20% 50% 10% 10% related parties 20% 20% not related parties	October 1988 February 1991 May 1993	Related parties (individual/group): 10% Not related parties (individual/group): a. 30% of capital starting from 31 December 1998 up to 31 December 2001. b. 25% of capital starting from 2002. c. 20% of capital starting from 1 January 2003.	31 December 1998
(5) Loan to deposit ratio	None	110%	February 1991	110%	April 1997
(6) Net open position	None	25% of capital 20% of capital for total currencies 25% of capital for each currency 20% of capital for total currencies 25% of capital for each currency 20% of capital for off-balance sheet	March 1989 February 1991 November 1991	20% of capital	31 December 1998
(7) Accounting standard	None	Available Based on International Accounting Standards	June 1992 September 1994	Revised edition	March 2000
III. Money market					
	Reintroduced in February 1984, SBI is the most important money market instrument at present. On 1 June 1993 the auction system of SBI changed from 'cut-	Individual is allowed to buy SBI.			July 1998
IV. Transparency and accountability of reporting and management					
(1)	To improve banking supervision by (a) standardizing accounting and reporting system; (b) requiring commercial bank to submit detail to the central bank and banning person involved in fraudulent transactions or defaulted on significant loans from becoming shareholder or member of the board of commissioners of banks or member of the board of commissioners of banks.		January 1995	The bank has to include information about the detail of December 1998 earning assets quality, required provision for earning assets losses, and CAR.	
(2)	Banks are required to (a) submit detailed credit plan to Bank Indonesia and those with uncollectible amounted to 7.5% of total credit o required to submit credit recovery plans; (b) standardize internal audit system and (c) adopt information system technology.				

a Permitted in principle, but economic and social requirements made it prohibited in practice.

b Since 29 May, can be channelled through other banks and rural banks. Since 29 May, can be channelled through other banks and rural banks.

c Overseas borrowing for public sector is subject to ceilings set by TKPLLN (Coordinating Team for Management of Commercial Offshore Loans) since October 1991

d Items (g) to (j) are subject to the Decree of Ministry of Finance Number 1548 of 4 December 1990.

e Can underwrite bonds and other debt instruments.

f Since 29 May 1993 own capital; included in the denominator.

g In 29 May 1993 this schedule was extended to December 1994.

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