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Research for Action

Research for Action 27

The Banking System and Monetary Aggregates Following Financial Sector Reforms

Lessons from Indonesia

Anwar Nasution

UNU World Institute for
Development Economics Research
(UNU/WIDER)

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This study has been prepared within the UNU/WIDER project on Short-term Capital Movements and Balance of Payments Crises, being co-directed by Dr Manuel Montes, Senior Research Fellow, Professor Stephany Griffith-Jones, University of Sussex, UK, and Professor Anwar Nasution, University of Indonesia.

Professor Anwar Nasution was holder of the UNU/WIDER-Sasakawa Chair in Development Policy in 1995-96. UNU/WIDER gratefully acknowledges the financial support of the Sasakawa Foundation.

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FOREWORD

I am pleased to present the paper, 'The Banking System and Monetary Aggregates Following Financial Sector Reforms' by Anwar Nasution, UNU/WIDER/Sasakawa Distinguished Professor for the Chair in Development Policy in 1995-96. This paper analyses the impact of financial sector reform which occurred in Indonesia in the late 1980s and provoked a surge in capital capital inflows. These flows tend to increase domestic liquidity and Professor Nasution suggests the reduction of domestic aggregate demand to counteract the impact. Professor Nasution also argues for strengthening prudential regulation of the financial system and the restructuring of ownership in the banking system to ensure the system's viability in the more risky market environment.

This paper comes out of the 1996-1997 WIDER research project entitled 'Short-term Capital Movements and Balance of Payments Crises'. The research in this project will evaluate the variety of policy responses and institutional features at the country and the international level with the intention of identifying policy pitfalls and reform recommendations in dealing with cross-border capital flows. It will also attempt to identify the mix of policies and regulatory approaches (1) for encouraging the private sector to use (and generate) better information in making their international investment decisions and (2) for ensuring that country stances properly reflect the lender-of-last-resort burdens that all monetary authorities have in maintaining functioning credit markets in advanced and emerging economies.

Professor Nasution, who continues as co-director of this project, returned to his teaching post at the University of Indonesia in July 1996.

Professor Giovanni Andrea Cornia
Director, UNU/WIDER
September 1996

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Anwar Nasution
September 1996

ABSTRACT

This paper discusses the process, problems and impacts of the financial sector reform in Indonesia, particularly since the late 1980s. The reform has encouraged a surge in private sector capital inflows to supplement the already high domestic savings for financial investment and consumption expenditures and spur economic growth in the 1990s. The surging capital inflows, however, have complicated macroeconomic management as they put pressures for the real exchange rate appreciation and overheating the economy. To restore and maintain internal and external stability of the economy this paper suggests the curbing of expansion in domestic aggregate demand. The surest way to restrain domestic demand is to have a surplus in the public budget. This requires a revision of the long standing fiscal policy which is based on the 'balanced budget principle': capping the budget deficit to the level that can be financed by concessionary development aid package. Moreover, the width of exchange rate intervention, under the present managed floating system, needs to be widened to allow greater use of monetary policy for maintaining internal stability. On micro level, the capability of the banking system to extend credit and create money supply has to be restrained by better implementation of the prudential rules and regulations which govern the system. However, the fragile banks need to be restructured in order to improve their financial and other capabilities to compete in the riskier market environment. Business conglomeration which allows cross-ownership between financial and non-financial firms in the private sector needs to be rationalized to prevent moral hazard or internal transactions where loans are given to sister companies without proper risk evaluation.

I INTRODUCTION

Two recent fundamental changes in managing the economy in Indonesia have changed the instruments for controlling the monetary aggregates in this country. First, the adjustment programmes adopted, since the early 1980s, have moved the management of Indonesia's economy to a more market-based system. This shift has ended the old practices of financial repression with ceilings cum selective credit policy at low or negative subsidized real interest rates. The policies to lower barriers to entry in financial industry have increased competition among banks and between them and non-bank intermediaries. Relaxation or removal of capital controls makes domestic asset markets more integrated with international markets. Under a managed exchange rate system, a more open economy significantly erodes the degree of policy independence from the rest of the world as domestic economic policies are constrained by foreign economic events and policies.

Second, along with these policy changes, Indonesia has also adopted a more restrictive CAMEL (capital adequacy, asset quality, management, earnings, liquidity) system to regulate and supervise banks. As suggested by the Basle Accord of the bank regulators in December 1987, the capital adequacy ratio is set at 8 per cent. The guidelines, bring full range of on- and off-balance sheet assets into the risk-based capital standards. A harmonized risk-weighting system has been developed to access the different degrees of risk associated with each category of assets. Carrying higher weights, capital adequacy, asset quality and liquidity are the key variables in the CAMEL system. In addition, the authorities have introduced a new standard accounting and reporting system for banks.

The speed of the adjustment process in the real sector of the economy is much slower than in the financial sector. Because of this reason, some theorists (e.g. Edwards, 1986; and McKinnon, 1993) suggest to first liberalize the real sector of the economy and the trade account of the balance of payments and then deregulate the financial sector and the capital account. In contrast to these suggestions, Indonesia has adopted a reverse sequence of deregulation (Cole and Slade, 1992; and Nasution, 1994). In addition, the coverage and aspects of economic deregulation in this country are much broader in the financial sector than in the real sector of the economy. Indonesia adopted an open exchange rate system in the early 1971 long before it deregulated the trade account.

Deregulation of trade and investment pushes expansion of private consumption and investment expenditures which subsequently put pressures on imports, widen the deficit of the current account of the balance of payments, and raise the inflation rate. To stabilize the economy, such expansionary impacts of the reform should have been countered by contractionary demand measures and more restrictive prudential measures. In contrast, there was no measure adopted in Indonesia to restrain the expansionary impacts of the broad based economic reforms. Such contractionary measures could have been done by a combination of curbing aggregate demand and tightening the

implementation of banking rules and regulations. Bank operations in Indonesia were practically less regulated and supervised for over two years as the new rules and regulations were only introduced in February 1991, two years after the drastic banking reforms in October 1988. This allowed banks to freely expand credit.

The move towards a market based system has became more difficult because of the absence of a well developed money market to absorb and sterilize the surge in short-term capital inflows. The authorities began to develop the money market in April 1984, one year after the deregulation of the credit system and interest rates. For nearly one and a half decades, until October 1988, this market was heavily repressed as the authorities tightly controlled interest rates and its working mechanism. Partly because of the narrowness and thinness of the money market, the authorities have to resort back to the use of non-market administrative mechanisms, both to limit and to mop-up short-term private capital inflows. All of these have added problems to the already difficult adjustment process.

The purpose of this paper is to discuss the theoretical frameworks of the behaviour of money supply, exchange rates, and interest rates and how the monetary authorities manage them under the previous and present regulatory systems. The following section highlights the structure of the financial system of Indonesia. Section three describes the policy measures that have been taken to relax capital inflows. Section four describes measures that have been taken to improve the financial conditions of the banks, the backbone of Indonesia's financial system. Section five analyses the process of money creation. Section six discusses monetary policy to influence the capacity of commercial banks for making loans. Section seven describes the erosion of monetary autonomy because of the increasing role of non-bank financial institutions. Section eight looks at how the authorities have developed money market. Section nine describes development of the interest rates. Section ten analyses exchange rate policy. Section eleven investigates the monetary survey. Concluding remarks are in the last section.

II FINANCIAL SYSTEM

In terms of total assets and number of offices, the banking system is the core of the financial sector in Indonesia (Table 1). The banking system held over 90 per cent of gross assets of the financial system in 1991. Other financial institutions, such as leasing companies, securities companies, insurance firms, and pension funds are fast-growing segments of the financial system, but these sectors as a group are relatively small. The banking system consists of Bank Indonesia (the central bank), and commercial and village banks (BPR-*Bank Perkreditan Rakyat*). Prior to October 1988, Indonesia adopted a system of strict functional specialization of banks, which consisted of commercial banks, development banks, savings banks and mortgage banks. The Banking Acts of 1968 also defined major areas of concentration for each state-owned bank. In practice, however, this was not strictly implemented. The central government has 6 commercial banks, a development bank (Bapindo-*Bank Pembangunan Indonesia*), a savings bank (BTN- *Bank Tabungan Negara*) and a mortgage bank (*Bank Papan Sejahtera*). Each of the 27 provinces has one Regional Development Bank (RDB) which, in reality, operates as a commercial bank and fiscal agent of their owners. In addition, there is one cooperative bank and one bank (*Bank Muamalat*) which operates based on a risk-sharing basis according to Islamic principles.

The capital markets are in the early stage of development. Despite their rapid growth, they are not yet important competitors of the banking industry. Having been closed since the mid 1950s, due to political and economic instability, the Jakarta Stock Exchange (JSE) was reopened on August 10, 1977 as a part of the Capital Market Supervisory Agency (*Bapepam),* the regulatory agency under the Ministry of Finance. A regulation was issued on December 4, 1991 to separate JSE from the Bapepam and then privatise it. The Surabaya Stock Exchange (SSE) was established on March 30, 1989 and followed by the Jakarta Parallel Bourse (JPB) later in the same year. In mid 1995, however, JPB was absorbed by SSE and, since then, the newly formed company has been allowed to operate both in Jakarta and Surabaya.

The capital market has became more lively as the reforms, in 1988, revoked the special right of PT Danareksa, the state-owned securities house, to buy new issues.[1] This ended direct government control on prices of securities. Bapepam, since 1991, has simplified listing procedures and trading system in Indonesia's stock exchanges. The efficiency of the capital market is improved by strengthening the regulatory frameworks. Demand for

[1] Previously, PT Danareksa had the right to buy at least 50 percent of every new issue in the first instance, but it has no obligation to purchase any percentage of an issue. Once PT Danareksa has taken up a percentage of an issue, it places the shares in its investment portfolio and may then issue bearer certificates, relating to the specific companies backed by certain percentage in the portfolio, in small denominations which it sells to general public in order to democratize the companies' ownerships. Foreign investors were banned from the securities markets and PT Danareksa set the securities' yields equivalent to interest rate of one year time deposits at state-owned banks. This eliminated capital gains and losses.

TABLE 1
REFORM IN THE BANKING INDUSTRY IN INDONESIA, 1983-1995

Policy Measures	Before Reform	After Reform	Date
I. Competitive Measures			
1. Entry of New Banks			
(a) Private banks	moratorium since 1970	permitted	October, 1988
(b) Foreign banks	moratorium since 1970	permitted to enter as joint venture	October, 1988
2. Branching Power			
(a) Private banks	restricted 1)	permitted to sound banks	October, 1988
(b) Foreign banks	restricted to Jakarta	permitted to seven cities (later Batam)	October, 1988
3. Foreign Exchange Licence	restricted 1)	eligible for sound banks	October, 1988
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 reduced	June, 1983 January 27, 1990
(b) Private banks	free to set	20 % total credit must be extended to small business 2)	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	June 1, 1983
(b) Private banks	free to set	free to set	
(c) Foreign banks	free to set	free to set	
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	June 1, 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	June 1, 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	June 1, 1983
(b) Private banks	set by Bank Indonesia	eliminated	June 1, 1983
(c) Foreign banks	set by Bank Indonesia	eliminated	June 1, 1983

Policy Measures	Before Reform	After Reform	Date
11. Foreign Exchange Power (limited to licenced banks)	subjected to ceilings set by Bank Indonesia	net open position 3)	November, 1989
12. Reserve Requirements	15 % of deposits (differentiated between banks)	2 % of deposits	October, 1988
13. Entry to New Activities			December, 1988 4)
(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 5)	—	prohibited	
(h) Custodian	not regulated	approval required for capital market)	otherwise can do as
(i) Trustee and Guarantor	not regulated	approval required for capital market)	part of usual activities
(j) Securities Administrative Agency	not regulated	prohibited	
(k) Investment Manager	not regulated	subsidiaries	
II. Prudential Measures			
1. Capital Requirements			
(a) General banks			
(i) Private banks	—	Rp. 10 billion	October, 1988
		Rp. 50 billion	October, 1992
(ii) Joint Venture banks	—	Rp. 50 billion	October, 1988
(minimum 15 % Indonesia ownership)		Rp. 100 billion	October, 1992
(b) Bank Perkreditan Rakyat		Rp. 50 million	October, 1988
2. Legal Lending Limits	none	1. Old credit: (% of bank capital)	May 29, 1993
		Individual | group	
		20 % | 50%	by May 29, 1993
		20 % | 50%	by Dec., 1995
		20 % | 50%	by March, 1997
		2. New credit 20 % for indiv. & 20 % for group	
3. Loan to Deposit Ratio	none	110 percent	February, 1991 6)
4. Capital Adequacy Ratio	none	(% of risk-weighted assets) 5 % by March, 1992 7 % by March, 1993 8 % by Dec, 1993 7)	February, 1991

Policy Measures	Before Reform	After Reform	Date
5. Net Open Position	none	25 % of capital	March, 1989
6. Accounting Standard	none	Standardized - *Standar Khusus Akuntansi Perbankan Indonesia (SKAPI)* - Accounting Standard for Indonesian Banks	January 1, 1993
III. Money Market			
Reintroduced in February 1984, SBI is the most important money market instrument at present. On June 1, 1993, the auction system of SBI changed from "cut-off rate" (COR) to "stop-out rate" (SOR). The private sector commercial paper (SBPU) introduced in January, 1985. Until now, the government has not floated treasury bonds in domestic market.			
IV. Transparency and Accountability of Reporting and Management			
1. To improve banking supervision by (i) standardizing accounting and reporting system; (ii) requiring commercial bank to submit detailed business plans to the central bank and banning person involved in fraudulent transactions or defaulted on significant loans from becoming shareholders, executives or member of the board of commissioners of banks.			January, 1995
2. Banks are required to (i) submit detailed credit plan to Bank indonesia and those with uncollectible amounted to 7.5% 7.5% of total credit or more are required to submit credit recovery plans; (ii) standardize internal audit system and (iii) adopt standardized information system technology.			March, 1995

Notes:
1) Permitted in principle, but economic and social requirements made it prohibited in practice;
2) Since May 29, can be channeled through other banks and BPRs;
3) Overseas borrowing for public sector is subject to ceilings set by TKPLLN (Coordinating Team for Management of Commercial Offshore Loans) since October 1991;
4) Item (g) to (j) are subject to Ministry of Finance's Decisions No. 1548 of 4 December 1990;
5) Can underwrite bonds and other debt instruments;
6) Since May 29, 1993 own capital; included in the denominator;
7) In May 29, 1993, this schedule was extended to December 1994.

Sources:
1 Pakto 1988, Pakmar 1988, Pakjan 1990, Pakfeb 1991, Banking Law Number 7, 1992; Banking Regulation, May 29, 1993.
2 Nasution, Anwar, "Financial Institution and Policies in Indonesia" Singapore: ISEAS (1983).
3 David Cole and Betty F. Slade, "Development of Money Markets in Indonesia", Development Discussion Paper No. 371, Cambridge, MA: Harvard University, HIID, January 1991.
4 John Chant and Mari Pangestu, "An Assessment of Financial Reform in Indonesia: 1983-90" in G. Caprio, Jr., et.al., Financial Reform: Theory and Experience, mimeo, 1992.

securities issued by Indonesian companies increased as foreigners have been allowed to own up to 49 percent of the listed shares issued by Indonesian companies (except for banks). Indonesian (state and private-owned) companies are also allowed to raise funds in international stock and bond markets.

1. Structure of the banking industry

The Banking Acts of 1967-1968 were replaced by the Banking Law of 1992. The new banking law contains the elements of banking reforms introduced since October 1988 and removes the traditional functional specialization between various types of banks and major areas of specialization for state-owned banks. The essential elements of the banking reforms since 1988 are summarized in Table 2. The Banking Law of 1992 also unifies the previous separate laws, one for each state-owned bank and the central bank. The existing special purposes institutions automatically became commercial banks and the existing 'secondary banks' became BPRs. A BPR-*Bank Perkeditan Rakyat*-is an unitary bank, without a branch network, and not allowed to issue demand deposits.[2] All of the 12 non-bank financial institutions opted to become full-fledged joint venture commercial banks in 1993. As commercial banks are prohibited from engaging in securities underwriting, brokerage and trading, or giving loans for stock trading, all of such activities are transferred to their subsidiaries. This induces the formation of financial conglomerates.

Having been closed since the early 1970s, new licenses have been issued to allow new entrants both from domestic and foreign institutions. Foreign banks, however, are charged, through discriminatory capital and entry requirements, with a relatively high 'entrance fee' to penetrate the domestic market. Aside from a higher initial capital requirement compared to newly established domestic banks, the entry of foreign banks is limited to two mechanisms. The first mechanism operates through a joint venture with local banks with a maximum 80 per cent equity ownership. The second mechanism operates through the acquisition of shares of domestic banks which have been floated in capital markets. Foreign investors can hold a maximum 49 per cent of the shares issued by domestic companies, including banks, in domestic capital markets. Requirements to open new branch offices and obtain licenses in dealing with foreign exchange transactions are also eased. Private national banks can open branch offices anywhere in Indonesia and the requirements for domestic foreign exchange banks to open branch offices overseas have been relaxed. Foreign and joint venture banks, whose operations were formerly confined to Jakarta, can now open one sub-branch each in seven other major cities.

The policy to ease barriers to entry has sharply increased the number of commercial banks from 111 in 1988 to 240 in March 1994. Each of the large business conglomerates now has at least one bank. Many pension funds of state-owned enterprises established their own banks. Ten foreign banks which have branch offices in Indonesia obtained operating licences in the late 1960s. Seven of the 29 joint-venture banks established

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[2] These geographical and product limitations limit portfolio diversification of BPRs, thus amplifying the effects of local shocks and class of customers to increase their solvency risk.

following the 1988 reforms are associated with Japanese banks. At present, twenty Indonesian foreign exchange banks have full and sub-branch offices and agencies in 14 foreign countries. All of these banks have offshore banking units in Cayman and Cook Islands the main operations of which are probably to launder obscure and illegitimate transactions of their customers at home. Customer bases of the joint venture and foreign banks are mainly multinational companies from their own countries. The American companies are the main producers of oil and natural gas while multinational companies from Japan and the ANIEs (Asian New Industrializing Economies) are dominant players in the non-oil manufacturing sector. Leading in advanced technology, products and networks, the American banks have also been able to capture local prime customers and retail markets. Foreign-owned banks are also acting as arrangers of private sector loans to both government and Indonesian companies and channelling official development assistance from their respective governments and multilateral institutions to the government of Indonesia.

Despite the rapid growth in the number of domestic and joint venture banks as well as in their assets and liabilities, the state-owned banks remain dominant players in the banking industry. In March 1994, this group of banks controlled 30.9 per cent of the total banks' assets as compared to 34.5 per cent in 1988. During the same period, the market share of the state-owned banks in total deposits dropped from 58.8 per cent to 38.6 per cent. Market competition on the liability side of the banks' balance sheet was further encouraged by the removal of the state-owned banks' exclusive access to the public sector's deposits and the elimination of most of the segmented credit ceilings cum selective credit policy with subsidized interest rates. As shown in Table 3, a steady erosion in the market power of state-owned bank groups (including Bank Indonesia) is accompanied by an increasing market power of certain dominant banks among the group of private institutions. The market share of the foreign banks group between pre- and post-reforms has not changed significantly.

The increasing number of domestic private and state-owned banks that require major assistance from the authorities partly indicate that the competition for market shares during the initial phase of banking sector reform in the late 1980s has led to a lowering in bank' credit standards. Banks continued to operate on the basis of the already outdated principles under the previous financial repression. It turns out that the banks need time to build internal capability to select customers, and recognize, evaluate and control risks inherent in unregulated markets. Being used to the old practice of valuing assets based on their historical book records, insufficient attention was given to market value and the quality of collateral. Credit risks were not properly priced and little attention was paid to interest risks.

The competition became wilder as the liberalization of domestic credit markets and foreign exchange transactions was not accompanied by measures to improve market infrastructure. Banking regulation and supervision were still based on the old practice of financial repression which was mainly focused on judicial compliance rather than on risk evaluation of individual banks. The more restrictive CAMEL system to regulate and supervise was introduced in February 1991, over two years after the introduction of the drastic banking reforms in October 1988. As a result, the rules and regulations are not

TABLE 2
STRUCTURE AND GROWTH OF THE FINANCIAL SECTORS, 1969-1994

	Number in					Share in Assets (%)					Asset Growth (%)			
	1969	1982	1988	1991	1994	1969	1982	1988	1991	1994	1970-82	1983-88	1989-91	1992-94
Bank Indonesia	1	1	1	1	1	57.7	42.4	36.8	23.8	21.3	31.1	18.8	9.2	6.6
Deposit Money Banks	179	118	111	195	240	42.3	52.9	56.9	68.5	78.7	37.6	22.4	32.6	37.4
State commercial banks	5	5	5	5	7	30.3	37.9	34.5	30.2	30.4	36.6	19.7	20.7	16.7
Private banks	126	70	63	129	166	3.7	5.8	13.1	25.2	34.9	34.0	41.5	56.9	67.9
Private forex banks	3	10	12	28	53	n.a	3.6	8.8	19.7	30.4	n.a	36.1	64.9	75.7
Private non forex banks	123	60	51	101	113	n.a	2.2	4.3	5.5	4.4	n.a	32.2	37.3	28.7
Foreign banks	11	11	11	29	40	4.3	3.6	2.8	5.2	6.9	32.6	16.8	55.4	44.6
Development banks	25	29	29	29	27	4	4.1	4.4	6.3	6.5	34.6	22.1	42.2	21.3
Savings banks	12	3	3	3	- -	0.1	1.4	2.1	1.6	- -	60.0	27.9	14.5	- -
Non bank financial inst.	n.a	13	13	13	n.a	n.a	2.5	2.7	2.1	n.a	n.a	22.3	14.9	n.a
Insurance companies	n.a	83	106	185	n.a	n.a	1.6	1.6	3.5	n.a	n.a	21.2	62.3	n.a
Leasing companies	n.a	17	83	88	n.a	n.a	0.4	1.5	1.8	n.a	n.a	45.4	33.6	n.a
Other credit institutions	8568	5808	5783	6243	n.a	n.a	0.3	0.6	0.4 a)	n.a	n.a	33.4	15.9 b)	n.a
Total	8748	6040	6097	6725	241	100.0	100.0	100.0	100.0	100.0	34.2	21.2	21.3	29
Total (Trillions of Rp)						0.7	32.3	115.5	218.5	319.6				
Memo items														
M1/ GDP						0.07	0.09	0.10	0.12	0.14				
M2/ GDP						0.09	0.14	0.30	0.44	0.55				
Total Assets of Financial Inst. (TAFI)/ GDP						0.26	0.52	0.81	0.96	1.01				
M2/ TAFI						0.33	0.34	0.36	0.45	0.55				

Notes: a) December 1990
b) Average 1989-90

Sources: 1. Bank Indonesia, Indonesian Financial Statistics and Annual Reports, various issues.
2. Cole, David C. and Betty F. Slade. 1992. "Indonesian Financial Development : A Different Sequencing ?" in Financial Regulation - Changing the Rules of the Game.Dimitri Vittas (ed.) EDI Development Studies. Washington, D.C. : The World Bank.
3. Department of Finance, Statistics Data of The Finance Companies 1991.
4. Department of Finance, Statistics Data of The Insurance Companies 1991.

TABLE 3
MARKET SHARES OF BANKING INSTITUTIONS BY OWNERSHIP, 1988-1995

	Billions of rupiah					As percentage of total				
	1988	1991	1993	1994	1995 a)	1988	1991	1993	1994	1995 a)
ASSETS										
State banks	39862	70158	91333	97179	95856	63.0	45.2	41.8	38.7	36.9
Private Forex banks	10189	45654	76092	97214	102814	16.1	29.4	34.8	38.7	39.6
Private Non Forex banks b)	4972	12868	12674	14174	14861	7.9	8.3	5.8	5.6	5.7
Foreign & Joint venture banks	3215	12070	18419	21937	22631	5.1	7.8	8.4	8.7	8.7
Development banks c)	5046	14505	19916	20929	23409	8.0	9.3	9.1	8.3	9.0
Total	63284	155255	218434	251433	259571	100	100	100	100	100
LOAN										
State banks	21149	48790	62195	69166	68756	54.4	41.5	38.9	35.2	33.4
Private Forex banks	7629	36844	60045	81842	86007	19.6	31.3	37.5	41.6	41.8
Private Non Forex banks b)	4334	11189	10862	11802	13023	11.1	9.5	6.8	6.0	6.3
Foreign & Joint venture banks	2109	9181	13049	16023	17869	5.4	7.8	8.2	8.1	8.7
Development banks	3678	11534	13758	17928	20196	9.5	9.8	8.6	9.1	9.8
Total	38899	117538	159909	196761	205851	100	100	100	100	100
SAVINGS & TIME DEPOSITS										
State banks	12294	22403	32430	32902	32921	58.7	42.6	39.9	34.7	33.1
Private Forex banks	4463	19639	33913	44370	48910	21.3	37.3	41.7	46.7	49.2
Private Non Forex banks b)	2619	6735	8067	8506	7644	12.5	12.8	9.9	9.0	7.7
Foreign & Joint venture banks	763	1538	1479	2449	2271	3.6	2.9	1.8	2.6	2.3
Development banks	800	2317	5465	6718	7644	3.8	4.4	6.7	7.1	7.7
Total	20939	52632	81354	94945	99390	100	100	100	100	100

	Billions of rupiah					As percentage of total				
	1988	1991	1993	1994	1995 a)	1988	1991	1993	1994	1995 a)
DEMAND DEPOSITS										
State banks	4366	6399	7074	8202	8288	54.4	38.2	32.3	31.1	32.4
Private Forex banks	1403	5777	9469	11380	11171	17.5	34.5	43.2	43.1	43.7
Private Non Forex banks b)	960	2001	1804	2036	1873	12.0	11.9	8.2	7.7	7.3
Foreign & Joint venture banks	342	645	1189	1183	1216	4.3	3.9	5.4	4.5	4.8
Development banks	961	1930	2377	3586	3020	12.0	11.5	10.8	13.6	11.8
Total	8032	16752	21913	26387	25568	100	100	100	100	100
TOTAL DEPOSITS										
State banks	16660	28802	39504	41104	41209	57.5	41.5	38.3	33.9	33.0
Private Forex banks	5866	25416	43382	55750	60081	20.2	36.6	42.0	45.9	48.1
Private Non Forex banks b)	3579	8736	9871	10542	9517	12.4	12.6	9.6	8.7	7.6
Foreign & Joint venture banks	1105	2183	2668	3632	3487	3.8	3.1	2.6	3.0	2.8
Development banks	1761	4247	7842	10304	10664	6.1	6.1	7.6	8.5	8.5
Total	28971	69384	103267	121332	124958	100	100	100	100	100

Notes : a) April.
b) Some non-foreign exchange banks became foreign exchange banks in this period.
c) The state-owned Bapindo is included in the category of Development Banks.

Source : Bank Indonesia, Indonesian Financial Statistics, various issues

properly implemented and the banks are less supervised. On the other hand, the demand for credit remained strong as general economic policy continued to push the expansion of domestic absorption or price and income expectations.

2. Financial deepening

Table 2 presents four ratios measuring the size of the financial system relative to the size of the total economy. The first three ratios, respectively, measure the percentage share of narrow money (M1), broad money (M2), and total assets of all types of financial institutions (TAFI) to Gross Domestic Products (GDP). Indicating the monetization of an economy, the M1/GDP and M2/GDP ratios are standardized across countries because of standardized statistics compiled by the IMF. As they only cover the monetary liabilities of the central bank and deposit money banks (DMBs),[3] these ratios only point out the relative importance of the depository institutions. The inverse of these two ratios is the familiar macroeconomic concept of income velocity of money. TAFI, however, has limitations (Cole, 1993b). First, simply adding total assets of financial institutions, TAFI involves significant double counting. Second, it excludes the equity and securities held by firms and households. Third, the financial reports of non-bank financial intermediaries are only available for selected years with long time lags. Focusing on equity securities, the fourth indicator shows the ratio of stock market capitalization to GDP.

Narrow money (M1) includes currency, coins, demand or checking deposits and other current deposits which are highly liquid.[4] Broad money (M2) is equal to M1 plus the less liquid savings and time deposits, money market mutual fund shares available for individuals, overnight repurchase agreements, and foreign exchange deposits at DMBs which are not directly utilized as means of payments. The characteristics of foreign currency deposits are similar to those other components of quasi-money, even though they are denominated in foreign currency. The authorized DMBs in Indonesia are allowed to receive deposits in foreign currencies from residents and lend credit in foreign exchange.

Following the financial sector reforms, the ratio of M1/GDP increased from 0.10 in 1988 to 0.12 in 1991 and to 0.41 in 1994 (Table 1). During the same period, the ratio of M2/GDP increased from 0.30 to 0.44 and to 0.55. The ratio of TAFI to GDP rose from 0.81 in 1988 to 0.96 in 1991 and to 1.01 in 1994. Part of this increase, however, was due to the rapid rise in deposits owned by government and non-bank state-owned enterprises at Bank Indonesia, particularly when the Minister of Finance forced them to shift their deposits to the central bank in 1987 and 1991. In addition, government deposits are

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[3] Deposit money banks (DMBs) are commercial institutions whose demand deposits are important or form a large share of their total liabilities. Although the commercial banks are the main components of DMBs, other special purposes financial institutions such as development, savings and co-operative banks may also be included in this category when their liabilities are regarded as money (see: IMF Institute. 1981. *Financial Policy Workshop: The Case of Kenya.* Washington, D.C.: IMF).

[4] Includes savings deposits and NOW accounts, automatic transfers service accounts at banks and thrifts institutions. and share draft accounts held at credit unions or co-operative banks.

sensitive to fluctuations of oil prices and fiscal policy of the government. Because of these, TAFI is not only responding to the increase in interest rates and improvements in financial services.

The relaxation of capital flows creates problems of currency substitutions between the rupiah and foreign currencies. An increase in either rupiah devaluation or country risks encourages conversion of the rupiah to foreign currencies and their uses in serving domestic transactions. The proportion of dollar deposits at commercial banks as a percentage of M2 increased from 15.5 per cent in 1988 to 20.3 per cent in 1991 and gradually declined to 17.8 per cent in March 1994. The share of the banks' credit denominated in US dollars as percentage of total credit was continuously increasing from 4.1 per cent in 1988 to 15.6 per cent in 1991 and 18.3 per cent in 1994. As will be discussed further, the rising currency substitution have made both the demand and the supply of money become more unstable and interest rates more aligned to international rates. The rising ratio of domestic liquid assets to foreign assets has made the management of monetary policy more difficult and increased the susceptibility of the domestic economy to external shocks.

The fourth financial ratio focuses on equity securities. Following the financial sector reform, the ratio of stock market valuation or capitalization over GNP rose rapidly from 0.3 per cent in 1988 to 2.8 per cent in 1991 and 7.1 per cent in 1994. The number of issuer of shares traded in both JSE (Jakarta Stock Exchange) and SSE (Surabaya Stock Exchange) increased from 24 in 1988 to 141 in 1991 and to 216 in 1994. The number of companies which have issued shares in the Parallel Bourse has increased from 8 in 1989 to 6 in 1991 and to 18 in 1994. The value of shares traded in JSE and SSE rose from Rp0.2 trillion in 1988 to Rp27.6 trillion in 1991 and Rp103.8 trillion in 1994. During the same period, the issuers of bonds rose from 6 in 1988 to 21 in 1991 and to 31 in 1994 with the values at Rp0.9 trillion, Rp2.2 trillion and Rp2.9 trillion. The issuers of these bonds are state-owned financial institutions and public toll-road companies while their buyers are largely state-owned insurance companies and state-controlled pension and contractual savings funds. The secondary bond market is inactive as the buyers keep bonds until their maturities. The bond market is expected to become more lively with the increasing pressure for companies to raise funds in this market due to the rising banks' lending rates. To help improve transmission of market information, the credit rating agency (Pefindo) was established in mid 1995.

Aside from showing a positive development, the rise in financial deepening also indicates a potential problem. The rising ratios of domestic liquid assets to foreign assets and the larger share of domestic assets held by foreigners have made management of monetary policy more difficult. These and the increasing proportion of short-term liabilities in total external debt have increased the susceptibility of domestic economy to external events and policies. The short-term liability includes deposits at state-owned commercial banks which are generally perceived by the public as contingent liabilities of the monetary authorities. As a result, a bank run can be easily translated into a currency run. The latter happens when the level of short-term liabilities to Central Bank assets is quite high (Calvo, 1994).

III RELAXATION OF CAPITAL INFLOWS AND THEIR USES

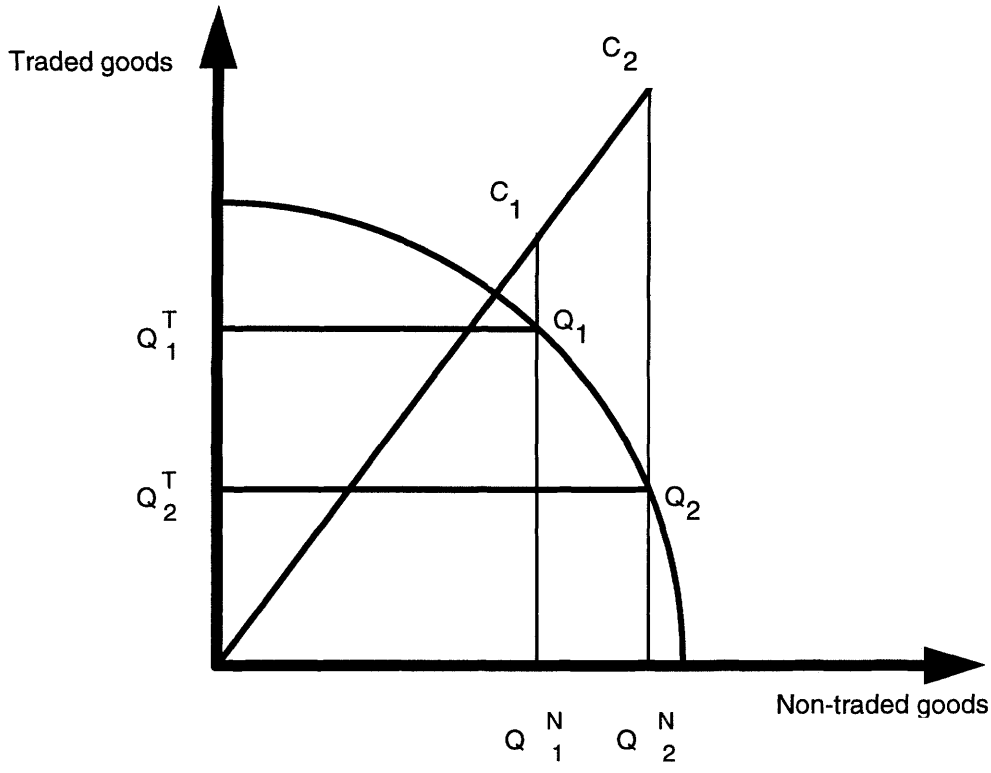
A combination of an increase in interest rates and more liberal trade and capital accounts has increased the size of capital inflows and changed its structure with a higher proportion of private sector short-term capital. External savings have been a welcome addition to the already high domestic savings rate in Indonesia (over 25 per cent of annual real GDP since the early 1970s), augmenting investment and helping spur real growth (6 per cent plus per annum since the early 1970s). In particular, capital inflows have financed Indonesia's investment-savings gap and balance of payments deficit, particularly of the private sector. A surplus in the current account of Indonesia's balance of payments has happened only once in recent history in 1974, the early years of 'oil boom' period in the 1970s. This partly reflects the main deliberate efforts at sustained economic development which entailed rapidly rising imports (especially capital goods and raw materials), outflows of payments of investment income, and increasing payments of services. Some of the external resources has been used for financing consumption expenditures.

The impact of larger capital inflows on domestic consumption can be analyzed by using the standard model of traded and non-traded goods as shown in Figure 1. In the figure, tradable goods production and consumption are shown on the vertical axis, and non-traded production and consumption are shown on the horizontal-axis. Prior to the economic reform, Indonesia was consuming at the point C^1 and producing at the point Q^1. Since the consumption of traded goods C^T_1 was greater than their production Q^T_1, we see in the figure that Indonesia was running a trade deficit. By definition, production and consumption of non-traded goods are always equal, as shown by $C^N_1 = Q^N_1$. The increase in capital inflows after the economic reform would involve an outward shift in consumption, to a point like C^2. Note that as the trade deficit is increased, there is an increase in non-traded production (from Q^N_1 to Q^N_2) and a rise in the production of traded goods from Q^T_1 to Q^T_2). The relative price of non-traded goods to traded goods, PN/PT, is equal to the slope of the production possibility frontier at the respective production points. Thus at Q_2, the relative price of non-traded goods has increased compared with the price at Q_1. In other words, in order to spur the shift of production from non-traded goods to traded goods, the relative price on non-traded goods must fall. In standard terminology, the (internal) real effective exchange rate (PT/PN) must rise. We will discuss this more in Section 10.

1. Changing structure of capital inflows

Initially, most capital inflows to Indonesia were in the form of official lending, followed by commercial bank lending with government guarantees. The present government, which came to power in 1966, adopted a balanced budget policy of financing the budget deficits by concessionary foreign aid and loans, mainly from its Western official creditors. To further impose financial discipline, the central government controls foreign

FIGURE 1
PRODUCTION POSSIBILITY FRONTIER AND CAPITAL INFLOWS



borrowings of all public sector (including local government, quasi-government and state-owned) enterprises and requires approvals from the Ministry of Finance and the Planning Agency (Bappenas-*Badan Perencanaan Pembangunan Nasional*). Under the present system of indicative planning, the Bappenas controls allocation of 'development expenditures' of the state budget and the Ministry of Finance the charge for the allocation of the 'routine' budget.

Private-sector capital flows have been less regulated as Indonesia, in 1971, adopted a relatively open capital account and a managed unitary exchange-rate system. Under this system, there are no surrender requirement for export proceeds or taxes or subsidies on the purchase or sale of foreign exchange. Indonesian citizens and foreign residents are free to open accounts either in rupiah, the national currency, or in foreign currencies at authorized banks[5] (*bank devisa*). These banks are also allowed to extend credit in foreign exchange in domestic markets. To encourage inward foreign investment, between January 1979 and December 1991 a special effective exchange rate was made available to domestic borrowers by providing an explicit subsidy on the exchange rate. The subsidy was extended through the exchange-rate swap facility. Under this facility Bank Indonesia provided forward cover to foreign-exchange borrowing contracts swaps to banks and NBFIs, and customers with a foreign-currency liability. The subsidy came about because of the time lag in either an upward adjustment of the swap premium or a nominal depreciation of the rupiah, or a combination of both.

Such an open exchange rate system with a subsidized exchange rate, however, has not encouraged a surge in private-capital inflows. The authorities, until 1989, imposed limits on both inflows of foreign direct investments and off-shore borrowings of the domestic banks. The exchange swap facility was also subject to quantitative ceilings. Both the ceilings on banks' foreign borrowings and swap facility were rationed with administrative mechanisms. On the supply side, there was no incentive for domestic companies to borrow overseas because of the availability of a subsidized interest rates and exchange-rate risk-free loans from state-owned banks. On the demand side, moreover, not so many Indonesian companies were creditworthy in international financial markets.

The situation has changed following the financial sector reform in October 1988 and further liberalisation of trade, investment and labour policies in the subsequent years. Private sector capital inflows were further encouraged by the chronically high domestic interest rates and the privatization of state-owned enterprises. Meanwhile, the number of domestic companies which have access to international financial markets is also rising. Inflows of portfolio investment are encouraged as the reforms allow greater participation of foreigners in domestic capital markets and permit private and state-owned companies to sell securities in international markets. On the demand side, the liberalisation coincided with the accelerating trends of individual and institutional investors in industrialized countries to look for higher yields in newly emerging markets.

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[5] However, interest earnings from foreign exchange deposits were subject to 15% withholding tax as compared to, until October 1988, zero rate for interest income from rupiah denominated deposits.

The bulk of these flows to Indonesia, however, take the form of foreign direct investment (FDI) which now constitutes most of the external capital inflows, coming mainly from Japan and ANIEs-Asian Newly Industrializing Countries (South Korea, Taiwan, Hong Kong and Singapore). The 1985 Plaza Accord ignited the appreciation of the currencies of these countries. This appreciation and the higher prices of land and wages in these countries led to a loss of competitiveness for labour-intensive and resource-based industries and forced relocation of such industries to low-cost producing countries, including Indonesia. Most FDI has been used to modernize, deepen and broaden the productive base of the economy. In particular, FDI is highly concentrated in labour-intensive and resource-based export-oriented mining and manufacturing industries. The new investment in capital goods and human resources has enlarged the productive capacity of the Indonesian economy and shifted its production possibility frontier of Figure 1 outward.

There are two aspects of the reforms that have increased the role of banks in intermediating short-term capital inflows. First, the reforms relaxed requirements for domestic banks to deal in foreign exchange transactions, open branch offices overseas and allow greater penetration of foreign banks in domestic economy. Second, the new rules and regulations replaced the ceilings on offshore borrowings of commercial banks by a system of net open position (NOP) and abolished the limits for inflows of FDI in November 1989. The NOP requirement states that commercial banks must keep the long and short positions in different currencies within 20 per cent of their equities. This requirement is applied separately to on- and off-balance sheet items.

2. Quantitative controls versus taxes on short-term capital flows

The new freedom to borrow abroad allowed large-scale short-term private sector capital inflows in 1989-91 which contributed to banks' rapid credit expansion and inflation. The increasing portion of short-term liabilities in total external liabilities makes the economy become less liquid. To slow down the capital inflows, the authorities imposed special quantitative ceilings on offshore borrowings of the public sector (including state-owned enterprises), in October 1991. The ceilings are also applied to offshore borrowings of the private sector which rely on public entities for their bankability. Concurrently, Bank Indonesia eliminated the implicit subsidy on premium of exchange rate swap facility.

Quantitative restrictions or capital controls are perceived as inferior to a tax on foreign borrowing which is regarded as the best policy.[6] In the short-run, these restrictions and controls are seen as made to measure devices to bring about a reduction of capital inflows quickly without having to lower interest rates. In the longer run, however, quantitative controls on capital movements have several major disadvantages. As they are inevitably involved with non price rationing, they result in very different effective

[6] Other forms of capital control include prohibition of foreign purchase or holding of domestic assets, requirements to obtain administrative permission for a foreign bond issue, minimum maturity periods for foreign bond issue, a dual exchange rate for capital transaction, taxes on purchases of domestic assets by foreigners or on investment income earned by foreigners, negative interest rates on bank deposits held by foreigners, or reserve requirements on deposits held by foreigners.

rates of tax on different domestic borrowers. They are administratively cumbersome and there is some potential policy rigidity or pressure group activity which ensures restrictions once imposed are not eased or removed when the original macroeconomic reasons have gone. Because of such macroeconomic crisis-protection ratchet effects the capital controls are subject to be abused and dissipated in inducements to rent-seeking as allocation of such quantitative controls inevitably involve non-price rationing.

The principal less-distorting alternative policy that may help discourage the motivation to shift capital around is the so-called 'Tobin tax' (Tobin, 1978 and Eichengreen, at. al., 1995), a tax on financial transactions that involves currency exchange. This includes a non-remunerated reserve requirement deposit at the central bank on deposits associated with direct borrowing in foreign currency. The tax would be an insignificant burden for exchanges in the goods and services markets, labour market and long-term capital investments. It, however, would significantly add to the cost of short-term arbitrage to reduce speculative transactions. The proceeds from such a tax increases government revenue and can be used to reduce speculative transactions and exchange rate volatility. The feasibility of collecting such a tax, however, depends on the existence of an international agreement for cooperating in collecting it within national borders. As of now, a tax on short-term capital inflows is not covered in double-taxation treaties between nations. A high tax may act as a disincentive to borrow overseas, particularly on short-term maturities. Moreover, the high tax can be avoided or re-routed through other channels. These include over-invoicing of imports or under-invoicing of exports when export credits are exempted from the tax. In addition, a tax measure is a long-term solution while excessive capital inflows is a temporary phenomenon. As a result, it would be difficult to readjust the tax ratio once short-run capital inflows return to a more manageable level.

3. Patrimonialism and 'strategic industries'

The abuse of control on access to external borrowings is evident from its use and beneficiaries. Most foreign loans are being used for financing of long-term economic infrastructure projects, land-based industry, and the highly protected 'second stage of import substituting industries'. The beneficiaries are mainly the politically well-connected private groups and state-owned enterprises. The land based industry includes real and industrial estates. The highly protected second stage import substituting industries include 'strategic industries' under the Ministry of Research and Technology[7] and a number of petrochemical projects owned by politically well-connected private groups. Privatization of economic infrastructure gives rights to politically well connected groups to build and operate electric generating plants, telecommunications, and toll roads.

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[7] Professor B.J. Habibie, the State Minister of Research and Technology, the Chairman of BPIS (*Badan Pengelola Industri Strategis*), Agency for Development of Strategic Industries, controls 10 state-owned 'strategic industries', namely: aircraft (PT IPTN), steel mills (PT Krakatau Steel), shipyards (PT PAL), diesel engines (PT Boma Bisma Indra), heavy equipment (PT Barata), electronics (PT LEN), telecommunication equipment (PT INTI), light armaments (PT Pindad), locomotives and railway tracks and wagons (PT INKA) and explosives (PT Dahana).

Many of the privately-owned 'mega projects' in non-traded or highly protected sectors of the economy have a strong government affiliation through a combination of various mechanisms. These include loans at low interest rates and risks from state-owned banks, special access to sources of inputs at below market prices, special access to public sector procurements and guaranteed monopoly or oligopoly power, capital participation either by Treasury or state-controlled pension funds[8] or implicit guarantees on external borrowings to cover exchange rate and interest rate risks. Stock prices and real estate values soared because of the rapid growth in bank credit which has been possible partly because of massive private sector capital inflows. High asset values in turn boosted wealth and kept debt-asset ratios artificially low.

At best, the main contribution of the private sector infrastructure projects is to help relax the supply constraint. The projects and 'strategic industries' are not likely to increase economic efficiency both in the short run as well as in the longer run. The reason is because the allocation of economic rents in Indonesia is more on the basis of patrimonial consideration rather than for pursuing economic efficiency. Moreover, to some extent, the privatization process in Indonesia is no more than transfer of ownership or monopoly rights from the public sector to the politically well-connected private sector without improving efficiency of the economy.

Given the presently narrow and thin technological skill and industrial base of Indonesia, the 'strategic industries' are also not likely to generate both pecuniary and technological ('Marshallian') externalities. The first type of externalities affects prices of inputs and outputs of other firms and, therefore, is transmitted through market transactions. Because of the low backward and forward linkages of these industries with other sectors of the economy, investment in them is not likely to produce the maximum multiplier effects in the Keynesian sense. The thinness of Indonesia's skill and industrial base, again, limits its capacity to absorb or transfer foreign technology, and assimilate and diffuse them to produce the maximum effect of dynamic technical externalities or the Schumpeterian efficiency for the national economy (Nasution, 1995).

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[8] As the state-owned banks are now in weak financial conditions, the state controlled insurance companies and pension funds are being used as the dispensers of the cheap state funds. Operating through the capital markets, these institutions are investing heavily to support unattractive but politically well-connected stock issuers.

IV MEASURES TO IMPROVE FINANCIAL CONDITIONS OF BANKS

Despite a relatively high economic growth of 6 per cent plus per annum since 1990, the problem of bad loans in the national banks appear not to have diminished significantly. Bad debts are financial tapeworms, they eat up capital and grow fatter on capitalized interest that the banks never see. The exact size of the problem loans in Indonesia is difficult to estimate due to the weaknesses in legal and accounting systems. These allow banks to make opaque reports and the credit 'evergreen' by refinancing the bad debts. Systematic collection of data on the quality of banks' assets, including non-performing loans, was only begun recently.

As shown in Table 4, the problems are likely to be more severe at state-owned banks group and non 'foreign exchange' banks. Nearly 72 per cent of the total Rp9.78 trillion dud loans of banks in April 1995 was accounted for by state-owned banks. Traditionally this group of banks was under capitalized. The past low capital requirements were hardly enforced for state-owned banks because of presumption that the state will stood by its banks. The portfolios of state banks are relatively weak because they were the main providers of credit programmes, with subsidized interest rates, during the past era of financial repression and the main victims of erratic government policies such as Sumarlin shocks. A large part of the credit programmes was medium-term investment credit at subsidized interest rate. This was the main source of financing for the present private sector business conglomerates and non-financial state-owned enterprises. The state-owned banks remain the main sorces of financing for companies which have no access to either capital markets or international financial markets. The bad debt problem at state-banks has also been related to outright fraud, widespread corruption by high ranking government officials[9] and inter-company credits between state-owned enterprises.

For totally different reasons, some of the domestic private banks ahave also suffering from financial difficulties. This group of banks mainly provides short-term financing for trade and working capital. Following the reforms, however, the private banks have rapidly raised exposure in land-based industry. In addition, through networks of

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[9] The recent trials of all former Managing Directors and key officials of Bapindo (the state-owned development bank) reveal that Admiral (ret.) Sudomo, the then Co-ordinating Minister for Political and Security Affairs, and Professor Dr. J.B. Sumarlin, the then Minister of Finance, were, between 1989-1992, allegedly involved in arranging loans from the bank to Golden Key Group of the sum of $565 million for financing highly inflated investment costs of petrochemical projects. The company is owned by Mr. Edi Tanzil, an obscure young businessman (McLeod, 1994). Mr. Tanzil was sentenced for 17 years prison term in August 1994, all the former Bapindo officers were sentenced to various terms of imprisonment. However, the exact roles of the two former powerful Cabinet Ministers, who got what and how much were not clear in the court processes. At present, Mr. Sudomo is the Chairman of the Supreme Advisory Board (*Dewan Pertimbangan Agung*) and Dr. Sumarlin is the Head of the Supreme Auditory Board (*Badan Pemeriksa Keuangan*). With the help of bribed Chief Warden, Mr. Tansil encaped from Jakarta's Cipinang prison on May 4, 1996.

ownership, business and interlocking management, nearly all of the domestic private banks are closely connected to large conglomerates. The formation of financial conglomerates is encouraged by the financial sector reforms. As long as all companies within the group operate up to international standard, conglomeration provides synergy because close relationships with other companies infuse capital, business opportunities, shared financial expertise and information. The problem arises if the less efficient subsidiaries are carried along by sales to other companies in the group. Moreover, large firms may lose the flexibility necessary to keep responding adequately to new challenges and changing business environments. The recent failures of many private banks (such as Bank Summa, Bank Duta and Bank Pacific) indicate that sectors within conglomerates may become more a burden rather than a boon.

TABLE 4
STATUS OF BANKS' CREDIT IN INDONESIA, 1993-1995

	Amount (Rp trillion)				Composition (in per cent)			
	Oct 93	Dec 93	Mar 94	Dec 94	Oct 93	Dec 93	Mar 94	Dec 94
All banks								
Total credit	170.6	177.5	185.8	217.0	100.0	100.0	100.0	100.0
Current	143.5	152.3	159.4	190.9	84.1	85.8	85.8	88.0
Classified 1)	27.1	25.1	26.4	26.2	15.9	14.2	14.2	12.1
State-owned banks 2)								
Total credit	92.4	94.1	96.9	104.1	100.0	100.0	100.0	100.0
Current	72.8	75.5	77.5	84.7	78.8	80.2	80.1	81.4
Classified	19.6	18.6	19.3	19.4	21.2	19.8	19.9	18.6
Private banks								
Total credit	74.6	79.8	85.4	108.7	100.0	100.0	100.0	100.0
Current	68.2	74.0	79.1	102.8	91.4	92.1	92.6	94.6
Classified	6.8	5.8	6.3	5.9	8.6	7.3	7.4	5.4

Memorandum: Non Performing Loans by Bank's Ownership, April 1995 (as per cent of)

	Total Asset	Total Credit	Capital, Reserves and Profit & Loss
State-owned banks (including Bapindo)	7.38	8.84	103.80
State-owned banks (excluding Bapindo)	4.24	5.08	59.59
Private National Forex banks	1.04	1.16	10.39
Private National Non-Forex banks	5.13	5.82	32.54
Foreign and Joint Venture Banks	2.03	2.88	20.21

Notes:
1) Classified loans consist of three categories, namely: 'sub-standard', 'doubtful' and 'loss';
2) Includes Bapindo and Bank Tabungan Negara, but excludes Regional Development Banks;
Sources: The World Bank. 1995. *Indonesia: Improving Efficiency and Equity Changes in the Public Sector's Role.* Report No. 14006-IND, prepared by Country Department III, East Asia and Pacific Region. June 9; Governor of Bank Indonesia, Public Hearing before the Parliament, *Kompas Daily,* June 22, 1995.

Bank Indonesia, the central bank, has traditionally had wide responsibilities in Indonesia. By law, it has a role as lender of last resort as well as responsibility for upholding systemic stability in financial markets. At present Indonesia has neither a banking safety net nor a transparent bailout program. Bank Indonesia, however, provides support programmes on an ad hoc and non-transparent basis. The supports, including

capital injections and other emergency financial supports, are made available particularly for those banks owned by politically well-connected owners. To strengthen their primary (Tier 1) capital, Bank Indonesia acquires shares of problem banks and provides them with other types of equity capital. The central bank also provides loans, guarantees and other types of support to strengthen the liquidity of the financially distressed banks, primarily owned by politically well-connected private sector groups. As shown by the case of PT Bank Pacific,[10] providing distressed bank access to lender of last resort funding on a continuous basis often committed Bank Indonesia to lend money to institutions that had no capital. Owners had no incentive to use the new money wisely because they had nothing at risk. Aside from providing credit, Bank Indonesia also arranged merger, consolidation, and the take-over of problem banks by either stronger institutions or new investors.

At present, the government has no resources to strengthen the capital base of its banks. The high proportion of non-performing loans have been largely responsible for the weakening of net interest income of the state-owned banks. It is, however, further squeezed by the rising interest on deposits. The severe market competition on both sides of their balance sheet makes it difficult for banks to increase the spread between lending and deposit rates as a way to pass on (at least) some losses to prime customers. In fact, to reduce interest costs, more large firms are bypassing banks by going directly to credit markets through stock and bond markets. Some of the prime customers of state-owned banks have also shifted to private and foreign banks which offer them better services and wider international networks. Meanwhile, this group of banks hardly meets the criteria for raising equity capital in both domestic and foreign stock exchanges. As a result, the government only has limited options to strengthen the capital base of the state-owned banks.[11]

The first mechanism that has been adopted by the authorities to strengthen state banks' capital was to borrow the sum of US$307 million of Financial Sector Development Project loan from the World Bank on November 12, 1994.[12] In addition, nearly all of

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[10] For the second time, the authorities rescued PT Bank Pacific in 1995 by assigning Bank BNI to provide loans to it. Bank Pacific has sour loans amounting to Rp1 trillion or 40 percent of its total assets on July 31, 1995 which have been mainly used for financing car loans and real estate projects (*Forum Keadilan*, 14(IV), 23 October 1995). At the end, Bank Indonesia picks up the tab as Bank BNI's loans to Bank Pacific can be rediscounted at Bank Indonesia. To strengthen its capital base, on 11 March 11 1996, Bank BNI borrowed sub-ordinated floating rate loans at the sum of $145 million with 7 year maturity from a syndicated international banks headed by Long Term Credit Bank of Japan. In addition, it plans to sell equity at Jakarta Stock Exchange in Summer 1996 (*Kompas*, 7 June 1996). Until the 1980s, Bank Pacific was fully owned by the family of General Ibnu Sutowo, the former President Director of Pertamina, the state-oil company. Borrowing short-term commercial loans recklessly, Pertamina, under General Sutowo invested heavily in non-oil related, risky and less diversifiable projects such as hotels and commercial real estate, hospitals, harbour and roads. To help rescue Bank Pacific, Bank Indonesia acquired 38.25 percent of its equity shares in the early 1980s.

[11] Capital, under the present regulatory system, is defined as the sum of paid-in capital, general and specific reserves and retained earnings, plus sub-ordinate and two-step loans.

[12] The World Bank, *Annual Report 1993*, Table 7-5, p. 177. This amount is much less than the amount of capital injection into PT Bank Duta ($419 million), a relatively smaller private bank, in September 1990, to cover its loss from foreign exchange speculation. The injection came from an outright gift from Mr.

the public funds from foreign aid and loans, including two-step private sector loans from Japan, are channelled through this group of banks. Bank BNI was allowed, with government guarantee, on 11 March 1996 to borrow $145 million floating rate notes with maturity of 7 years from the international market (*Kompas*, 7 June 1996). The second mechanism is the conversion of some of the outstanding Bank Indonesia's refinancing facility into their capital. The third is to modify the definition of capital and the weights to calculate the risk of bank portfolio. The May 1993 prudential regulation, for example, relaxes the definition of capital for calculating CAR by including 100 per cent of previous year's profits, instead of the formerly 50 per cent. Of the seven state-owned banks, only Bank Tabungan Negara and Bank BNI have meet criteria for raising equity capital in domestic capital markets.

Because of the poor quality of the portfolios of the state-owned banks, the above capital strengthening policies are inadequate to improve their financial conditions. To ease the problems, the authorities also adopt a number of measures to improve the quality of the state banks' asset portfolios. This includes intensification of collection of the matured loans. Large domestic companies are even encouraged to repay their loans early by raising funds either from overseas borrowings or selling shares in domestic markets. The overseas borrowing has sharply raised the loans denominated in foreign currency which are very sensitive to interest rate and exchange rate volatility. Part of banks' bad debt was either directly taken over by the Treasury or shifted to other government institutions and state-owned companies. The collapsed petrochemical projects owned by Golden Key Group, for example, were taken over by PT Pusri, a state-owned fertiliser company. Another part of the dud loans was shifted to state-owned credit insurance companies such as PT Askrindo and PT Asei and Perum PKK.[13]

On a limited basis, the authorities encourage securitization of the non-performing assets to improve the health and resilience of the banking system. This, however, is neither a magic touch nor a substitute for recognition of losses from sour loans as assets do not become more valuable simply because they are securitized. According to Dewatripont and Tirole (1993, p. 188), 'securitization is particularly effective in raising the solvency ratio when the bank's solvency is not far from its minimum requirement.'

Prayogo Pangestu, the timber cum petrochemical and automotive magnate to three social foundations (all chaired by President Soeharto) the major shareholders of the bank.

[13] PT Askrindo is a state-owned insurance company originally established in 1974 primarily to insure credit investment and working capital for medium- and small-scale enterprises (KIK and KMKP programs). PT Asei is a state-owned export insurance company and Perum PKK is a state-owned company for insuring credit to co-operatives.

V THE PROCESS OF MONEY CREATION

This section analyzes the process of money creation by analyzing the monetary survey or the consolidated the balance sheets of the central bank and deposit money banks (DMBs).[14] The Monetary Survey is useful to analyze the financial aggregates most influenced by the monetary authorities and most influential on other economic aggregates.[15] The instruments available to central banks for influencing monetary aggregates often affect deposit money bank operations directly, but not on the operation of other financial intermediaries.

The monetary authorities create reserve money or monetary base or high-powered money.[16] Foreign assets and domestic credit are the principal assets of these institutions. Foreign assets, on the asset side of the balance sheet, include gold, foreign bank notes, deposits in foreign exchange held abroad, investment in the debt instruments of other countries, SDRs, and the reserve position in the IMF. Foreign bank notes are fiduciary issues of the main trading partners and SDRs are fiduciary issues of the IMF.[17] Monetary functions of the government are shown in the accounts of the treasury or other government institutions. In such cases the reserve position of the central bank should be counterbalanced with these accounts either in the claims on government or government deposits.

As the bank for the government, the central bank gives credit to the Treasury. As the bankers' bank and lender of the last resort, the central bank provides credit to financial institutions and, under extraordinary circumstances, to the non-bank public. Claims on

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[14] Deposit money banks (DMBs) are commercial institutions whose demand deposits are important or form a large share of their of their total liabilities. Although the commercial banks are the main components of DMBs, village banks or BPR - Bank Perkreditan Rakyat may also be included in this category when their liabilities are regarded as money.

[15] The consolidation of Monetary Survey with the balance sheets of other financial intermediaries (such as postal or savings banks, mortgage banks, insurance and pension funds) is called the Financial Survey. The Financial Survey is useful for monetary and financial analysis and, together with the balance of payments and the financial accounts of the government sector, it provides valuable information to construct flow of funds analysis. The balance sheet of non-bank financial institutions, however, are often not available without substantial delay, thus, limiting the usefulness of these data for the formulation of monetary policy.

[16] In the case of Indonesia, the central bank is entrusted to issue coins and currency, hold the national reserve of gold, foreign exchange and Special Drawing Rights (SDRs), control the monetary system and act as the bank for the government. The Government Treasury, however, maintains accounts at the IMF (such as local currency subscription and the use of IMF credit). Transactions with the IMF are the main functions of the government treasury. A country's reserve position at the IMF is the outstanding amount it can draw unconditionally under the Fund's regular trance policies plus equivalent of its outstanding lending to the Fund under the borrowing arrangements.

[17] Beginning January 1, 1991, the SDR valuation basket consists of currencies of the five members having the largest exports of goods and services during the period 1985-89, with the following weights: USD-40%; DM-21%; Japanese yen-17%; French franc and British pound sterling-11% each.

the public sector are divided into claims on government and claims on official entities. Claims on state-owned financial institutions (such as commercial, developments and savings banks) are included in claims on other financial institutions. In general, claims on the private sector are insignificant as normally the central bank directly gives credit neither to private business firms nor to state-owned non-bank entities. Rediscounts are recorded as claims on deposit money banks since they are regarded as a transaction between the central bank and those banks.

The main item on the liability side of the monetary authorities' consolidated balance sheet is reserve money. The principal components of reserve money are currency in circulation outside banks or in the hands of the public, currency in bank vaults and banks' deposits with the monetary authorities. Only because of tradition, the currency-fiduciary issues is recorded in the liability side of the balance sheets of the monetary authorities.[18] The currency in bank vaults and banks' deposits with the monetary authorities serve as the base for DMBs to create demand deposits.

The State Treasury makes almost all its payments for the purchases of goods and services and repays maturing government debt out of its accounts at the central bank. The Treasury attempts to prevent those accounts from fluctuating excessively because their changes directly affect the stock of high-powered money. For that purpose, the government also keeps accounts at commercial banks, such as tax and loan accounts. When the treasury receives tax payments, it deposits them in commercial banks, rather than at the central bank, so that it does not affect the stock of monetary base. Before the treasury makes payments, it moves its deposits from the commercial banks to the central bank and because of this, the stock of high-powered money is only temporarily affected by the treasury purchase. The same transaction mechanism can be used to sterilized public borrowing from domestic money markets for financing its budget deficit.

Assets of monetary authorities indicate the sources of monetary base (H^S) and their liabilities reflect the uses of monetary base (H^d). Foreign exchange reserves (R) and total credit (to government, financial institutions and others) of the central bank (D) are the principal components of their assets. The sources of monetary base, therefore, can be written as:

$$H^S = R + D \tag{1}$$

Foreign assets is a stock concept. A change in the stock of foreign assets (R) is the difference between the current account (CA) and the capital account (K) of the balance of payments, which is a 'flow' data. Or,

$$CA = R + K \tag{2}$$

The current account records transaction for goods, services and income and those for unrequited transfers. The capital account covers transactions in financial assets and liabilities, both direct investment and portfolio capital. Direct investment covers assets

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[18] As fiduciary issue, currency is only backed by faith, not either gold or foreign reserve.

and liabilities involving a lasting interest in an enterprise, while portfolio investment covers transactions in bonds and corporate equities. In the case of Indonesia, the capital inflows have been used to finance the chronic current account deficit and to accumulate foreign exchange reserves.

The principal liabilities of the central bank are the currency held by general public and the deposits of deposit money banks at it. As a result, the uses of monetary base are written as:

$$H^d = CUR + BD \quad (3)$$

where CUR is the coins and currency held by the public;
BD is bank deposits at the central bank.

In equilibrium, the uses of monetary base are equal to their sources, or

$$H^s = H^d = H = R + D = CUR + BD \quad (4)$$

The principal components of DMBs assets are reserves and credit and the main component of their liabilities are deposits held by the government and the public. For simplicity, assume that deposits consist of demand deposits (DD) only. Against these, DMBs hold their reserves in the central bank (BD) and issue short-term bank credit (C) to the public sector. In this simplified system, we can write:

$$DD = BD + C \quad (5)$$

Also for simplicity, we assume money is narrowly defined and consists of currency (CUR) and demand deposits (DD):

$$M = CUR + DD \quad (6)$$

The proportion of currency in money stock depends on the interest rate, as an opportunity cost of holding cash payment system and long-term variables such as payment system.

By assuming that DMBs' reserves are exactly the same as their deposits at the central bank, we can consolidate equation 4 and equation 6 to get:

$$M = (H - BD) + (BD + C) = H + C = D + C + R \quad (7)$$

Equation 7 indicates that money can be created in a number of ways: by credit expansion of the central bank, by credit expansion of DMBs, and by sale of foreign exchange to the central bank. As shown in equation 1, the credit expansion of the central bank (such as to government, quasi-government institutions and state-owned enterprises financial institutions) and the sale of foreign exchange to the central bank increase the quantity of the monetary base. Through the exercise of monetary policy, monetary authorities influence the capacity of the DMBs to create demand deposits.

Equations 1 and 7 indicate a dual role and efficacy of monetary policy in an open economy. The first role of the monetary policy in an open economy is to affect price inflation through its influence on domestic credit of both the central bank and DMBs. In an open economy with fixed exchange rate, monetary policy is less effective as it can only affect the composition of liquidity. To maintain the same level of money supply, a credit expansion (either from the central bank or DMBs) should reduce international reserve in equivalent amount. Otherwise, the credit expansion ignites price inflation and reduces interest rates. Depreciation or devaluation of domestic currency will cause a cost push effect on prices and wages, particularly when the export and import substitutes are fully employed.

The second function of monetary policy is to stabilize the balance of payments. Monetary policies usually influence external stability through their effects on internal stability. In an open economy, however, the external instability could be caused by foreign economic events and policies, such as cyclical movements of commodity prices, currency realignments and economic policies in major developed countries. These 'external shocks' directly affect both internal and external stabilities and put constraints on the formulation of domestic economic policy, including monetary policy.

A surplus on the balance of payments (due to surplus on either the current or capital accounts), in a fixed exchange rate system, results in a rise in foreign exchange reserves. If the international demand for domestic currency exceeds the supply, the central bank and DMBs can intervene by accumulating foreign reserves paid by money that they created. Such exchange market operations raise both monetary base and foreign reserves of the monetary authorities. To keep the money supply constant the authorities can reduce its domestic credit or the DMBs loans by an equivalent amount.

The only way the central bank can defend its reserve position (keep R of Equation 1 constant) is by not buying or selling foreign exchange on a net basis. A credit expansion of the banking system puts pressures on the exchange rate to depreciate. Capital inflows tend to appreciate domestic currency. As prices and wages are rigidly downward, appreciation will also harm exports and import substitutes.

The present government of Indonesia has not financed its budget deficit by borrowing from domestic sources, either from the central bank, commercial banks or from domestic securities market. As indicated earlier, the government, since 1968, has adopted a policy of capping the public budget deficit to the level that can be financed by foreign aid and borrowing. The public sector's external capital inflows are categorized as 'development revenues' in the budget as they are earmarked for financing of 'development expenditures'. Indonesia, since 1968, has adopted a policy for maximising inflows of development aid from the consortium of its Western donors. The availability of 'oil money' between 1973-1982 and the rise in its income have only shifted Indonesia's position to a package of less concessional aid.

From a monetary point of view, however, such a 'balanced budget policy' is not neutral (Booth and McCawley, 1981; and Nasution, 1989). In theory, the oil money and government revenues from foreign aid and loans can be sterilized by the early retirement

of foreign debt, the building up of budget surplus, and the increasing import content of the public budget expenditures. To some extent the authorities have opted for the third alternative. The budget policy rules out building up the budget surplus particularly as the deficit is financed by concessionary loans.[19] Until recently, the government policy was not to repay its external debt early as the benefits from the concessionary loans are much greater than their opportunity costs. Such a policy, however, has been changed since autumn 1994. At that time, the authorities used part of the proceeds from selling off 35 per cent of the equity of PT Indosat-Indonesia Satellite Corporation (a state-owned company which controls international telecommunications) to prepay $740 million of high interest rates loans (over 10 percent per annum) from the World Bank and Asian Development Bank.[20] Another $760 million of the high cost debt to these banks was prepaid in fiscal year 1995 from the government share of the privatization proceeds of PT Telkom (domestic telecommunications) and PT Tambang Timah (tin mining company).

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[19] During the 'oil boom' period, between 1973-1982, the authorities encouraged state-owned banks to build up foreign reserves as a way to sterilize part of the 'oil money' (Grenville, 1977).

[20] With a total value of IPO (initial public offering) amounted to US$1 billion, in September 1994, Indosat offered 10 percent of its equity shares in domestic market and 25 percent in overseas markets in the form of ADRs (American Depository Receipts) or ADSs (American Depository Shares). The 25.9 million ADRs - each representing 10 ordinary shares - began trading on NYSE (the New York Stock Exchange) on October 19, 1994. Issued by U.S. banks and traded in the domestic securities market in that country, ADRs are negotiable certificates representing ownership of shares in non-U.S. companies. The certificates therefore represent the number of foreign securities the U.S. bank holds in that security's country of origin. In 1995, PT Tambang Timah, the state-owned tin mining company, offered 25 percent of its equity shares in London Stock Exchange in the form of GDR (Global Depository Receipts).

VI MONETARY POLICY TO INFLUENCE THE CAPACITY OF DMBS FOR MAKING LOANS

As indicated in the previous section, the monetary authorities affect the capacity to generate loans (demand deposits) through monetary policy exercise. The recent shift of prudential rules and regulations on deposit money banks from a system with required reserve ratio to credit ceilings mechanism and to a system with capital adequacy ratio has changed the instruments of monetary policy and approach to monetary policy management. In the system based only on required reserve ratio, the central bank sets the required reserve ratio (r), controls the amount of treasury bonds (and other monetary instruments, such as SBIs in Indonesia) and controls its total credit. The treasury affects the liquidity of financial system by shifting its deposits between the central bank and commercial banks. The central bank, via the money multiplier, is only required to change a moderate level of monetary base outstanding for changing a certain target of changes in DMBs' credit and money supply.

Control on money market instruments to influence the amount of liquidity available in the economy can be handled through open market operations. The central bank pays its purchases of monetary instruments with money that it can create and reduces money supply when it sells securities in the market. In such a system, holding excess reserve constant, the capacity of a DMB to create demand deposits, by lending and investing funds, is limited by the amount of its reserve deposits [C = (1-r)DD].

In the credit ceiling model, the authorities directly determine the amount of DMBs' loans independent of the level of their reserve deposits. Although it is still a binding constraint, the role of reserve ratio (r) is less important in this model than in the previous system. As a part of the selective credit policy, the authorities even set a rigid and segmented credit system based on the ownership of the bank, economic sector, commodity, region and class of customers. The amount of money market instrument, DMBs' deposits at central bank and their deposits liabilities have became endogenous variables. Open market operation and adjustment in reserve ratio mop up DMBs' liquidity but do not affect their capacity to give loans. To avoid pressures of excess liquidity on foreign exchange rate, the credit ceiling is usually accompanied by control on capital flows, including ceiling on foreign borrowings of the DMBs.

In the current risk-based capital system, the capacity of a DMB to create demand deposits is dependent on: (a) the capital adequacy ratio (CAR) as set by the authorities; (b) the amount of its capital and (c) the composition or risk structure of its portfolio. The monetary authorities also define both the composition and the structure of bank capital (both core and supplementary capital) as well as a detailed and specific method to calculate risk. The required capital of a bank is therefore dependent on the amount as well as the quality of its assets. Like in the credit ceiling system, the role of the required reserve ratio (r) becomes less important in the CAR system. Like in the ceiling system,

the growth of banks' credit is independent of the level of their reserve credit. In February 1991, the central bank set the schedule for meeting CAR at 5 per cent in March 1992, 7 per cent in March 1993 and 8 per cent in December 1993. Previously, in October 1988, Bank Indonesia cut the minimum reserve requirement ratio from 15 per cent to 2 per cent (Table 2). This raises the money multiplier and reduces the role of reserve requirement ratio as an instrument of monetary policy. Moreover, the cut in reserve requirement ratio reduces operating costs for the undercapitalised domestic commercial banks.

In contrast to those under the reserve ratio system, reserve deposits are not transferable in the CAR system. As expansion in loans (assets) of a DMB is directly linked to the size of its capital and structure of its portfolio, it cannot simply borrow funds from surplus institutions, both at home and overseas, in order to increase its capability to make loans. The borrowed funds can only be used to meet the required reserve ratio for additional deposits and invest the rest in monetary instruments, but not to make loans. An increase in capital adequacy ratio forces those banks with limited capital either to shrink the size of their capital portfolios or to place greater emphasis on those assets with low risk weight and, therefore, a lower capital cost. The capital costs for merger and acquisitions within the industry are more expensive under the CAR system in the other two systems. Because of these, the CAR system offers more inflexible instrument to control banks, credit and money supply.

Monetary management becomes more difficult as the banks in Indonesia are also subject to selective credit regulations.[21] The domestic banks are required to observe legal lending limits rules which limit their credit to insiders (share holders, employees and subsidiaries) and to an individual customer or group of companies. As in CAR, the limits are linked to certain ratios of bank' capital. In addition, they are mandated to channel at least 20 per cent of their credits to medium and small scale companies (KUK-*Kredit Usaha Kecil*). Foreign and joint venture banks are required to channel at least a half of their credits to export-related activities. Such selective credit regulations drive up the banks' required capital and make management of their portfolios more difficult.

[21] The credit regulations which link bank credit to certain economic sectors and class of customers make the credit policy remain segmented, and pro-cyclical. Restrictions on loans to insiders are difficult and costly to monitor and enforce. Bank owners may swap loans among themselves and the industrial conglomerates which own the banks can persuade their banks to give favourable treatment to their suppliers and customers.

VII THE EROSION OF MONETARY AUTONOMY: NBFIS AND MONEY SUPPLY

The reforms which shift more decisions to the market have surely eroded the autonomous power of monetary authorities in Indonesia to direct monetary policy for preserving both internal and external economic stability. However, the autonomy of monetary authorities in conducting monetary policy has actually been greatly reduced long before the recent financial sector reforms. In the past, the highly interventionistic rules and regulations in the financial sector were only felt mostly in the state-owned banks. Partly because of this, the less regulated private banks and finance companies (non-bank finance institutions, leasing, factoring, consumer financing and credit card companies) grew very fast in the early 1970s. The share of the grey market increased further with the rise in trade and investment related private sector's capital inflows because of the increasing transactions with foreigners and internationalisation of business sector. Partly because of these, the authorities found themselves as having a choice of letting the unregulated markets dominate the state-owned banks or permitting financial reform and accepting some associated erosion of autonomy of the state-owned banks.

Except that they are prohibited from accepting demand deposits, in reality, the operations of investment finance companies are very similar to those of commercial banks. These institutions are competing with the banks in attracting large denominated certificates of deposit and in providing fast growing short-term business financing and consumer credit including housing and car loans. They have also been used as 'cash dispensers' to buy shares of companies floated by the politically well-connected private conglomerates. Until December 1995, the investment finance companies were regulated and supervised by the Ministry of Finance. As the Ministry has no capability to implement the regulatory and supervisory tasks, these institutions were, in reality, unregulated and unsupervised.

Prior to the recent reforms, the operations of finance companies were only constrained by regulations on the gearing ratio, that is, the maximum ratio (limited to 15 times) an investment finance may borrow in relation to its own shareholders' fund, and a ceiling on foreign borrowings. This freedom of action has permitted them to adapt more rapidly and effectively to changes in the economic and financial situations than the banks. In Indonesia, these institutions were also being used by the state-owned banks and Bank Indonesia to extend short-term credit and invest in sectors and activities that the banks themselves could not reach during the past financial repression. These ended with the elimination of the repressive system of credit ceilings cum selective credit policy with subsidized interest rate in January 1990. As has been pointed out earlier, the 12 investment companies opted to become full-fledged commercial banks in 1992.

VIII THE MONEY MARKET

During the early period following the financial sector reform, capital inflows were effectively controlled and the financial market was relatively underdeveloped. These allowed sufficient autonomy for the interest rate and the exchange rate objectives to be treated separately. The ability of the central bank to raise domestic interest rates has drastically diminished as the capital movements have become increasingly interest rate sensitive. Sterilization operations for mopping up capital inflows require a relatively efficient money market with a sufficient amount of instruments.

The central bank begun to develop the money market in April 1984, one year after it relaxed its controls on banks credit and interest rates. Until then, the money market consisted only of the interbank money market. As the policy is to finance the public budget deficit only by external borrowings, the present government has never issued bonds in the domestic market. In the absence of such securities, Bank Indonesia, the central bank, has to issue its own certificates as money market instrument to sterilize the foreign exchange inflows. Table 5 shows that SBI (*Sertifikat Bank Indonesia*) is, currently, the most important money market instrument in Indonesia and accounts for over 70 per cent of transactions. Introduced in 1985, private sector commercial papers (SBPU-*Surat Berharga Pasar Uang*) are only available in small amounts.

Prior to October 1988, the SBI market was repressed. PT Ficorinvest, a non-bank finance company owned by Bank Indonesia, was appointed as the sole market maker of that financial instrument. In addition, SBI was auctioned on the basis of pre-announced rates by the central bank. Because of the shallowness and narrowness of the money market, particularly during times of crises, the authorities had to resort back to the use of non-market mechanisms for limiting and mopping up the massive short-term private capital inflows.

To improve their portfolios, there is also demand from banks to increase investment in this zero weight risk SBIs. However, the rapid rate of growth in the use of these money market instruments has been mainly related to non-market arms twisting policy of the authorities. To suppress capital outflows, in July 1987, Professor Dr. J.B. Sumarlin, the then Minister of Development Planning and Acting Minister of Finance, instructed a number of large state-owned companies to convert Rp900 billion of their deposits, mainly at state-owned banks, into SBIs. The second 'Sumarlin shock', introduced in February 1991, when the same Mr. Sumarlin had became the Minister of Finance. The latter shock initially withdrew Rp7 to Rp8 trillion ($3.64 to 4.1 billion at the then exchange rate at Rp1,923/$1) from the monetary base or nearly a half of stock of narrowly defined money supply (M1). The net withdrawal amounted to Rp2 trillion as Bank Indonesia offset part of the sale of SBIs with its purchase of SBPUs.

TABLE 5
THE DEVELOPMENT OF SBI AND SBPU, 1985-1995
(billions of Rp)

End of period		SBI held by Commercial Bank	SBPU sold in the market	Total SBI & SBPU	The role of SBI in total market instrument	SBI & SBPU as % of DMB's Assets a)	SBI & SBPU as % of Excess Reserve	SBI & SBPU as % of Total Deposits b)
(1)		(2)	(3)	(4)=(2+3)				
1985	Mar	243	-	243	100.0	0.8	19.7	1.6
	June	3	92	95	3.2	0.3	8.8	0.6
	Sep	366	74	440	83.2	1.4	40.5	2.5
	Dec	755	61	816	92.5	2.4	81.7	4.4
1986	Mar	490	3	493	99.4	1.4	34.5	2.6
	June	849	54	903	94.0	2.5	69.2	4.6
	Sep	1013	123	1136	89.2	2.9	75.0	5.1
	Dec	302	-	302	100.0	0.7	21.3	1.4
1987	Mar	105	26	131	80.2	0.3	8.4	0.6
	June c)	32	469	501	6.4	1.2	35.1	2.1
	Sep	780	-	780	100.0	1.7	36.4	3.0
	Dec	275	-	275	100.0	0.6	14.5	1.0
1988	Mar	25	-	25	100.0	0.0	1.0	0.1
	June	690	50	740	93.2	1.3	28.1	2.3
	Sep	590	-	590	100.0	1.0	24.7	1.7
	Dec d)	1254	-	1254	100.0	2.0	102.7	3.5
1989	Mar	444	-	444	100.0	0.7	29.1	1.2
	June	2156	-	2156	100.0	2.9	211.8	5.3
	Sep	2483	-	2483	100.0	3.0	243.7	5.5
	Dec	2886	-	2886	100.0	3.1	163.0	5.6
1990	Mar	2216	253	2469	89.8	2.4	129.8	4.4
	June	2061	-	2061	100.0	1.8	157.4	3.3
	Sep	1412	-	1412	100.0	1.1	139.5	2.1
	Dec	1529	-	1529	100.0	1.2	99.9	2.0
1991	Mar e)	9414	6782	16196	58.1	12.0	1025.7	22.5
	June	11994	7739	19733	60.8	13.6	1590.1	25.0
	Sep	11410	4995	16405	69.6	11.6	1321.9	19.5
	Dec	10942	4342	15284	71.6	10.0	1131.3	17.0
1992	Mar	11239	4196	15435	72.8	9.8	716.2	17.2
	June	15542	2808	18350	84.7	10.9	1766.1	18.9
	Sep	17982	1995	19977	90.0	11.3	1584.2	19.4
	Dec	20599	2820	23419	88.0	12.8	1476.6	21.8
1993	Mar	23010	2619	25629	89.8	13.5	1122.1	23.2
	June	18730	1511	20241	92.5	10.4	1184.4	18
	Sep	18663	1625	20288	92.0	9.8	1049.6	16.5
	Dec	23435	1395	24830	94.4	11.6	1133.8	19.5
1994	Mar	19772	2734	22506	87.9	10.0	1338.8	16.9
	June	15238	3341	18579	82.0	8.1	1635.5	13.6
	Sep	14090	3373	17463	80.7	7.3	1505.4	12.1
	Dec	15052	3842	18894	79.7	7.4	1764.1	12.2
1995	Mar	11223	4137	15360	73.1	5.9	1262.1	9.5
	Apr	10861	5513	16374	66.3	6.2	n.a	10.0

Notes: a) DMB = Deposit Money Banks;
b) Consist of demand deposits, time deposits, and foreign currency deposits;
c) The first Sumarlin shock in June 1987;
d) The reduction in bank's reserve requirement have to be temporary held in SBI;
e) The second Sumarlin shock in February 1991.

Source: Bank Indonesia, Indonesian Financial Statistics, various issues.

The lesson that can be learned from the above discussions is that the high costs of sterilization operations have been exclusively borne by the public sector. The monetary authorities have regained some independence in conducting monetary policy only by paying such high costs. (Woo and Hirayama, 1995). The non-bank state-owned enterprises have suffered from the liquidity freeze both in rupiah and external borrowings cut on yields of their deposits. The sterilization operations can be seen as measures to shift the interest and foreign exchange risks of external borrowings from the banking system to the central bank. As shown previously in Table 1, the balance sheet of Bank Indonesia expanded faster than that of the banking system during the periods of sterilization operations of the massive capital inflows in 1987 and 1991. The larger the amount of SBIs issued by the central bank and the higher their interest rates, the higher the interest cost borne by Bank Indonesia.

The end of easy bank credit has raised the need for non-financial companies to raise funds by issuing bonds and other commercial papers that can be traded in the money market. A private-owned rating company, PT Pefindo (*Pemeringkat Efek Indonesia*) was established in the mid 1995 to rate the securities that can be used as money market instruments. As of May 1996 there were only 51 companies which have been issued bonds in Jakarta and Surabaya Stock Exchanges with a total issue at Rp6.4 trillion. The secondary market for bonds is inactive as most of them has been absorbed by pension funds and insurance companies and hold them until maturity. The market is expected to be more active in the near future as a number of large state and private companies have announced their plan to raise funds in long-term bond market. The giant PLN-*Perusahaan Listrik Negara* the state electric company, for example, will issue the fifth batch of 5 years maturity bonds, amounted to Rp1 trillion, in August 1996. Since it first entered the bond market in 1992, PLN has raised Rp1.9 trillion in local bond market.

IX INTEREST RATES POLICIES

This section presents the framework to analyse the behaviour of bank deposits and lending interest rates in a more deregulated and open economy. The issue of interest rate determination is important as the country proceeds to liberalise its financial sector and remove impediments to capital flows. The internal deregulation has shifted interest rate decisions to the market place. In a country with a completely closed economy (closed current and capital accounts), the nominal interest rate is determined by the money market condition and the expected inflation rate. Interest rate, in the short-run, can be reduced by monetary expansion but, gradually, it is adjusted upward with the rise in inflation rate (Mundell, 1963).

In contrast, in an open economy with no impediments to capital inflows, the monetary authority is powerless in setting the domestic interest rate. Assets of similar risk traded in asset market of such an open economy, according to the portfolio balance theory, will bear similar returns both inside and outside the country (allowing transaction costs). If returns are not closely aligned, investors can safely arbitrage by moving funds out of the low return assets and to the high return asset. This portfolio re-balancing will naturally tend to align returns by bidding up the price of the high-return asset and doing the opposite for the low-return asset. Depending on the exchange rate regime, this international arbitrage will either alter the interest rate (in a fixed exchange rate system) or alter the exchange rate (in the flexible exchange rate system). The external deregulation which increases capital mobility and its sensitivity to interest rate expectations has made monetary authorities face two difficult dilemmatic choices: whether to direct monetary policy at either interest-rate or exchange-rate targets. The authorities have to intervene in the foreign-exchange market in order to pursue a certain target level of interest rate.

Edwards and Khan (1985) combine Fisher's equation for the closed economy model with the interest parity model for a small open economy as follows:

$$(8) \qquad i_t = \theta(i_t^* + e_t^e) + (1-\theta)(r_t + \pi_t^e)$$

where:

- i = the nominal interest rate in the domestic market;
- θ = an index of openness of the capital account of the country that can be estimated from the country data;
- i^* = the (nominal) world interest rate;
- e = the expected rate of change in the exchange rate (defined as the domestic price of foreign currency);

r = the real (ex ante) rate of interest;[22]
π = the expected rate of inflation;
with subscript t referring to time.

The value of parameter θ lies between zero and unity ($0 \leq \theta \leq 1$). The closer the value of θ to unity the more open the economy. If the capital account is fully open ($\theta=1$), equation 8 becomes the full interest parity condition. In contrast, if the economy is totally closed ($\theta=0$), equation 8 collapses into the closed-economy Fisher equation.

Following financial sector reforms, which raise the value of parameter θ in equation 8, deposit rates at domestic financial institutions are expected to immediately move closer to their counterparts in international markets. The spread between domestic and international deposit rates can be disaggregated into two components, namely: (a) market perceptions about default risks and (b) market expectations of exchange rates. The first class of risks is closely linked to the levels of current account deficit and external indebtedness as well as to the financial conditions of domestic financial institutions. The two components of the spread can be measured by comparing three interest rates: on-shore deposits in domestic currency, on-shore interest rates on deposits in foreign currencies and off-shore interest rates on deposits in foreign exchange. Any difference in on-shore and off-shore deposits denominated in the same currency must be attributable to the risk of holding assets on-shore, plus a margin for transaction costs or market imperfection. This spread can be used as a rough indicator of the market's expectation of devaluation of domestic currency.[23]

Domestic deposit rates also vary between banks according to the degree of confidence of their management and ownership.[24] To attract deposits, both in rupiah and foreign currencies, domestic (state-owned and private sector) banks, in general, offer substantially higher interest rates than international banks. Depositors have high confidence in foreign banks and still perceive that the government stands by its own banks.

Domestic lending rates in an open capital account are also linked to international levels, but in a weaker fashion compared to the deposit rates. Unlike depositors, borrowers face more expensive transaction costs to switch to international lenders. Lender switching becomes more difficult because of informational asymmetries (Stiglitz and Weiss, 1981). The switching to international lenders is, therefore, limited for reputable borrowers and internationally unknown borrowers are confined to domestic banks. NOP

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[22] *Ex ante* real interest rate is the relevant interest used by borrowers when judging the expense of borrowing to finance investment. Calculating this rate, however, requires knowledge on how the economic agents form their expected inflation. Because this is not easily determined, real rate is usually calculated on an *ex post* basis by correcting the nominal rates for the actual rate of inflation over the holding period of the deposit or loan. The difference between *ex ante* and *ex post* values, which is called expectational errors, represents unexpected transfers between borrowers and lenders.

[23] Jeffrey A. Frankel (1994) points out limitations of interest rate spread as a measure of country risk in countries with relatively underdeveloped forward exchange rate markets.

[24] The variance of bank deposits rates as published in daily newspapers is higher in the post 1988 as compared to the pre 1988 (Nasution, 1993).

regulations are not applied to companies outside the financial sector. Following Bank Indonesia's decisions to eliminate the subsidy on the premium of its exchange rate swap facility, the industrial companies switch to a commercial swap facility which offers lower premiums. Such a facility is widely available at nearby regional financial centers (Singapore and Hong Kong). The switch to international lenders is partly indicated by the rising shares of credit in dollars as a percentage of total bank credit as shown in the bottom of Table 6. The alternative strategy of reputable companies to reduce the burden from the rising rupiah interest rates loans is to bypass banks by raising funds through stock and bond markets.

Partly because of the informational factor, from the microeconomic point of view, equation 8 is mainly for deposit rates. Domestic lending rates are also influenced by the state of the financial condition of the lending institutions and their operating costs. Taking all of these into consideration, domestic lending rates can be formulated as follows:

$$(9) \qquad i_l = k\,E + \frac{(1 - k)d}{(1 - q)} + I + P$$

where:

- i_l = the bank lending rates;
- k = the capital adequacy ratio;
- E = the average rate return on capital;
- d = the banks' cost of funds, in which deposit rates are the main component;
- q = the required reserve ratio;
- I = the cost of intermediation; and
- P = the risk premium.

At least during the transition period, the shift to the present CAR system has raised the interest rates of both deposits and loans in Indonesia (Table 6). At the same time the spread between the interest rates of deposits and loans was also rising. Such a rise in interest rate spread is part of the bank strategy to pass part of their losses to their customers, particularly those who have no access either to stock and bond markets or to international financial markets. Equation 9 indicates the mandated CAR and raises bank capital costs. Banks with deficient capital bases suffered the most. Such banks, again, had to make the difficult choice either to raise additional equity or to shrink the size of their portfolio or to place greater emphasis on those assets with a low risk weight. The rise in the spread is also due to the rising risk premium (P) because of the worsening of the quality of banks' portfolios. This is usually happening during the transition from the previously repressed credit system (with complicated ceilings cum selective credit policy and subsidized interest rates) to support inefficient enterprises in inward looking industries (McKinnon, 1993). The rising capital costs and the eroding allowance (reserves) for losses on loans is partly offset by a reduction in operating costs due to a lower reserve requirement ratio and cost of intermediation as a result of a more severe competitive environment.

TABLE 6
MONETARY SURVEY, 1980-1995
(in billions of Rupiahs)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995 a)
Assets																
Foreign Assets (Net)	6031	6370	5266	8089	11942	14106	15919	18332	17892	18279	10659	17283	27987	30611	26452	28593
Domestic Credit	5054	6852	10281	12208	11978	14799	20329	28739	40835	60564	95896	114002	123164	162546	192901	206009
Claims on Government (Net)	-3058	-3624	-3280	-3847	-8031	-9087	-8541	-6882	-7167	-8941	-12026	-12711	-15262	-13535	-18242	-19865
Claims on Official Entities	523	835	1071	1182	4717	5013	5104	4818	6350	8560	7709	9706	11342	11945	10550	13193
Claims on Private Sector	7590	9641	12491	14873	15292	18873	23766	30803	41652	60945	100213	117007	127084	164136	200593	212681
Liabilities																
Money	5011	6474	7125	7584	8581	10124	11631	12705	14392	20559	23819	26693	28801	37037	45622	44789
Quasi-Money	3056	3671	5117	7212	9356	13054	15984	21200	27681	37967	60811	72717	90274	108563	128697	137595
Import Deposits	468	418	330	311	251	291	426	449	709	658	1074	990	915	1856	1176	1443
Other Items (Net)	2550	2659	2975	5192	5732	5436	8207	12718	15946	19659	20852	30885	31161	40746	39560	45797
Memorandum items:																
1. Dollar deposits at DMB as % of M2	15.3	11.3	12.7	15.6	16.4	14.6	16.6	13.8	15.5	13.7	17.3	20.3	19.1	17.8	17.8	19.2
2. Credit in dollar as % of total credit	7.4	5.8	6.1	7.6	3.3	3.3	1.8	3.1	4.1	7.4	12.2	15.6	17.9	18.8	18.3	18.8
3. % of total excess liquidity of DMBs held in US$	49.1	47.3	78.5	65.9	65.5	100.3	100.9	91.9	3.1	1.5	3.5	3.6	6.9	13.6	9.3	13.4 b)
4. The role of SBI in total market instrument (%)	n.a	n.a	n.a	n.a	n.a	92.5	100.0	100.0	100.0	100.0	100.0	71.6	88.0	94.4	79.7	66.3
5. Deposit rates (3 month, % p.a)	8.2	10.2	8.6	14.8	17.1	14.6	14.0	16.5	17.8	17.1	21.0	21.9	16.7	11.8	14.3	16.39
6. Lending rates (working capital, % p.a)	12.0	12.0	9.0	9.0	12.0	12.0	21.2	22.2	22.3	21.0	21.0	25.1	22.1	18.0	17.0	17.8
7. Interest rates differential (6-5) (%)	3.8	1.8	0.4	-5.8	-5.1	-2.6	7.2	5.7	4.5	3.9	0.0	3.2	5.4	6.2	2.7	1.4

Notes: The financial repression gradually relaxed since June 1983. Until then credit was subject to ceiling and selected credit policies, while interest rates were controlled by the authorities.
a) April
b) March

Sources: 1. Bank Indonesia, Indonesian Financial Statistics, various issues.
2. International Monetary Fund, International Financial Statistics, various issues.

The transition period has became more difficult as more financially distressed domestic (state and private) banks have relied on external borrowings. In the past, their sources of financing were dependent on Bank Indonesia's refinancing facilities. The heavy reliance on debt financing had adverse effects at the microeconomic level as it led to unbalanced capital structure. High debt to equity ratio represents few problems as long as the firms continue to grow and real interest rates remain very low or negative. A highly leveraged financial system, however, simultaneously renders the enterprises and banks to internal and external shocks. Because of the rise in international interest rates, accompanied by successive realignments of major convertible currencies since the second half of the 1980s, the heavy reliance on debt has strained the cash flows of companies and their banks and increased their vulnerability. The economic restructuring which reduced economic rents and the effective rate of protection has also contributed to a reduction in corporate profits.

Equations 8 and 9 indicate that monetary authorities can adopt a number of macro- and microeconomic measures to lower domestic lending rates. Sound macroeconomic policies bring down the devaluation premium and create a conducive climate for growth. Interest rates can be lowered by the appreciation of domestic currency either by drawing down foreign exchange reserves or attracting capital inflows. On the micro side, the government can assist banks to meet their capital requirements and solve problem loans to reduce credit risk premium (P). The latter is also related to improvements in market information which require improvements in social infrastructure, particularly good governance and legal and accounting systems.

X EXCHANGE RATE POLICY

The exchange rate is the single most important relative price in the economy. In a more open economy, monetary transmission operates through exchange-rate effects on net exports and interest rate effects of financial portfolio. Exchange-rate policy,[25] therefore, plays two roles. On the one hand, jointly with other policies, it plays an important role in promoting both external and internal macroeconomic stability. On the other hand, exchange rate policy, also jointly with other policies, helps to remove distortions in the domestic economy and maintain its international competitiveness. As noted earlier, the authorities in Indonesia mainly use fiscal, credit and price policies for restoring and maintaining macroeconomic stability.

To encourage non-oil exports, in November 1978, the authorities devalued the rupiah by 50 per cent. Concurrently, it replaced the nominal external anchor of the rupiah to the US dollar to an undisclosed basket of convertible currencies. These corrected the 'Dutch disease' problem or appreciation of the rupiah because of 'the oil boom'. Since then, the authorities have used a managed floating system and paid greater attention to international competitiveness as measured by the (external) real effective exchange rate (REER). REER is defined as the ratio of international price to domestic price (disregarding transport cost and other barriers to trade, information problems, consumer loyalty and differences between domestic and foreign goods). An increase in REER indicates a depreciation in domestic currency *vis a vis* foreign exchange and, thereby, an improvement in competitiveness of the country in international markets.

To correct REER appreciation, the authorities devalued the nominal value of the rupiah against the US dollar by 40 per cent in June 1983 and another 31 per cent on September 12, 1986. The steady rise in the rupiah's REER (Figure 2), measured both in trade and SDR weights, indicates a consistent government policy to provide financial incentive for achieving the objectives of export oriented economic policy: to promote the exports of non-oil products and to change the structure of the production away from non-traded products.[26] The rise in REER provides an incentive for more production of traded goods in the economy. Such an economic transformation would become easier if there were deregulation to remove distortions in the labour, goods and financial markets. These

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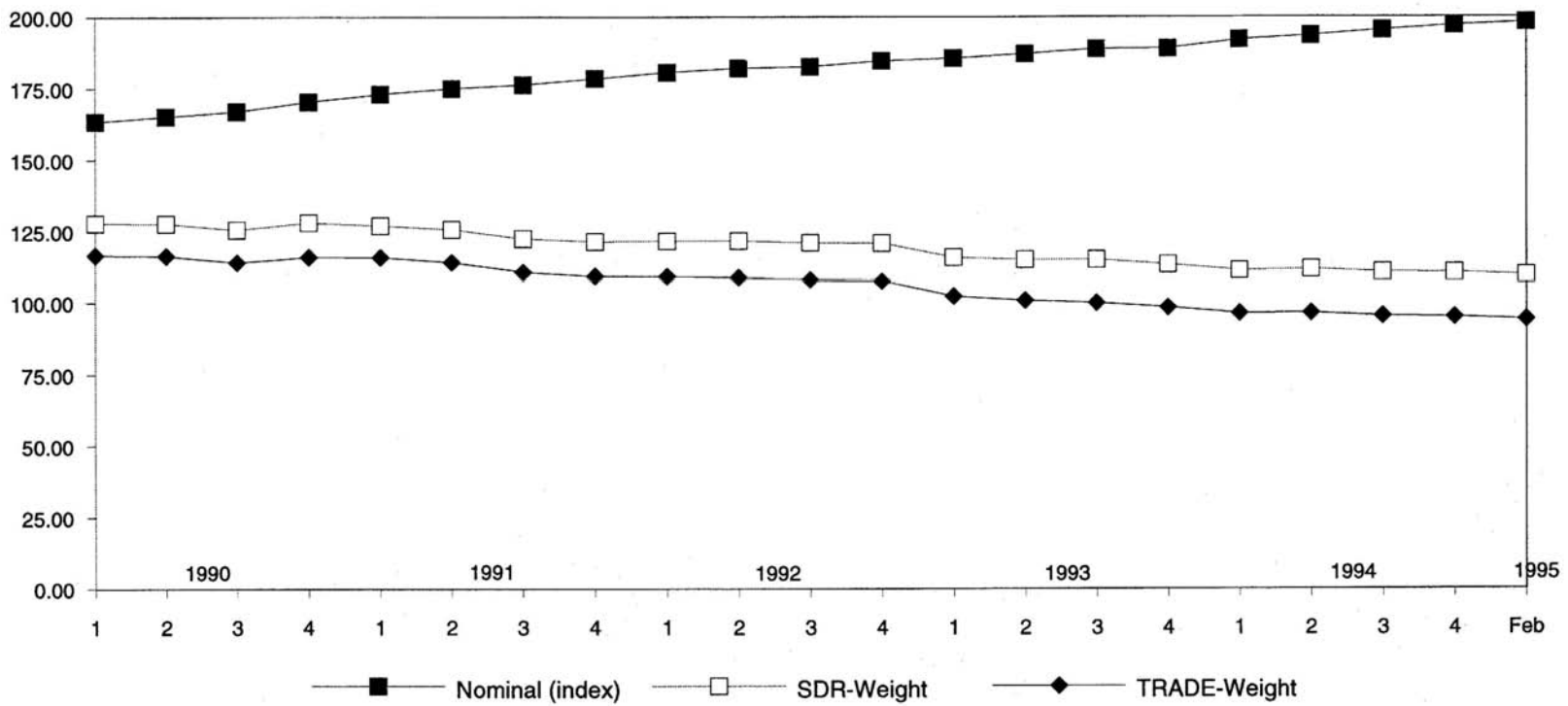
[25]The exchange rate policy includes devaluation, speed up depreciation of the rupiah and widening intervention band and raising transaction costs in foreign exchange markets.

[26] The other group of measures that has been used to promote production and export of non-oil products is to promote productivity gains by pursuing structural reforms more vigorously and by improving human capital, particularly elementary and high school education system. The measures to promote export include a range of 'second best' export support schemes such as provisions for imported inputs at world prices through indirect tax relief system , export finance, credit guarantees and insurance facilities. The tax relief system consists of: (a) export processing zones and bonded manufacturing warehouses; (b) prior duty exemption and duty drawback schemes; and (c) refunds of VAT paid on domestic inputs used in export production (Nasution, 1996).

facilitate an increase in labour productivity and reduce the price of imported inputs. The rise in REER also indicates that the authorities have not used the exchange rate as the nominal anchor and have allowed rupiah appreciation as an instrument for generating fiscal revenues and curbing the domestic inflation rate.

FIGURE 2
REAL EFFECTIVE EXCHANGE RATES (REER), 1990-1995
(1985 = 100)



Note: Real Effective Exchange Rates (REER) is calculated by the equation (e*Pf)/P, where e is the exchange rate, Pf the foreign CPI, and P the domestic CPI. The SDR and TRADE valuation basket consist of the currencies of the five members having the largest exports of goods and services during the period 1985-89, with the weights for SDR: US$-42%; Japanese Yen-19%; DM, French franc and British pound sterling-13% each. And the weights for TRADE: US$-3.68%; British pound sterling-2.62%; Japanese Yen-59.85%; French franc-1.89%; DM-4.96%. Beginning January 1, 1991, the weights for SDR: US$-40%; DM-12%; Japanese Yen-17%; French franc and British pound sterling-11% each.

XI MONETARY SURVEY

Financial sector policy reforms have caused shocks in the money supply and the money demand function. The end of direct controls on interest rates and credit rationing have made the interest rate reflects the opportunity cost of holding money and raised the usefulness of interest rates for monetary policy. Monetary policy has became more difficult because, on domestic front, many banks are unable to meet the minimum capital as required by new rules and regulations. The ability of Bank Indonesia to raise interest rates and the reserve ratio and contract net domestic assets is limited as they would further weaken the banking system. On the other hand, the financially distressed banks are unable to pass on the expansionary monetary policy to their customers by lowering interest rates and easing credit. Expanding credit to small firms, as demanded by the new credit policy, is particularly more difficult because of asymmetric information and costly enforcement of contracts. Monetary policy has became more complicated with the further liberalization of the capital accounts of the balance of payments. This liberalization, which encourages internationalisation of financial markets, has made capital flows became increasingly sensitive to interest-rate differentials and exchange rate expectations.

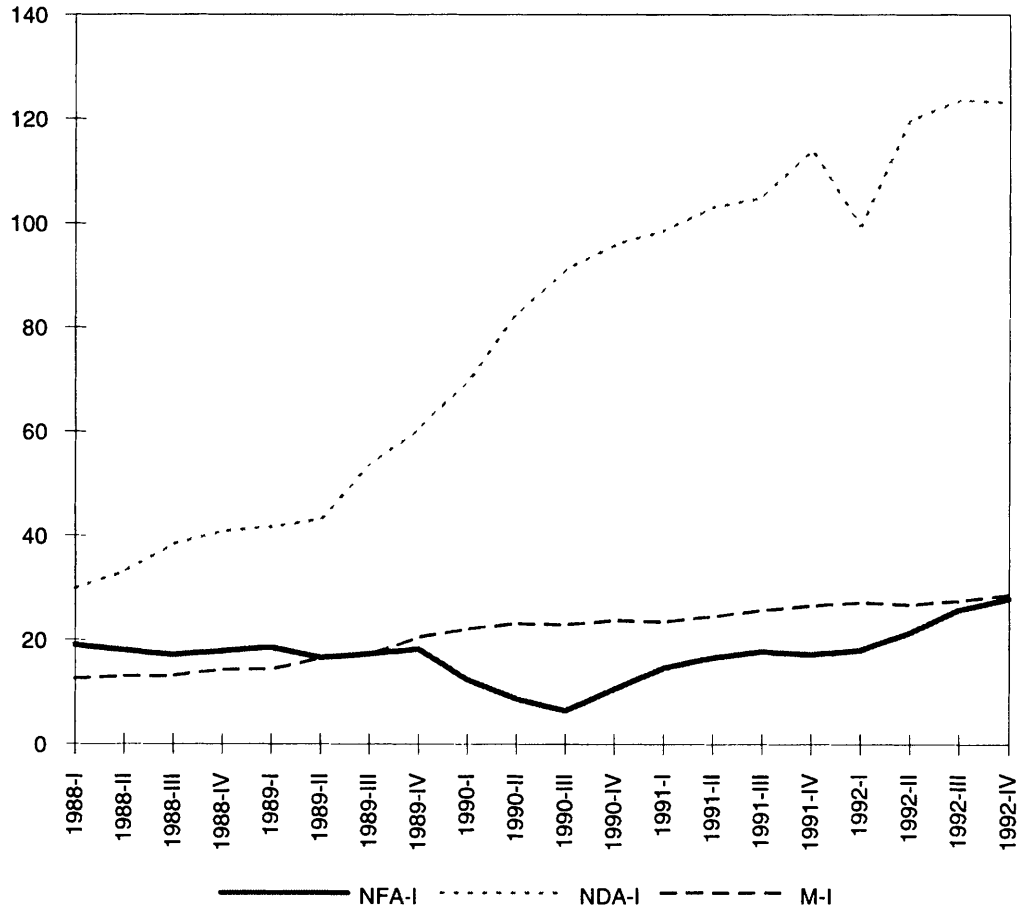
The monetary survey of Indonesia from 1988 to 1995 is shown in Table 6. The table indicates that the money supply grew rapidly on an average at around 25 percent per annum following the broad based economic reforms since the 1980s, including the banking sector reforms introduced in October 1988. The main reason for the rapid rate of growth of money supply has been the rapid rate of growth of bank credit to the private sector and the accumulation of foreign reserves by the central bank. As it happened, non-oil exports rose rapidly since 1987.

Figure 3 shows developments of the components of the monetary base in Indonesia from 1989 to 1992. The figure indicates that a rapid growth of net domestic assets of the banking system in 1989-1990 was at the cost of a sharp erosion in its foreign assets. There were two reasons for a sharp decline in net domestic assets of Bank Indonesia in 1991. First, the Central Bank significantly reduced the scope of the credit programme that can be refinanced by it. The second reason was the introduction of the second 'Sumarlin shock' in February 1991. Since 1993, the net domestic credit of the Central Bank, since 1993, has been increasing again, partly for lowering interest rates and partly for bailing out domestic (state and private owned) banks.

As noted earlier, the size of capital inflows into Indonesia is more than the size of the current account deficit of the balance of payments. Part of the capital inflows has been used to accumulate foreign exchange reserves. On the demand side, the economy requires a higher stock of foreign exchange reserves as it is more integrated to the rest of the world. In the short-run, structural reforms in the real-sector economy are also likely to cause larger deficits in the trade and current accounts of the balance of payments. The

reason is that the reforms immediately increase imports while there is a time lag between implementing reforms and achieving a faster rate of growth of exports. Extra reserves are also needed to buffer against shocks in the markets for goods and services and for financial assets. Events (such as the currency crisis in Mexico in 1994) and changes in economic policies, such as a rise in the interest rate, in developed countries could stop the inflows of private-sector short-term capital into Indonesia. These events and policies can quickly reverse into outflows that could produce severe financial problems and even greater economic crises. To ride out the contagious effects of the recent currency crisis, Bank Indonesia intervened in the foreign-exchange market by depleting between $500-600 million of its foreign-exchange reserve in early 1995 to defend the external value of the rupiah and hold a rise in interest rates.

FIGURE 3
COMPONENTS OF MONETARY BASE IN INDONESIA, 1988-1992
(Rp billion)



Sources: IMF, International Financial Statistics, various issues.

XII CONCLUSIONS

A combination of high domestic interest rates and the liberalization of capital accounts has encouraged the inflows of private-sector capital into Indonesia. Large private-sector capital inflows require careful management of the domestic economy to ensure that those benefits are realized. In a more open economy, under the managed exchange rate system, foreign events and policies affect both internal and external stability. Monetary policy in such an economy has become less effective as it can only alter the composition of liquidity.

Monetary management became more difficult as Indonesia has adopted a 'reversed sequence' of deregulation with underdeveloped and repressed money market and inadequate market infrastructure. The pace of deregulation in the 'financial sector' is much faster than in the 'real sector' of the economy. Undercapitalised commercial banks are unable to absorb the rising costs of an increase in the reserve requirement ratio that may be needed for either sterilising capital inflows or reducing domestic monetary expansion. The money market began to be developed one year after interest rate and credit deregulation in June 1983. Moreover, the expansionary impacts of the drastic liberalization of trade and investment policies, the domestic credit market, and foreign exchange transactions were not accompanied by other measures that would have significantly restrained the expansionary effects of the reforms. Economic policy in general did not adequately dampen the rapid growth of domestic absorption, and price and income expectations. A more restrictive set of banking regulations and supervisions only introduced in February 1991, two years after the drastic banking reform in October 1988. During this period, the banking system was less regulated and inadequately supervised. Meanwhile, the systematic collection of data on non-performing loans only recently began.

At the macro level, the rising real effective exchange rate (REER) indicates that the authorities do not instrumentally appreciate the rupiah as a policy for dampening the inflation rate in Indonesia. Controlling inflation rate and creating new employment opportunity, the twin objectives of internal balance, are mainly pursued through other policy instruments, such as fiscal and credit policies. In addition, the trade policy and investment policy reforms help relax the supply contraints as they increase domestic production and import and create new job opportunity. Moreover, labor, wage and price policies also contribute to domestic stabilisation program.

At the micro level, the rising REER indicates that, in general, the domestic economy is competitive in international markets. The rising REER also provides an incentive for affecting the composition of the domestic economy to produce more traded goods. Part of the explicitly and implicitly subsidized external savings, however, is being used for financing the non-traded sector, including 'strategic industries' which require high protection. In the medium- and long-run such distorted resource allocation distorts

investment and saving decisions and alters the structure of domestic production and income distribution.

Because of institutional factors, sterilization operations were relatively easily done in Indonesia. The bulk of short-term capital inflows is received by the public sector (including state-owned enterprises) and the politically well-connected private sector. Moreover, state-owned banks and non-bank financial institutions are still dominant players in the money, foreign-exchange and capital markets. Through control on these entities, the authorities can directly influence both the size and the types of capital inflows. Furthermore, empirical evidence indicates that the authorities are willing to take harsh measures with expensive financial burdens for the public sector (including the central bank) in order to bring the fundamentals in line with the existing value of the exchange rate. Such sterilization operation will likely be less effective in the future along with the diminishing role of the state-owned enterprises. The private sector, particularly foreign institutions, is less sensitive than state-owned institutions to government's 'window guidance' and arm-twisting measures.

Following financial sector reforms, deposit rates are immediately linked to international rates. The persistently high spread between interest rates on domestic and foreign loans is attributed to the market's expectation of devaluation of the domestic currency, perception of country risks and informational problems. The first two factors are related to the recent stubbornly high inflation rate, slower growth of non-oil exports, rising external debts, and the slow pace of deregulation process in the real sector of the economy. These same reasons, as well as the inadequacy of the banks' capital and relatively high non-performing loans, have contributed to the persistently high spread between lending and deposit rates in domestic financial markets. To reduce domestic lending rates requires good macroeconomic policies, improved market efficiency, and addressing the problems of banking distress.

Indonesia is now entering the second and most expensive and difficult phase of the economic reforms. Measures are needed to strengthen the capital base and reduce the non-performing assets of the domestic commercial banks. To be able to survive in the competitive financial market, the banks also need to improve their capability to gather and process information and monitor borrowers. Such capability was neglected during the long period of tight regulation of the past when banks were used to inadequate internal risk management controls. The financially distressed banking system also limits the ability of the central bank to conduct monetary policy. Restrictive monetary policy, which restricts domestic credit of the central bank and raises both the interest rates and the ratio of reserve requirements, would further weaken the financial conditions of the banking system. On the other hand, the financially distressed banking system cannot reduce interest rate and expand credit in the case of expansionary monetary policy of the central bank.

The market system only works efficiently when the market has been created with sufficient infrastructure to protect private ownership, assure symmetry of market information and minimize transaction costs. These require the slow process institutional building, including the creation and strengthening of markets, and the upgrading of the

regulatory frameworks and accounting systems. At the same time, regulators need to tighten prudential bank regulation and strengthen supervisory efforts, focusing not only on judicial compliance but also on risk evaluation on individual financial institutions.

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