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Distressed Financial Institutions in Thailand: Structural Weaknesses, Support Operations and Economic Consequences

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Abstract

The Thai financial system faced a crisis in 1983. Weak managerial practices and an inadequate legal and regulatory framework were associated with a gradual deterioration in many financial institutions' balance sheets; these weaknesses were brought to the fore by a sharp economic downturn in the first half of the 1980s. The Thai authorities took a number of measures to maintain stability in the financial system and to restructure insolvent financial institutions, including a substantial strengthening in the legal and regulatory framework. The crisis has impacted on the government budget deficit and caused shifts in the demand for financial aggregates and the supply of reserve money.

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1214; 3116; 3120; 3140

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Summary

Beginning in 1983, a crisis in the financial system in Thailand induced the authorities to intervene in about a third of the local banks and finance and security companies, accounting for one quarter of financial institutions' total assets. This paper examines the background to the deterioration, the remedial actions taken, and their economic consequences.

The financial institutions' difficulties can be traced to the structure of their ownership and management and to an inadequate legal, regulatory, and supervisory framework. These problems were brought to the fore by a slowdown in economic activity that resulted in the failure of some finance companies and a loss of confidence in other financial institutions, leading to deposit withdrawals.

Since then the Bank of Thailand has closed 24 troubled financial institutions and intervened in another 30. Liquidity support for these institutions includes loans from commercial banks and funds provided directly by the Central Bank. The provision of this support was conditional on the implementation of restructuring programs. The cost of the support operations to the authorities through subsidies to insolvent institutions has been substantial, equivalent annually to about 1 percent of budget revenue.

Following the crisis there was a shift by depositors and borrowers out of finance companies into commercial banks. This reintermediation may have led to more contractionary monetary conditions during 1984-85. The subsequent expansion in central bank liquidity to support distressed financial institutions added to the easing in monetary conditions in 1986-87.

The Thai experience suggests the following conclusions. Strong legal, regulatory, and supervisory systems are needed when normal "self-regulatory" checks and balances on financial institutions' managements are inadequate. A policy of closing failed institutions is preferable, for reasons of economic efficiency, to trying to keep open insolvent institutions. A financial crisis can distort financial aggregates and have real macroeconomic effects even if overall financial sector stability is not threatened. The possible impact of economic policies on confidence in financial institutions should be taken into account in formulating macroeconomic policy.

I. Introduction

This paper is one in a series examining country experiences with financial crises. 1/ While each of these experiences reflects country-specific factors, they also provide more general background on the potential causes and consequences of financial crises. A recurring theme in these papers is the interrelationship between the stability and soundness of the financial system, the role of regulation and supervision of the financial institutions, and macroeconomic conditions. This paper reviews the background to the deterioration in the conditions of financial institutions in Thailand, the remedial actions and support arrangements that were subsequently taken, and the consequences for macroeconomic conditions.

The financial system in Thailand faced a financial crisis in the first half of the 1980s. Poor managerial practices accompanied by inadequate regulations and supervision led to a gradual deterioration in the quality of financial institutions' balance sheets. The difficulties were brought to the fore by a slowdown in economic activity in the early 1980s. Beginning in 1983, about 50 finance and security companies and 5 commercial banks, together accounting for about a quarter of financial institutions' total assets, have had to be intervened by the Thai authorities. Twenty-four finance and security companies have been closed and 9 others merged into two new companies; 13 finance companies and 5 commercial banks have continued to receive support. The support arrangements have included, on the one hand, financial subsidies in the form of "soft" loans and on the other, remedial actions, including reductions in capital values, management restructuring, and the build-up of capital and reserves under financial programs set by the authorities. As a result of the crisis, the powers of the authorities to supervise and intervene to restructure financial institutions have been strengthened substantially. The macroeconomic impact of the crisis was probably procyclical, resulting in a more restrictive policy (1984-85) and a more expansionary policy (1986-87).

The outline of the rest of the paper is as follows: Section II reviews the structure and the evolution of the financial system; Section III discusses some indicators of the condition of financial institutions; Section IV examines the reasons for the emergence of distressed financial institutions in Thailand, emphasizing structural and regulatory inadequacies; Section V describes the arrangements to support the ailing financial institutions; Section VI reviews these support arrangements; Section VII examines the macroeconomic impact of the financial crisis; and Section VIII is the conclusion and summary of main findings.

1/ The other papers include: Tomás J.T. Baliño, "The Argentine Banking Crisis of 1980," IMF, WP/87/77, and Andrés Velasco, "Liberalization, Crisis, Intervention: The Chilean Financial System 1975-1985," IMF, WP/88/86.

II. Structure of the Financial System and Evolution of Banks and Finance Companies

The financial system in Thailand appears relatively diversified. At end-1987 it consisted of the Bank of Thailand (BOT), the central bank; 16 local commercial banks and 14 branches of foreign banks; a number of representative offices of foreign banks; nonmonetary financial institutions including 94 finance companies, 11 security companies, and 25 credit foncier companies; a number of government-owned or sponsored specialized financial institutions--the Government Savings Bank (GSB), the Bank for Agriculture and Agricultural Cooperatives (BAAC), the Government Housing Bank (GHB), the Industrial Finance Corporation of Thailand (IFCT), and the Small Industries Finance Office (SIFO); a large number of savings and agricultural cooperatives; 12 life insurance corporations; the Securities Exchange of Thailand (SET); short-term money markets; and a sizeable unorganized financial system. Table 1 provides a summary of the main characteristics of the financial institutions. In practice, assets of the financial system are concentrated mainly among the commercial banks and the finance companies, which are predominantly private sector institutions, and the GSB. Because of the concentration of assets, a crisis among the banks and finance companies is tantamount to a financial sector crisis.

The establishment of local and foreign banks had proceeded at a rapid pace up to 1955 when the Thai Cabinet passed a resolution to restrict the approval of new banks; a virtual moratorium on new banking licenses was imposed from the mid-1970s (see Table 2). At end-1987 there were 16 local and 14 foreign-owned banks, virtually the same number as in 1966. 1/ In addition to the virtual moratorium on new banks, foreign banks' branching activities were restricted to a total of 20 local branches. The local commercial banks, by contrast, developed an extensive branch network and at end-1987 the 16 local commercial banks had 1,964 local branches, excluding head offices, compared with 352 in 1960.

Most local banks were established by Thai-Chinese business families and trading houses to help finance their operations. The Bangkok Bank, Thai Farmers Bank, Bank of Ayudhya, the Bangkok Metropolitan Bank, and the Bank of Asia have remained effectively family-controlled institutions. The Government has also become an important factor in bank ownership: the

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1/ The only new bank opening after 1966 was the German-based European Asian Bank and reflected both the lack of a previous German representation and the desire by the Thai Farmers Bank to open a branch in Germany. Of the 16 local banks, the Sayam Bank stopped accepting deposits and extending credits in April 1987 when its performing assets and deposit liabilities were transferred to the Krung Thai Bank (see below and Sections III and VI).

Table 1. Thailand: Summary of the Structure of Financial Intermediaries

(End-December 1987 unless otherwise stated)

	Commercial Banks	Finance Companies	Credit Foncier Companies	Government Savings Bank	Life Insurance Corporations	Savings Cooperatives 1/	Agricultural Cooperatives 1/	Bank of Agriculture and Agricultural Cooperatives	Indus. Finance Corp. of Thailand	Small-Scale Industries Financial Office	Government Housing Bank	Pawn Shops
Total assets (billions of baht)	943.3	163.2	3.8	111.5	24.9	19.6	8.5	33.6	22.6	0.1	15.4	5.4
Number of institutions												
Total	30.0	94.0	21.0	1.0	12.0	732.0	1,157.0	1.0	1.0	1.0	1.0	336.0
Foreign-owned	14.0	...	...	—	1.0	...	...	—	—	—	—	—
In which the Government holds 50% or more of the equity	2.0	...	...	1.0	—	...	...	1.0	—	1.0	1.0	...
With public quotations on the SET	12.0	12.0	—	—	—	—	—	—	—	—	—	—
Total number of branches 2/	2,004.0	22.0	—	452.0	724.0			70.0	3.0	—	—	—
Of which: In Bangkok	557.0	9.0	—	64.0	68.0 3/	...	...	...	...	—	—	—
Proportion of liabilities that are:												
Demand deposits	4.7	—	—	0.1	—	...	...	—	—	—	0.1	—
Savings deposits	24.0	—	—	16.9	—	...	...	10.7	—	—	31.8	—
Time deposits	47.3	—	—	45.4	—	...	...	10.7	—	—	18.8	—
Capital funds	6.1	6.7	15.7	5.0	11.2	...	...	6.3	13.3	93.8	14.3	25.9
Other borrowing:												
Bank of Thailand	4.5	5.8	...	—	...	...	...	8.9	0.2	—	6.5	—
Commercial banks	2.5	19.1	52.6	—	0.2	...	...	36.6	—	—	—	61.1
Government	2.5	—	...	2.0	...	...	...	0.9	1.8	—	—	—
Overseas	3.9	1.4	...	—	...	...	...	22.3	39.8	—	16.9	—
Other private sector	4.5	67.0	31.7	30.6	84.7	...	...	3.6	44.9	—	—	—
Proportion of assets held as claims on:												
Bank of Thailand	2.7	0.2	...	0.5	...	...	...	—	—	—	0.6	...
Commercial banks	2.4	2.8	5.2	13.1	12.0	...	...	11.6	3.6	50.4	1.9	3.7
Other financial institutions	5.5	5.5	—	1.9	...	...	...	—	5.8	5.0	5.2	—
Central Government	12.3	12.4	—	76.9	16.5	...	...	—	—	2.3	0.1	—
Public enterprises	1.6	0.6	—	1.9	...	...	...	—	0.1	—		—
Business and household sectors	65.2	65.9	55.3	1.4	34.9	...	...	74.7	49.6	—	82.5	88.8
Overseas	4.1	—	—	—	...	...	...	—	—	—	—	—
Regulatory framework												
Governing legislation	4/ 5/ 6/	7/	7/	8/	9/	10/	10/	11/	12/	—	13/	14/
Licensing body	15/	15/	16/	17/	16/	18/	18/	17/	17/	—	17/	19/
Supervisory agencies												
Primary	16/	16/	16/	15/	20/	18/	18/	15/	15/	21/	15/	19/
Secondary												

Source: Bank of Thailand.

1/ Estimates based on 1985 data.
2/ Excluding Head Office.
3/ End-June 1987.
4/ Commercial Bank Act 1962 and 1979 (revised).
5/ Bank of Thailand Act.
6/ Currency Act.
7/ The Finance Securities and Credit Foncier Act of 1979, amended by emergency decree, 1983.
8/ Government Savings Bank Act 1946.
9/ Life Insurance Act 1967.
10/ Cooperatives Act 1968.
11/ Bank for Agriculture and Agricultural Cooperatives Act 1966.
12/ Industrial Finance Corporation of Thailand Act 1959.
13/ Government Housing Bank Act, 1953
14/ Pawnshop Act, 1962.
15/ Ministry of Finance.
16/ Bank of Thailand.
17/ Act of Parliament.
18/ Ministry of Agriculture and Agricultural Cooperatives.
19/ Ministry of Interior.
20/ Ministry of Commerce.
21/ Ministry of Industries.

Table 2. Thailand: Commercial Banks: Date of Opening and Distribution of Private Sector Deposits

	Year of Opening	Deposits as a Percentage of Total (end-December 1986)
Local commercial banks		
Siam Commercial Bank	1906	8.7
Nakornthon Bank 1/	1933	0.9
Bank of Asia	1939	2.4
Siam City Bank	1941	4.1
Bangkok Bank of Commerce	1944	4.7
Bangkok Bank	1944	26.6
Bank of Ayudhya	1945	5.9
Thai Farmers Bank	1945	14.1
Laem Thong Bank	1948	0.5
Union Bank	1949	1.9
Thai Danu Bank	1949	1.2
Bangkok Metropolitan Bank	1950	4.1
Thai Military Bank	1957	5.1
First Bangkok City Bank	1960	2.9
Sayam Bank 2/	1965	2.0
Krung Thai Bank	1966	12.7
Subtotal		97.8
Foreign commercial banks		
Hongkong and Shanghai Banking Corporation	1888	0.3
Standard Chartered Bank	1894	0.2
Banque Indosuez	1897	0.1
Four Seas Communication	1909	0.0
Bank of Canton	1919	0.0
Citibank 3/	1923	0.1
International Commercial Bank of China 4/	1947	0.1
Bharat Overseas Bank 5/	1947	0.1
Bank of America	1949	0.2
Mitsui Bank	1952	0.3
Bank of Tokyo	1962	0.4
Chase Manhattan Bank	1964	0.2
United Malayan	1964	0.1
Duetsche Bank (Asia) 6/	1978	0.1
Subtotal		2.2
Total		100.0

Source: Bank of Thailand.
1/ Previously Wang Lee Bank Ltd.
2/ Previously The Asian Trust Bank Ltd.
3/ Previously Mercantile Bank Ltd.
4/ Previously Bank of China Ltd.
5/ Previously Indian Overseas Bank Ltd.
6/ Previously The European Asien Bank Ltd.

Krung Thai Bank, and more recently the Sayam Bank, are government owned and the Government has minority shareholdings in several other banks. 1/

The banking system in Thailand is highly concentrated. Local banks overwhelmingly dominate, accounting for 95-97.5 percent of total commercial bank assets, advances, and deposits (see Table 2). Within the commercial banking sector, business is concentrated among a few banks. At end-1986 the largest bank, the Bank of Bangkok, accounted for about 30 percent of total commercial bank assets and deposit liabilities and the three largest banks (the Bangkok Bank, the Thai Farmers Bank, and the Krung Thai Bank) together for about 57 percent of commercial bank assets. The smallest five local banks accounted for only 5-6 percent of commercial bank deposits and assets. The two government-owned banks--the Krung Thai Bank and the Sayam Bank--which have been operationally merged, together account for about 15 percent of bank assets, representing the second-largest banking organization. The banks have operated an effective interest rate cartel organized around the Thai Bankers' Association (TBA); in recent years the cartel arrangements have been breaking down under pressure from foreign competition for bank loans to domestic customers and official encouragement of a more competitive interest rate structure, and by end-1988, the competitive setting of local deposit rates had begun to emerge. About 60 percent of the value of commercial bank deposits are accounted for by deposits larger than B 0.5 million (US$20,000) and some 70 percent of credits outstanding are for loans exceeding B 1.0 million (US$40,000). The effective degree of deposit and loan concentration is even higher because of various family and corporate connections between bank customers.

The second major group of financial intermediaries are the finance and security companies. Finance companies, which in contrast to commercial banks are highly competitive institutions, first emerged in the early 1960s as the finance arm of retailers. Subsequently, they expanded their activities into certain types of corporate finance with the first fully fledged finance company established in 1969. The entry of new finance and security companies was first regulated by a National Executive Council Announcement No. 58 made in July 1972, but this order left the finance and security companies quite free in their operation compared to commercial banks. The effect of the Executive Council Order was thus largely to give official recognition to the companies, which significantly increased their attractiveness to investors. Further controls were placed on their operations in 1979 under the Finance, Securities and Credit Foncier Business Act, BE 2502 at a time when problems emerged with a finance company (Raja Finance) but as noted below (Section IV), these were generally inadequate to regulate these companies.

1/ The Siam Commercial Bank, the Bangkok Bank, the First Bangkok City Bank, the Bank of Ayudhya, the Thai Military Bank, and the Union Bank of Bangkok all have some government ownership.

The number of finance companies grew rapidly during the 1970s when foreign and local banks were active in setting up these companies partly as a way around the moratorium on new banking licenses and on foreign bank branching, and the maximum interest rate and credit controls imposed on commercial banks. The number of such companies grew from 17 in 1971 to 78 in 1973 and 113 in 1979. Initially, financial companies were not subject to interest rate ceilings, and when they were introduced, they were higher than those imposed on commercial banks. The growth of finance companies was a good example of disintermediation because of interest rate and branching restrictions.

The much faster growth of finance company assets compared with commercial banks up to 1979 is shown in Chart 1; Charts 2 and 3 show the positive relationship between the relative growth of finance company promissory notes compared to bank time deposits and the differential in the interest rates paid by finance companies and banks up to 1979. The break in series in 1979 coincided with the emergence of problems with a finance company (noted above) which created a temporary, more general, problem of confidence in investing in finance companies.

The activities of companies are diverse: in December 1987, 22 were licensed only for finance company business (consumer installment lending, corporate advances, etc.), 11 to do only securities business (essentially stockbroking) and 72 to undertake both activities, performing functions not unlike merchant/investment banks. The largest finance company with assets of B 8.4 billion was about the same size as the third-smallest commercial bank, and six finance and security companies had larger assets than the smallest commercial bank. The largest 10 companies accounted for about 30 percent of finance companies' total assets. Finance companies are licensed to borrow through the issuance of fixed-term promissory notes but cannot accept deposits. However, since promissory notes can be at call and withdrawn on demand, the practical impact of this restriction has been limited. Business and household holdings of promissory notes accounted for 52 percent of finance and security companies' liabilities.

III. Financial Position of Banks and Finance Companies

The financial position of Thai commercial banks and finance companies weakened during the first half of the 1980s.

1. Commercial banks

Between 1980 and 1986 average bank net profits fell from 25 percent to 7 percent of capital funds, and capital/assets ratios declined from 6.4 percent to 5.7 percent (Table 3). An examination of the components of banks' "other assets" (Table 4) indicates the substantial build-up in interest and income earned but not received in recent years to the equivalent of about 2 percent of total assets. About 15 percent of banks' total assets are estimated to be delinquent.

CHART 1
THAILAND
GROWTH OF FINANCE COMPANIES
AND COMMERCIAL BANK ASSETS, 1972-86
(In percent)

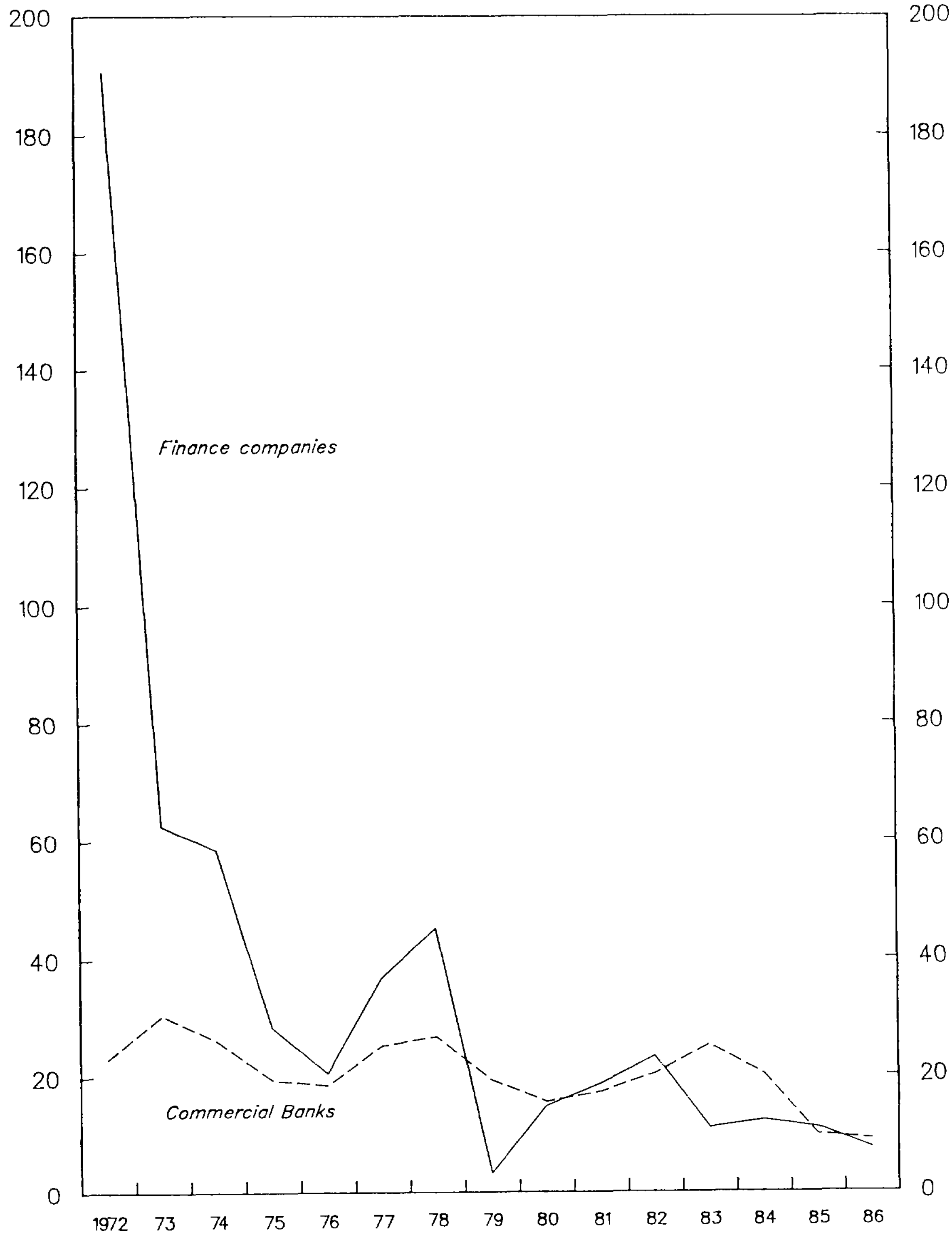

CHART 2

THAILAND

GROWTH OF TIME AND SAVING DEPOSITS WITH FINANCE COMPANIES AND COMMERCIAL BANKS, 1972–86

(In percent)

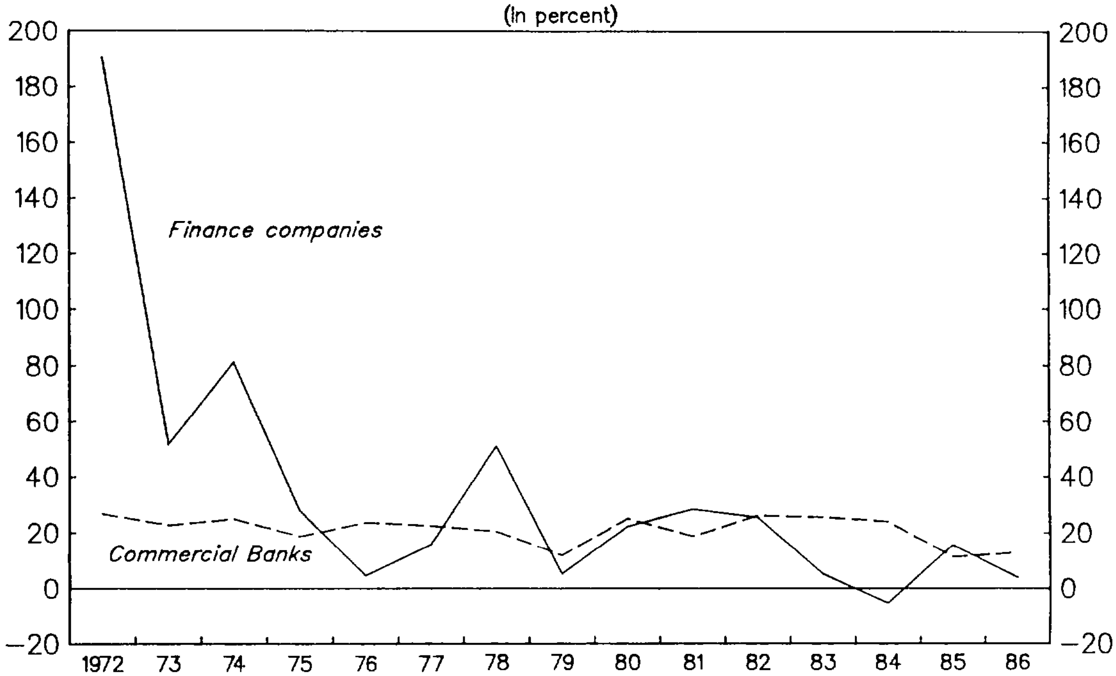

CHART 3

INTEREST DIFFERENTIAL BETWEEN FINANCE COMPANIES AND COMMERCIAL BANK DEPOSIT RATES, 1972–86

(In percent)

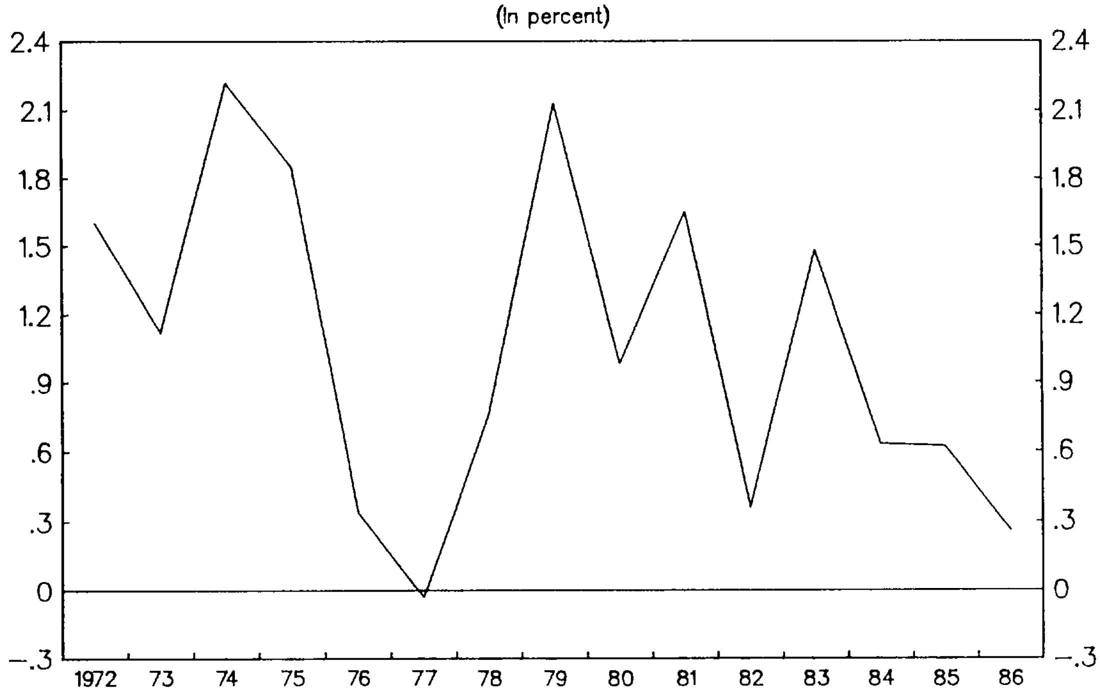

Table 3. Thailand: Indicators of the Financial Position of Commercial Banks

(End-period, unless otherwise stated)

	1980	1981	1982	1983	1984	1985	1986	1987
All Banks								
Total assets (billions of baht)	305.4	358.3	431.4	540.1	649.4	713.6	777.8	943.3
Annual percentage change	15.6	17.3	20.4	25.2	20.2	9.9	9.0	21.3
Annual growth of nonbank private sector								
Deposits	25.2	19.0	26.4	26.4	22.4	11.5	13.2	20.2
Loans	13.0	15.0	18.5	33.1	17.6	9.8	4.8	22.6
As percent of assets								
Capital accounts	6.4	6.0	5.7	5.2	5.6	6.0	5.7	6.1
Reserves with Bank of Thailand	3.4	3.3	3.0	2.8	2.3	3.0	2.8	2.7
Government securities 1/	12.9	14.0	15.4	12.5	14.6	13.8	16.2	12.3
Loans to nonbank private sector	73.8	72.3	71.2	75.7	74.0	73.9	71.0	72.2
Foreign assets	5.1	7.0	6.1	4.6	4.7	4.7	5.4	4.1
Nonbank private sector deposits	67.3	68.3	71.6	72.4	73.4	74.7	77.6	76.4
Borrowing from the Bank of Thailand	5.5	5.6	4.9	4.3	3.7	3.7	4.3	2.5
Claims on nonmonetary financial institutions	6.4	5.0	4.9	4.7	5.2	4.6	4.7	5.5
As percent of nonbank private sector deposits								
Loans to nonbank private sector	109.6	106.0	99.4	104.6	100.5	99.0	91.6	94.5
Reserves with Bank of Thailand	5.1	4.8	4.1	3.8	3.1	4.0	3.7	3.6
Reserves plus government securities 1/	19.2	20.5	21.5	17.3	19.8	18.4	20.9	19.6
Demand deposits	12.2	10.5	7.8	6.0	6.1	4.8	5.6	6.2
Savings deposits	13.2	15.0	19.4	23.8	21.3	20.8	26.1	31.4
Time deposits	74.1	74.0	72.4	70.0	72.4	74.2	67.9	61.9
Local Banks 2/								
Total assets (billions of baht)	...	...	...	...	...	688.0	753.0	812.3 3/
Capital and reserves (billions of baht)	...	...	...	...	...	39.1	40.6	44.8 3/
As percent of assets	...	...	...	...	...	5.7	5.4	5.5 3/
Reserves for loan losses (billions of baht)	...	...	...	...	...	4.2	5.4	6.3 3/
As percent of assets	...	...	...	...	...	0.6	0.7	0.8 3/

Source: Bank of Thailand. Some figures are partly estimated.

1/ Includes Bank of Thailand bonds.

2/ Excludes operations of foreign branches.

3/ June 1987.

Table 4. Thailand: Components of Commercial Banks' "Other Assets"

(End period)

	1983	1984	1985	1986
		(In billions of baht)		
Premises, furniture and equipment	11.2	12.4	14.5	16.4
Properties foreclosed	1.5	1.7	1.8	2.6
Accrued interest receivable	3.7	5.5	8.2	11.0
Prepaid expenses	0.9	2.1	4.9	5.1
Income earned but not collected	1.9	2.3	2.9	4.5
Interoffice	1.1	0.9	1.3	1.4
Sundry debtors	1.0	1.4	2.1	0.6
Other	4.3	4.9	4.9	5.7
Total	25.7	31.2	40.6	47.3
		(Percentage changes)		
Premises, furniture and equipment	...	10.7	16.9	13.1
Properties foreclosed	...	13.3	5.9	44.4
Accrued interest receivable	...	48.7	49.1	34.2
Prepaid expenses	...	133.3	133.3	4.1
Income earned but not collected	...	21.1	26.1	55.2
Interoffice	...	-18.2	44.4	7.7
Sundry debtors	...	40.0	50.0	-71.4
Other	...	14.0	--	16.3
Total	...	21.4	30.1	16.5

Source: Bank of Thailand.

There are, however, many problems involved in attempting to assess the financial position of institutions simply by focusing on a few ratios. For example, historical net profit figures are misleading because the accrual of income and interest earned but not received would have boosted these figures; moreover, there was inadequate provisioning for loan losses, which would also have inflated banks' reported net profit position. However, more recent net profit figures--which improved to about 11 percent of capital funds in the 12 months to June 1987--also give a misleading impression of underlying conditions since they have been boosted by the "soft" loan subsidy provided by the BOT (see Section V). Similarly, the historical capital-assets ratios failed to give a true picture of the trend in the reserve against insolvency because little debt was provisioned or written off. More recently, capital values of banks have been written down against loan losses and in 1986 and 1987 banks raised about B 15-20 billion in new capital funds so that the more recent capital/assets ratios imply a sounder financial position than the same ratios one to two years previously.

Indicators of the performance of individual local commercial banks in 1985 and 1986 are shown in Table 5. The capital/assets ratios of most banks were relatively low by international standards 1/ and the ratios for 8 banks declined in 1986. Seven banks, including the first-, third-, and fourth-largest banks, had capital/assets ratios below 5 percent. Eleven of the 16 local banks for which data are available recorded net profits in 1986; however, the net profitability of 10 of these banks declined relative to 1985. Two other banks slightly reduced their losses. Returns on equity fell by around 3-5 percent in 1986 to an average of about 7 percent. Most banks added to their provisions for loan losses in 1986, but average provisions amounted to less than 1 percent of assets.

During 1987, five banks with assets amounting to about 25 percent of total commercial bank assets received official support, and there were reports about the financial difficulties of two other banks (see Table 6).

2. Finance and security companies

The financial crisis among finance and security companies began in the autumn of 1983, when a finance company and two affiliates were closed owing to large losses; between 1983 and 1985 a total of 19 finance companies were closed. These closures were accompanied by a loss of confidence resulting in a withdrawal of deposits and in the year to September 1984, finance and security companies' liabilities to business and households fell by 11 percent. In 1985 there was a recovery in business and household deposits, but this was insufficient to prevent a

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1/ The Basle Committee of Banking Supervisors has recently recommended a minimum capital-to-risk assets ratio of 8 percent. See International Convergence of Capital Measurement and Standards, Committee on Banking Regulations and Supervisory Practices, Bank for International Settlements, Basle (July 1988).

Table 5. Thailand: Results of Local Commercial Banks

(Amounts in billions of bhat unless otherwise stated)

	Assets			Loans			Deposits			Capital/ asset ratio (percent)		Loan/deposit ratio (percent)		Net profit		Return on assets (percent)		Return on equity (percent)		Provision for loan losses	
	1985	1986	Percentage change	1985	1986	Percentage change	1985	1986	Percentage change	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986
Bangkok Bank	262.3	268.0	2.2	200.0	203.8	1.5	194.5	199.7	2.7	4.6	4.6	103.2	102.1	1.43	0.93	0.55	0.35	11.4	7.6	...	1.20
Thai Farmers' Bank	104.5	116.2	11.2	76.9	79.3	3.2	85.9	96.7	12.6	5.9	5.4	89.5	82.0	0.60	0.47	0.58	0.41	9.8	7.6	...	0.20
Krung Thai Bank Ltd.	93.5	105.6	12.9	64.9	69.7	7.4	77.9	85.1	9.2	3.9	4.2	83.3	81.9	0.06	0.15	0.06	0.14	1.6	3.4	0.01	0.08
The Siam Commercial Bank	65.3	73.1	11.9	48.8	51.6	5.7	52.6	60.8	15.4	5.3	4.8	92.8	84.9	0.54	0.35	0.83	0.48	15.6	10.1	1.60	1.29
The Thai Military Bank	37.7	4.8	18.8	27.0	31.5	16.7	27.8	34.3	23.4	6.8	5.7	97.1	91.8	0.25	0.23	0.67	0.51	9.8	8.9	...	0.11
Bank of Ayudhya	38.8	41.6	7.2	27.0	28.9	7.1	30.6	35.3	15.4	5.8	5.5	89.1	81.9	0.19	0.16	0.49	0.37	8.3	6.9	...	0.66
Bangkok Metropolitan Bank	33.3	35.8	7.5	23.5	246.0	4.7	22.4	25.2	12.5	4.5	4.7	105.8	97.6	0.12	0.08	0.38	0.23	8.4	5.0	...	0.26
The Bangkok Bank of Commerce	29.2	31.3	7.1	20.8	22.0	6.0	26.0	28.6	9.6	4.0	4.1	80.0	76.9	...	...	...	...	...	...	...	...
The Siam City Bank	27.8	28.6	2.5	19.2	20.4	6.4	22.7	24.8	9.2	5.7	5.6	84.6	82.3	0.02	...	0.06	...	1.02	...	0.01	...
First Bangkok City Bank	27.5	27.5	—	19.7	16.6	-15.6	16.1	16.4	1.8	5.4	5.8	122.4	101.2	...	-0.10	...	-3.6	...	-6.3	...	-0.13
Sayam Bank	17.2	20.3	18.0	10.2	10.7	4.9	8.3	11.7	42.0	3.0	2.6	122.9	91.4	-0.70	-0.45	-4.07	-2.22	-136.66	-82.6	...	1/
The Bank of Asia Ltd.	15.5	17.2	11.4	10.9	11.8	9.9	13.0	14.9	14.8	5.2	6.3	83.9	79.2	0.03	—	0.17	0.03	3.2	0.4	—	0.01
The Union Bank of Bangkok	15.2	14.1	-7.2	9.2	9.7	5.4	10.3	11.3	10.4	4.6	5.2	89.3	85.8	0.05	0.04	0.29	0.30	6.4	5.9	...	0.01
The Thai Danu Bank	7.9	8.9	12.7	6.2	6.6	6.7	6.2	7.5	20.3	8.1	7.3	100.0	88.0	0.06	0.05	0.81	0.55	10.1	7.5	0.02	0.04
Nakornthon Bank	5.7	6.4	13.4	3.6	4.5	22.7	4.3	5.2	20.7	4.5	4.4	84.8	85.9	0.03	0.02	0.45	0.27	9.6	5.9	...	0.03
The Laem Thong Bank	4.5	4.7	3.8	2.9	2.9	—	2.3	2.4	5.2	16.6	20.1	126.1	120.8	-0.04	-0.01	-0.88	-0.07	-5.2	-0.04	0.01	—

Source: Annual Reports of commercial banks.

1/ Accounts do not reflect B 4.9 billion in doubtful debts for which income is not available to make provisions.

Table 6. Thailand: Commercial Banks Which are Receiving Financial Support
or with Reported Financial Difficulties
(Position at end-December 1986 unless otherwise stated)

	Total Assets						
	In bns. of Baht	As Percent of Total	Capital Asset/ Ratio	Loan Deposit Ratio	Reported Difficulties	Recommendations by the Bank of Thailand	Support Arrangements
Bank of Asia	17.2	2.1	6.3	79.2	—	—	B 1.7 billion provided as a soft loan by BOT in 1987.
Sayam Bank	20.8	2.5	2.6	86.3	—	—	Taken over by the Government in August 1984 and operationally merged with the Krung Thai Bank in February 1987. Monetary authorities provided B 3.5 billion of support in 1986: B 0.5 billion to boost capital; B 1 billion to absorb bad debts and the remainder as a soft loan.
First Bangkok City Bank	27.5	3.3	5.8	101.2	At end-1985, bad debts reported at B 2.8 billion; including doubtful debts the figure was put at B 5 billion.	Value of capital ordered reduced from B 1,365 million to B 68 million, and then to be subsequently raised to B 2,000 million.	Received a soft loan of B 3.8 billion with a ten-year maturity in May 1986 from the BOT. RF stood ready to take up B 0.5 billion of shares issued. BOT officials took over management of the bank.
Siam City Bank	28.6	3.4	5.7	82.3	—	Ordered to reduce capital from B 800 million to B 40 million, and to increase it subsequently to B 1,500 million. BOT to approve management.	Soft loans provided by BOT; raised B 1 billion of new shares in February 1987. RF was ready to take up B 0.5 billion of shares issued.
Krung Thai Bank	105.6	12.6	4.2	73.6	Weak capital and reserve position. Also experienced losses because of the over exposure of a financial subsidiary (IFCC).	—	Recapitalization of the bank with a capital subscription of B 2 billion in 1987.
Other banks with reported financial difficulties							
Bangkok Metropolitan Bank	33.8	4.0	5.1	94.9	Loan exposure to the liquor sector and low capital funds.	Management structure to be revised to reduce family influence; exposure to liquor sector to be reduced; registered capital to be raised from B 500 million to B 1,000 million.	The Government has supported that Sura Thrip Group (Liquor Group) to protect the banking system.
The Laem Thong Bank	4.6	0.6	19.9	110.3	Experiencing loan losses and loss of confidence by depositors leading to deposit withdrawals.	—	—

further increase in their liabilities to the banking system, which rose to 25 percent of assets by end-1987, as these institutions moved to support the ailing companies. The capital/assets ratios of finance and security companies fell from 12 percent in 1980 to 6.7 percent in 1985 to 1987 and reserves for loan losses have risen to about 2 percent of assets compared with delinquent debts estimated at around 10-15 percent of assets (Table 7).

Operating losses of finance and security companies were B 0.2 billion in 1986, reduced from B 0.6 billion in 1985 and B 0.4 billion in 1984. However, as with the profit figures for the commercial banks, the underlying profit trends are difficult to discern because of the "soft" loan subsidy that has been provided by the BOT and the varying loan-loss provisioning. BOT loans to finance and security companies increased from B 3.9 billion at end-1984 to B 7.8 billion at end-1985 and B 9.1 billion by end-1987. Assuming that the average interest subsidy on these loans was 7 percent, the BOT support arrangements might have increased finance and security company profits by B 0.3 billion in 1984, B 0.6 billion in 1985, and B 0.7 billion in 1986. On the other hand, companies increased loan-loss provisions by B 0.9 billion in 1986. Similarly, the interpretation of the trends in the capital/assets ratios has been affected by the write-down of capital values against loan losses and the subsequent raising of new capital.

IV. Reasons for the Weakening Position of Banks and Finance Companies

A combination of factors contributed to the weakening financial position of banks and finance companies.

1. Institutional weaknesses of the commercial banks and finance companies

The oligopolistic nature of the banking system allowed banks for many years to make profits. But this also led to an inefficient banking industry and to a situation where bank management and shareholders paid little attention to considerations of safety and soundness. The nature of bank ownership and the high concentration of banking activity also led to weaknesses in the banking system. In 1981, the Governor of the BOT summarized several of the management problems of commercial banks: 1/

(1) several managers were not professional bankers and were part owners with extensive involvement in many commercial and business enterprises and gave too little attention to running their banks;

(2) inadequate internal controls and operating procedures provided scope for malpractice, irregularities and fraud;

1/ Speech by Mr. Nukul Prachuabmoh, Governor, Bank of Thailand, to Thai Bankers Association, February 18, 1981.

Table 7. Thailand: Indicators of the Financial Position of Finance and Security Companies

(End of period)

	1980	1981	1982	1983	1984	1985	1986	1987
Total assets (billions of baht)	65.4	77.6	95.7	106.3	119.5	132.8	142.8	163.2
Annual percentage change	14.9	18.7	23.3	11.1	12.4	11.1	7.5	14.3
Annual growth of business and household								
Deposits	22.3	28.8	25.4	5.2	-5.4	16.0	4.0	7.6
Loans	11.8	17.6	21.0	16.4	5.7	8.2	9.3	12.6
Net liabilities to (billions of baht)								
Banking system	4.3	0.4	0.4	6.6	15.4	18.2	23.8	35.7
Bank of Thailand	1.0	0.2	-0.2	0.2	3.7	7.4	10.1	9.1
Commercial banks	3.3	0.3	0.6	6.4	11.8	10.7	13.7	26.6
Business and households	-9.0	-6.0	-4.9	-13.1	-21.7	-13.2	-15.5	-22.5
As percent of assets								
Capital accounts	12.0	10.4	9.2	9.7	7.6	6.7	6.8	6.7
Reserves for loan losses	...	...	...	...	...	1.1	1.7	1.7
Borrowing from banking system	9.6	5.6	6.5	10.1	15.9	17.3	19.3	24.9
Borrowing from household and business	63.2	68.5	69.6	66.0	55.5	57.9	56.0	52.1
Advances to household and business	57.3	58.8	56.6	60.0	60.7	58.2	58.8	56.9
Claims on Government	4.6	4.5	5.7	5.0	7.9	11.1	11.7	12.4

Source: Bank of Thailand. Some figures are partly estimated.

(3) the extension of credit and guarantees to businesses in which directors and shareholders of the banks were heavily involved, contrary to sound banking practices;

(4) the construction of lavish and unnecessarily large headquarters and bank offices, which raised banks' operating costs excessively;

(5) failure to diversify the share ownership of banks and to include more small individual shareholders so as to improve the discipline of directors and managers;

(6) an over-concentration of lending to a few large-scale and interrelated enterprises and industries with adverse implications for risk exposure of the banks and the supply of credit to smaller borrowers which may have damaged economic development; and

(7) a lack of competition between banks which may have raised lending margins and reduced deposit rates to the detriment of savings mobilization and the attractiveness of the organized vis-a-vis the unorganized financial markets.

The management weaknesses were even more marked in many finance and security companies. In contrast to commercial banks, finance companies were highly competitive in bidding for deposits, but their main object was often simply to mobilize funds for use by their own or interrelated companies. The management weaknesses were compounded by the generally lax regulatory framework and controls that were imposed on these companies' operations, and their faster rate of balance sheet expansion during the 1970s.

2. Inadequate legislative framework

The internal weaknesses among the banks and finance companies might not have developed to threaten the stability of the financial system if the authorities had had adequate powers to regulate, supervise and intervene to direct the financial institutions. However, this was not the case and the legal, regulatory and supervisory framework had to be developed, essentially in a remedial manner after problems emerged among financial institutions, and even then it has taken time to fully implement the new regulations.

The central bank is normally placed at the apex of the financial system and its powers over the financial system should be clearly defined in its statutes. However, the Bank of Thailand Act, BE 2485 (1942), establishing the BOT, limited the BOT's powers to obtaining confidential statistical returns and supporting information from commercial banks. These restrictions on the BOT's powers meant that the detailed regulations had to be developed through separate laws and directives. As a result, the system may have been slower to react; the regulatory system was less flexible and also more political. Moreover, it took considerable time before the BOT was vested with sufficient powers to adequately supervise and regulate financial institutions.

The original drafting of the specific laws and regulations for banks and finance companies was also inadequate and had to be amended. The original version of the current Commercial Banking Act BE 2505 (1962) (denoted here as CBA1 for short) 1/ was first amended in 1979 and was known as the Commercial Banking Act (No. 2) BE 2522 (denoted as CBA2). This Act was again amended in 1985 by the Emergency Decree Amending the Commercial Banking Act, BE 2505, BE 2528--denoted EDCBA for short. The main statutory controls over finance and security companies were set out in the Act on the Undertaking of Finance Business, Securities Business and Credit Foncier Business BE 2522 (1979)--denoted FCA. The Act was amended by Emergency Decrees in BE 2526 (1983) and BE 2528 (1985)--denoted EDFCA1 and EDFCA2, respectively. Table 8 shows the regulatory arrangements at the end of 1987.

3. Specific regulatory shortcomings and amendments to the Commercial Banking Act and Financial and Security Company Legislation

a. Concentration of ownership and portfolio

The original Commercial Banking Act (CBA1) provided insufficient safeguards against a high concentration of ownership which had been a problem underlying several of the management shortcomings and a high concentration of lending to interconnected entities. CBA2 set the maximum individual shareholding at 5 percent and the minimum number of shareholders per commercial bank to 250. Under CBA2 the registry of shareholders was to be made available to the Bank of Thailand before any payment of dividends.

CBA1 did not place any limitation on banks' holdings of shares and debentures in companies as a percentage of the banks' own capital, thus permitting an excessive concentration of assets. CBA2 set the limit on banks' holdings of shares and debentures at 20 percent of the banks' capital and reduced the limit on banks' holdings of another company's issued shares to 10 percent of the total shares sold from 20 percent under CBA1. CBA2 also prohibited a commercial bank from purchasing the shares of another commercial bank, except when explicitly authorized by the BOT.

b. Conflicts of interest

The selection of directors, managers and advisors had not been regulated by CBA1; CBA2 listed the qualifications and exclusions for bank employees. CBA1 prohibited lending money to a director or his spouse or partnerships in which they were involved, but this left open a number of

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1/ This Act replaced the Commercial Banking Act BE 2488 (1945).

Table 8. Thailand: Summary of Main Statutory Requirements of Commercial Banks, Finance and Credit Foncier Companies at the end of 1987

	Commercial Banks	Finance and Security Companies	Credit Foncier Companies
Minimum paid-up capital (millions of baht)	—	60	30
Restrictions on share ownership	250 holding	100 holding	100 holding
Number of shareholders	50% of shares	50% of shares	50% of shares
Foreign ownership	25% of shares	25% of shares	25% of shares
Maximum held by a single person	0.5% of total	0.6% of total	0.6% of total
Minimum ratio of holdings of capital (in percent) to:			
Risk assets	8	6	6
Contingent liabilities	20	25	—
Exemptions of assets from the risk asset ratios	1/	2/	...
Maximum lending in relation to capital (in percent):			
Loans to a single borrower	25	30	30
Other loans categories	20% of aggregate share holdings	5% for car hire purchases	20% for unsecured call loans to an individual institution and 100% in aggregate
Other lending restrictions			
Loans to directors	Prohibited	Prohibited	Prohibited
Overdraft lending to single		—	—
borrower	Maximum B 50 mn	—	—
Loan to deposit ratio	...	Cash or notes equal	...
Minimum collateral requirements	...	to 3/ 70% of value of loans for security purchases	
Open foreign exchange position (percent of capital funds)	20	—	—
Reserve and liquidity requirements			
Cash reserve ratio			
(percent of deposits)	7	—	—
Balances of Bank of Thailand	(>2)	(...)	(...)
Cash in hand	(<2.5)	(...)	(...)
Government securities	(2.5)	(...)	(...)
Liquid asset ratio			
(percent of borrowing)	—	7	5
Balances of BOT	(—)	(>0.5)	(>0.5)
Unobliged government securities	(—)	(>5.5)	(>3.5) 4/
Deposits at call and loans to banks	(—)	(<1.0)	(<1.0)
Other restrictions on liabilities	Maximum interest rates	Maximum interest rates, minimum size of promissory notes 5/ Demand and savings deposits prohibited	Maximum interest rates, minimum 1-year maturity and size of promissory notes 6/ Demand and savings deposits prohibited
Supervisory framework			
Regular reports to the BOT	Monthly	Monthly	Monthly
BOT approval needed for:			
Payment of dividends			
Appointment of auditors	Yes	Yes	Yes
On site inspections by BOT staff	Yes	Yes	Yes
Formal loan classifications	Yes	Yes	Yes
Formal provisioning requirements	Yes	Yes	Yes

Source: Bank of Thailand; Commercial Bank Acts; Finance and Security Company, and Credit Foncier Acts.

1/ A list of 28 items are excluded, including certain loans to priority sectors.
2/ Exempt 14 items.
3/ This is subject to the regulation of the SET but not less than 25%.
4/ Including unobliged government guaranteed securities.
5/ B 10,000 in Bangkok metropolitan area, B 5,000 elsewhere.
6/ B 1,000.

channels whereby directors could obtain finance. CBA2 imposed tighter restrictions on commercial banks' business transactions with their own directors, including widening the definition of loans to directors to include companies in which they held 30 percent or more of the shares issued and requiring approval from the banks' boards and notification to the BOT for certain transactions. EDCBA tightened up these restrictions further by requiring that the BOT approve any transactions over a certain amount between a commercial bank and its directors. Identical restrictions were introduced by the EDFCA2 for finance companies. The definition of loans to a director was also expanded by EDCBA to include loans to subsidiaries of a company in which the director or his family members or associates were holding shares. Finance companies were prohibited from lending money to and from guaranteeing any debt to its directors under EDFCA2. CBA2 increased the penalties on interlocking directorships in commercial banks which were prohibited.

c. Changes in supervisory responsibility

A number of regulatory responsibilities were transferred from the Ministry of Finance (MOF) to the BOT by CBA2, which had the effect of improving the supervisory arrangements. The MOF retained responsibility for licensing head offices of domestic banks, but the BOT was given the power to regulate changes in the location of bank offices and to authorize domestic representative offices of foreign banks and foreign representative offices of domestic banks. The BOT was similarly made responsible for the authorization of domestic representative offices of foreign finance companies under EDFCA2. The BOT also took over the responsibility of approving bank auditors from the MOF and was given sole responsibility for setting banking hours and bank holidays. The authority for prescribing the form and frequency of commercial banks' summary statements and for collecting and analyzing statements was also transferred to the BOT from the MOF.

d. Tighter regulations and penalties

Under CBA1, banks had been largely unrestricted in the types of activities they could undertake. CBA2 defined banking business in more detail and made any activity unrelated to banking either unlawful or subject to approval by the BOT. CBA2 also gave the BOT authority to set a capital requirement against contingent liabilities and the power to impose a liquid assets requirement and to differentiate the cash requirement by type of deposit.

CBA2 included more powers on the seizure and revocation of licenses and stated that the MOF could recommend that a commercial bank dismiss directors or officers to avoid having its license revoked. The EDFCA1 required the finance companies to close their books at least every six months and required that balance sheets and profit and loss accounts had to be approved by a general meeting of shareholders before being published, and had to be handed to the BOT within 21 days. The EDCBA introduced the same regulations for commercial banks. Conditions for the publications of accounts had previously been lax. The EDFCA1 and then the EDCBA required that auditors be approved annually by the BOT for finance companies and commercial banks, respectively.

Stricter penalties were introduced for noncompliance with the law by CBA2 and EDFCA1. A summary of the most important changes in the penalties imposed on banks is given in Tables 9 and 10.

e. Expanded supervisory powers and cease and desist arrangements

CBA1 allowed for the appointment of bank inspectors but did not provide inspectors with the powers necessary to conduct on-site examinations of commercial banks; also the lack of BOT control over bank returns under CBA1 may have restricted off-site inspection. Under CBA2, an inspector was given more powers, including the right to enter a bank's premises when there was reason to suspect that an offense had been committed. In addition to demanding cooperation from directors, officers and employees of commercial banks, the inspector could demand the same from the banks' auditors. However, the main powers of on-site supervision had to await the EDCBA and EDFCA2. These Acts gave inspectors (competent officers in the case of finance companies) the right to enter the premises where data were analyzed or stored and to obtain information from and to order cooperation by persons responsible for collection or analyzing data. With the approval of the Governor of the BOT or the MOF, bank inspectors were also permitted to enter the premises of and examine the operations of the commercial bank's borrower, or otherwise require the borrower or relevant persons to provide information necessary for the inspection of the commercial bank.

Under CBA1 the Minister could order, in the public interest, the revocation of a license or that a bank be placed under control following the inspector's report, but these were blunt and unutilized instruments. Under CBA2, the BOT was given the power to demand that a commercial bank write off irrecoverable assets as worthless, as determined during the analysis of the summary statements, hence allowing the BOT to effectively impose some flexible remedial measures. The EDFCA1 established similar regulations for finance companies, and gave the BOT the additional flexibility to require finance companies to provide special reserves to cover doubtful assets. This additional power for the BOT was expanded to include commercial banks by EDCBA.

The EDCBA and the EDFCA2 allowed the MOF, with the advice of the BOT, to stop all or parts of a commercial bank's or a finance company's operations temporarily in order to rectify the financial position of the bank or to protect the stability of the financial system. The BOT was given power to enforce compliance with regulations through direct intervention, and could order a commercial bank or a finance company to increase or reduce its capital in order to prevent any damage to the public interest and to remove any director or person responsible for operating a commercial bank or a finance company that threatened damage to

Table 9. Thailand: Main Changes in Penalties for Noncompliance with the Commercial Banking Law Enacted by CBA2.

New offenses subject to penalties under CBA2	Penalties for the bank	Penalties for responsible persons
Operating a representative office domestically or abroad without obtaining authorization of the BOT.		Imprisonment of up to one year or a fine of maximum B 100,000, or both.
Failing to comply with regulations on concentration of ownership of shares.	A fine of maximum B 100,000.	
Failing to comply with special cash reserve requirements when in effect.	A fine of maximum B 200,000.	Imprisonment
<u>Increased penalties for existing offenses</u>		
Undertaking commercial banking without proper authorization.		Imprisonment up to five years and/or a fine of maximum B 500,000
Serving as director or holding any other position in two or more commercial banks simultaneously.		Imprisonment up to one year and/or a fine of maximum B 100,000.
Establishing a branch without proper authorization.	A fine of maximum B 300,000.	
Reducing the bank's equity capital.	A fine of maximum B 300,000 and/or B 3,000 per day.	Imprisonment up to one year and/or a fine of B 300,000.

Source: Commercial Banking Act (No. 2), BE 2522.

Table 10. Thailand: Main Changes in Penalties for Noncompliance with the Commercial Banking Law Enacted by CBA2

New Offenses Subject to Penalties under CBA2	Penalties for the Bank	Penalties for Responsible Persons
Dismissed bank employees still working for the bank or not cooperating with new employees by providing information		Imprisonment of up to 1 year and/or a fine of maximum B 100,000
Prescriptions and conditions concerning:		
- Concentration of ownership of shares	A fine of maximum B 100,000	
- Minimum 250 share-holders per bank	A fine of maximum B 100,000	
- Bank purchasing/ holding shares in another bank	A fine of maximum B 100,000	
- Ceasing bank operations	A fine of maximum B 100,000	
- Transferal/dismissal of bank employees	A fine of maximum B 100,000	
- Maximum credit per borrower	A fine of maximum B 100,000	
- Liquid asset requirements	A fine of maximum B 100,000	
- Increasing/reducing equity capital	A fine of maximum B 100,000	
- Removal of directors	A fine of maximum B 100,000	

Source: Emerging Decree Amending the Commercial Banking Act, BE 2505, BE 2528.

the public interest. New officials would have had to be approved by the BOT.

4. Lax regulatory standards

Even in cases where there was an adequate regulatory framework, there were weaknesses in implementation.

a. Capital/assets ratios

The deterioration in banks' overall capital/assets ratio partly reflected an easing in regulatory standards for commercial banks. The overall capital/risk assets ratio was reduced from 8.5 percent to 8 percent in May 1983, largely because commercial bank lending was being constrained by a lack of capital rather than because of any reassessment of the riskiness of banks' assets. This reduction in the overall capital/assets ratio was accompanied by a very rapid growth of bank loans to the private sector (34 percent in 1983, see Chart 4) and, combined with weak procedures for assessing the quality of loans, it contributed to the banks' subsequent loan losses. Rapid balance sheet growth in and of itself can strain management resources and credit appraisal systems.

The definition of banks' risk assets was also weakened. First, a number of relatively high risk assets such as lending to finance and security companies were excluded from the definition and, as these assets tended to grow rapidly, there was a deterioration in the quality of banks' balance sheets. Second, in August 1986, the BOT reduced from 100 percent to 80 percent the proportion of loans extended to certain priority sectors that were counted as risk assets, but as these carry a high degree of risk, this also tended to weaken banks' balance sheets. The BOT also increased temporarily the limits on banks' open foreign exchange positions from 20 percent to 40 percent of capital funds (October 1986 to April 1987) as a measure to reduce domestic currency liquidity in the financial system, and it subsequently redefined open foreign exchange position to exclude positions on a bank's branches abroad, thus providing scope for avoidance of the restriction. Third, until 1985 the assets of Thai banks' foreign branches were excluded from their capital/assets ratios; complete consolidation in terms of capital requirements had yet to be completed. As a result of the above exclusions, Thai banks' on-balance-sheet risk assets amounted to only 51 percent of their total assets at end-1986, compared with 64 percent in 1984 (Table 11). In addition, off-balance-sheet risks were also now substantial.

b. Off-balance-sheet risks

A 20 percent capital requirement was imposed against contingent liabilities, but the definition of contingent liabilities used in calculating this capital requirement covered only 12 percent of banks'

Table 11. Thailand: Assets, Off-Balance-Sheet Items, and Capital of Thai Commercial Banks (Including Overseas Branches)

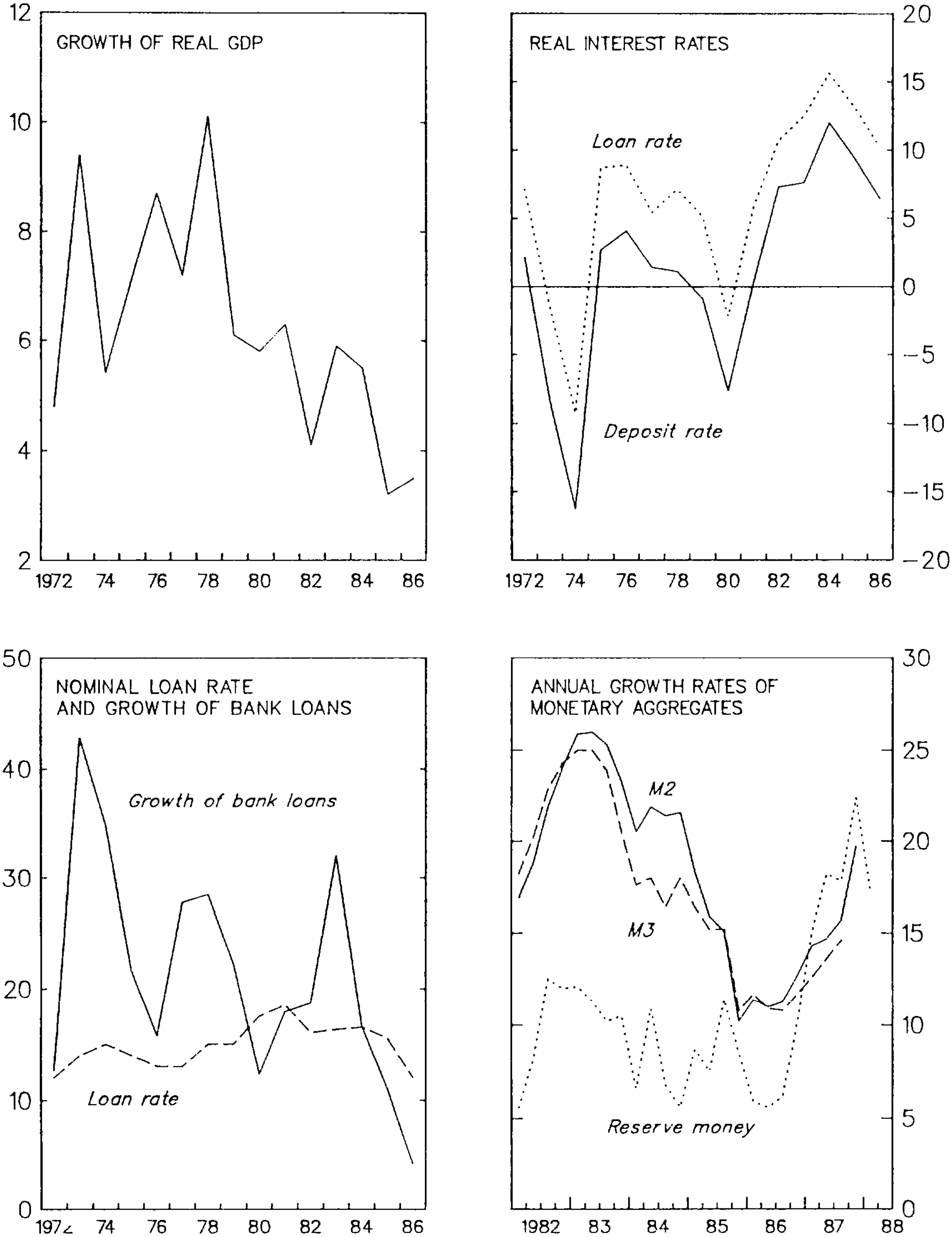
(Values in billions of baht)

	1982	1983	1984	1985	1986
Total assets	496.2	614.7	741.4	806.8	870.1
Risk assets 1/	247.0	326.7	396.1	450.5	439.6
As a percent of total assets	49.8	53.2	64.4	55.8	50.5
Off-balance-sheet (OBS) transactions	310.6	348.4	429.7	411.2	484.5
As a percent of total assets	62.6	56.7	60.0	51.0	55.7
Contingencies 2/	...	43.4	54.7	61.0	57.5
As a percent of OBS transactions	...	12.4	12.7	14.8	11.9
Contingencies and risk assets	...	370.0	450.7	511.4	497.2
Total assets plus OBS transactions	806.8	963.1	1,171.1	1,218.0	1,354.6
Capital funds	24.5	28.0	36.1	42.3	43.9
As a percent of:					
Total assets	4.9	4.6	4.9	5.2	5.1
Risk assets	9.9	8.6	9.1	9.4	10.0
OBS transactions	7.9	8.0	8.4	10.3	9.1
Contingencies	...	64.5	66.1	69.3	76.4
Contingencies and risk assets	...	7.6	8.0	8.3	8.8
Total assets plus OBS transactions	3.0	3.6	3.1	3.5	3.2

Source: Bank of Thailand.

1/ Those assets subject to 8 percent capital requirements.
2/ Off-balance-sheet items defined under Section 10(3) of the Commercial Bank Act that are subject to a 20 percent capital requirement.

CHART 4
THAILAND
ECONOMIC AND FINANCIAL INDICATORS
(In percent)



Sources: Data provided by the Thai authorities and *International Financial Statistics.*

off-balance-sheet (OBS) transactions (see Table 11). 1/ Hence the average capital requirement against total OBS transactions was only 2-3 percent. Furthermore, this capital requirement has been imposed parallel with the 8 percent capital/risk assets ratio for on-balance-sheet risks using the same capital base, i.e., the balance sheet risk assets and contingencies have not been added together to arrive at a measure of total risk exposure in the portfolio for the purposes of determining capital adequacy. 2/ Hence, to the extent that the capital has been fully employed as a safeguard against on-balance-sheet risks, it has not been available as a safeguard against OBS transactions. Total OBS transactions were significant, equivalent to more than 50 percent of banks' total assets. The ratio of capital to gross total assets and OBS transactions was around 3 percent (Table 11).

c. Divided payments and interest accruals

Although the BOT had power under Section 21 of the CBA2 to prevent the distribution of dividends, it never exercised this power, even though banks were slow to increase provisions for bad and doubtful debts. Similarly, the BOT did not impose any restrictions on the accrual of interest and income earned but not received in the balance sheets of commercial banks. Restrictions on dividend payments and interest accruals have been imposed on finance companies. Interest accruals boost recorded earnings and book profits, and unwarranted dividend payments could give a misleading impression to new shareholders when banks are raising new capital.

d. Loan provisioning

The BOT defined worthless and irrecoverable assets in a notification, 28th March BE 2529 (1986). The criteria were defined mainly in terms of the nonrecoverability of the debt evidenced, e.g., by death, bankruptcy, lack of collateral or legal proceedings rather than in terms of delinquency in meeting scheduled payments. The operational significance of this was to delay provisioning until the debt was actually a loss, since there were no clear criteria for defining doubtful debts, which required

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1/ Excluded from the definition were undrawn facilities, interest rate and currency swaps, options, and forward exchange rate and interest rate agreements. Such transactions were relatively new for Thai banks but have been growing rapidly, particularly since banks have been seeking to improve their profit positions by increasing their fee incomes and to avoid the capital/risk asset restrictions on their balance sheet activities. The BOT has been conducting a review of its treatment of OBS transactions. Tejasmit, et al., "Central Bank Policy on Off-Balance-Sheet Operations," Thailand Country Paper, presented to SEACEN Seminar, July 22-24, 1987, Bangkok, Thailand.

2/ This type of procedure is suggested by the Basle Committee of Bank Supervisors, op. cit.

provisioning in advance of loss. This tended to accentuate the problem of under-provisioning by Thai banks.

e. Concentration of ownership

Despite the regulations on share ownership, there appears to be de facto a high concentration of ownership, which has interfered with the professional management of some commercial banks. This was a problem, especially where the regulations on lending to shareholders, directors, and managements (or other affiliates) were being circumvented.

5. Economic conditions

While it is clear that there were distinct structural and regulatory inadequacies, the inherent institutional weaknesses were brought to the fore by the downturn in economic activity in the first half of the 1980s (see Chart 4). In 1982 there began a very significant tightening of monetary policy with a substantial increase in nominal and real interest rates. Real bank loan rates, which had averaged 4.2 percent during 1971-81, averaged 12.4 percent during 1982-86. Nominal bank loan rates rose above the growth of bank credit to the private sector in 1980 and 1981 and again in 1985 and 1986, resulting in a net transfer of resources from borrowers to commercial banks which acted to squeeze borrowers and created problems of loan delinquency. As already noted, the rapid growth of bank lending in 1983 reflected the easing of the capital/assets ratio requirement. By 1983 a significant downturn had begun in the growth of the monetary aggregates (see Chart 4). The difference in the growth rates of M2 and M3 (M2 plus the consolidated liabilities of finance companies) in 1984 is indicative of the serious loss of confidence in finance companies in that year, which resulted in a shift of deposits out of finance companies into commercial banks (see Section VII). The average rate of real GDP growth fell from 6.9 percent in 1971-81 to 4.4 percent in 1982-86.

During the 1980s, there was in addition an increase in competition in the supply of bank credits. This reflected a number of factors. First, after 1985 the authorities encouraged the more competitive determination of bank interest rates and placed less reliance on interest rate ceilings. Second, the emergence of positive differentials between Thai and Eurodollar interest rates (1983-86) encouraged increased borrowing abroad by prime corporations. Third, in 1986 and 1987, there was a high level of financial sector liquidity reflecting the improvement in the balance of payments and foreign exchange reserve accumulation by the BOT. Fourth, in 1984-86 there was relatively sluggish loan demand with falling loan/deposit ratios (see Table 3). The factors resulted in banks cutting their lending rates to prime borrowers to 3 percentage points or more below posted "minimum lending rates". As a result, banks' effective spreads between their average cost of funds and their average return on lending declined from 2.8 percent in 1982 and 1983 to 2.2 percent in 1984, 2.05 percent in 1985, and 1.95 percent in 1986. In some cases, spreads between borrowing and lending rates failed to cover the risks acquired in the portfolio, and, as already noted, the overall profitability of the banking system was reduced. An increase in competition would inevitably put pressure on weaker institutions, and in the Thai context where some financial institutions were already insolvent, it made the recovery of the weaker banks and finance companies even more difficult.

The combination of weak institutions and economic downturn resulted in a crisis in 1983 with the failure of a finance company and more general deposit runs. As the finance companies accounted for a relatively small proportion of total financial institution liabilities it is conceivable that they could have been allowed to fail without threatening financial sector stability. However, in the circumstances of a sharp economic downturn, there was concern that any loss of confidence could have had serious economic implications and hence the decision was taken to intervene in these companies either to pay off depositors or to support and restructure them. A loss of confidence in commercial banks was potentially much more serious, but except for deposit runs on the Sayam Bank, there was no evidence of a general loss of public confidence in the banking system.

V. Support Arrangements and Remedial Actions

The restructuring and support of ailing financial institutions has been based on a number of schemes. This partly reflected the legal powers of the authorities and whether the arrangements were part of crisis management or taken in advance of a crisis which allowed for a better design of policy.

Under EDFCA1 (1983) the supervisory powers of the Minister/BOT were expanded in the area of financially troubled companies. Any finance company that suspended repayment of its due obligations had to immediately notify the MOF and the BOT, and was not to transact any business without special authorization from the Minister. After receiving such a notification, the Minister had the power to appoint a competent officer to make an investigation of the company. However, this did not give the BOT flexible power to intervene in troubled companies. The powers to order a banker or finance company to reduce or increase its capital, to remove directors and managers and to appoint new officers in the public interest were only provided to the BOT in 1985 under EDCBA and EDFCA2 and hence were not available when the crisis emerged in 1983. After 1985, the restructuring of institutions through mergers continued to be inhibited by the merger law, which required a 100 percent agreement of creditors before mergers could take place. Hence the remedial measures have been pursued mainly through direct government takeovers and attempts to rehabilitate existing institutions and only in a few cases through mergers. In addition, there have been legal difficulties in recovering delinquent debts.

1. Support for finance and security companies

The main elements of support for finance and security companies have been liquidity injections through a number of schemes--a "liquidity fund", the "lifeboat", and credit from other financial institutions--and capital and management restructuring.

a. Initial liquidity support

In late 1983, to provide general liquidity support to the ailing finance and security companies, the Government and members of the Thai Bankers' Association (TBA) established a "liquidity fund" of B 5 billion, of which B 1 billion was provided by the Krung Thai Bank acting on behalf of the Government and the remainder by other commercial banks. The fund was managed jointly by representatives of the Krung Thai Bank, (representing the TBA), the MOF, and the BOT and its resources were used to support 18 companies. The TBA charged market-related interest rates on their loan to the fund (initially at 13 percent equal to the BOT discount rate) and rates on the loans provided by the fund to support institutions were also market-related (set initially at 16-16.5 percent but subsequently reduced in line with the decline in market rates). Loans were initially granted for periods of up to three years, but have subsequently been rolled over.

b. Lifeboat support and restructuring

In April 1984, after it became clear that a serious loss of confidence was developing in the finance companies, the MOF initiated a "lifeboat" scheme for the troubled companies. This provided additional liquidity support to the "liquidity fund" and provided the authorities with a means to intervene in the finance companies, which the "liquidity fund" and the existing legal framework did not.

Under the "lifeboat" scheme, any troubled finance or credit foncier company which was not a bank affiliate could apply to join the "lifeboat". Three types of financial assistance were available to firms in the "lifeboat": credit lines at market rates, without a maturity date, for the purpose of offsetting deposit withdrawals (the total amount available to be drawn was B 3,155 million); capital injections through equity participation by the Krung Thai Bank 1/ (B 2,400 million); and BOT "soft" loans to be invested in government bonds (up to B 6,400 million, the "soft" loans carried a five-year maturity and an interest rate of 0.1-2.5 percent, depending on the interest rate on government bonds purchased).

As a requirement for joining the scheme, the value of shares in companies were reduced and the existing management and major shareholders

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1/ These were later taken over by the Fund for Rehabilitation and Development of Financial Institutions (see section 2 below).

had to surrender additional collateral, and to transfer a proportion of shares to the MOF. This transfer involved 25 percent of the shares plus another 50 percent of the voting rights; the latter 50 percent was to be transferred back to the original owners within five years at a price to be set by the MOF. As the authorities injected additional capital into the companies, their effective voting rights rose to about 90 percent of shares issued. The BOT and MOF were responsible for the screening of applicants, the installment of new management, and the amount, type and terms of financial assistance. The BOT also had to monitor closely the performance of companies in the scheme.

Twenty-five companies joined the "lifeboat" scheme and a further six companies, which refused to join the scheme, were subjected to a detailed evaluation and restricted from accepting new deposits or granting new loans. Of these six, four lost their licenses and were closed in October 1985. The BOT has been paying off depositors in finance companies that have been closed over a ten-year period without interest on the deposits. The controls on accepting new deposits and granting loans on the two others were lifted. Another finance company which had not joined the "lifeboat" scheme was closed in November 1986, bringing to 20 the total number of closed finance companies; and in July 1986 four security firms (which had not been in the "lifeboat" scheme) lost their licenses, reducing the number of such firms to 11. Of the 25 firms in the "lifeboat", 11 were viewed to be in a position that could be supported with "soft" loans, while the remaining 14 were judged to be in critical condition.

In January 1987 a scheme was announced to resolve the problems of the finance companies in the "lifeboat": (1) the Krung Thai Bank was to take over the management of the finance companies still in the "lifeboat"; staff from the Krung Thai Bank were appointed to join the management teams, and to oversee the operation of these financial institutions; a task force consisting of analysts and examiners was also set up at the BOT to follow activities of the firms, and provide management information as well as recommendations to policymakers; (2) the business of the companies was to be restructured to make them active in investment banking; (3) the cost of borrowing from the "liquidity fund" was to be cut to 8.85 percent (with a similar reduction in the return on placements with the fund); (4) the stronger companies in the scheme were to be reprivatized and the weaker companies were to be merged into new companies; and (5) foreign financial institutions were also to be invited to join in the ownership and management of firms in the "lifeboat" and given incentives similar to those offered to encourage mergers, but this proposal has faced difficulties. Nonperforming assets of finance and security companies were to be rediscountable with the Fund for Rehabilitation and Development of Financial Institutions (RF), thus providing liquidity to these otherwise nonperforming assets. The Krung Thai Bank set aside a further credit line of B 4 billion to be extended to companies at market rates in addition to the funds it had provided to the "liquidity fund". This brought the total credit lines provided under the support schemes to around B 19 billion, and by the end of 1987 the net indebtedness of finance companies to the banking system had reached B 36 billion (see Table 7).

Five of the 25 companies in the "lifeboat" have been resold to their previous shareholders, as originally envisaged when setting up the scheme and directors appointed by the authorities have been withdrawn, but the new management installed by the authorities has been retained as part of the resale arrangement. The prices at which these companies were resold did not involve losses to the original shareholders and additional "soft" loans were provided as incentives for the reprivatization of the companies. The authorities have encouraged other companies that share common shareholders and/or common debtors to merge and have provided incentive schemes such as the privileges to open branches and new lines of business (leasing). After two years of legal and administrative preparations, the first merger of six companies took place in late 1987 and a further three companies have since merged. The merged companies have remained in the "lifeboat" and continue to be supported by "soft" loans. At the end of 1988, 13 companies with assets of B 20 billion remained in the "lifeboat".

2. Fund for the Rehabilitation and Development of Financial Institutions (RF)

The RF was set up within the BOT as a legally distinct entity with its own Board and management under the EDCBA for the purpose of rehabilitating financial institutions. The scope of the RF's activity include: lending (with proper collateral) to, placing deposits in, acquiring assets from, and holding equity in financial institutions; and offering assistance to depositors in, or lenders to, financial institutions during crises. Financial institutions are required to contribute to the RF at a rate set by its Board, up to 0.5 percent of outstanding deposits; the present rate has been set at 0.1 percent. However, the BOT has contributed the major part of the resources of the RF through a capital subscription and loans equivalent to 84 percent of the RF's total funds of B 12.2 billion in November 1988. The RF has been active in underwriting and subscribing to capital issues by distressed financial institutions and has taken over the capital injections made earlier by the Krung Thai Bank under the "lifeboat" scheme. It has also provided liquidity support by rediscounting nonperforming assets of troubled financial institutions and providing "soft" loans. By November 1988, the RF had lent B 4.2 billion to commercial banks--the largest portion to the Krung Thai Bank--and invested B 4.3 billion and B 1.0 billion, respectively, in the equity of five banks and one finance company.

3. Support for commercial banks

The type of support and restructuring arrangements for commercial banks has also reflected the powers of the BOT to intervene and to order a restructuring of troubled financial institutions. The main arrangements used to support ailing commercial banks have been government takeover, "soft" loans from the BOT and the RF to be invested in government bonds by the institution (a de facto subsidy to banks' profits), and equity participations by the RF, combined with a restructuring of the banks' managements under BOT guidance. Proposals to support ailing banks have been made by the Bank Supervision Department of the BOT. On the basis of these proposals the Board of the BOT can approve "soft" loans to the institution and the Board of the RF can approve equity participations, rediscounts, and "soft" loans by the RF. As a condition of support, the BOT has set financial programs specifying paths for increases in capital and bad debt provisions of the banks. The purchase of shares by the BOT or RF in supported institutions has meant that part of the gain in the net worth of the banks due to "soft" loan subsidies accrues to the BOT through an appreciation in share values.

Five banks have received financial assistance (see Table 6). The Sayam Bank, with about B 20 billion in assets (the eleventh-largest local bank), was judged insolvent in the early 1980s and, after suffering a run on deposits, it was taken over by the Government in August 1984. It has since received B 3.5 billion in support (equivalent to 20 percent of assets) from the monetary authorities and was operationally merged with the nationalized Krung Thai Bank in February 1987.

The Siam City Bank and the First Bangkok City Bank (the ninth- and tenth-largest banks, each with about B 28 billion in assets) were also judged to be insolvent but did not face deposit runs, and hence, emergency intervention and restructuring was not required. Because emergency measures were not called for, the BOT could more easily decide the timing and type of intervention and was able to utilize the new powers granted to it under EDCBA. After inspections of their books, the BOT ordered the value of the banks' capital reduced and for new capital to be raised to a level that could support their activities, thus involving losses for existing shareholders. In each case, the banks were supported by "soft" loans from the BOT, and the RF stood ready to underwrite a large part of the new capital issue.

Once the BOT's powers of intervention had become established, it was easier for it to encourage further "voluntary" restructuring by certain commercial banks. In the case of the Bank of Asia (the twelfth-largest bank), the BOT provided "soft" loans when the bank agreed to a comprehensive restructuring package, and the shareholders and existing management were supported. However, the BOT retained the option of buying shares in the bank at below-market rates should the restructuring fail to advance as intended.

A package of support measures, including an equity participation of B 2 billion and loans by the RF, was announced in 1987 for the Krung Thai Bank, which had been active in supporting the ailing finance companies; consequently, the burden of financial institution support has come to rest even more heavily with the BOT.

VI. Review of Support Arrangements

It seems important to distinguish between the support operations for the finance and security companies and the commercial banks. As already noted, the finance companies were financially less significant and substantially unregulated before the crisis and the insolvent companies had significant negative net worth, which has made their rehabilitation difficult. There would seem to be a prima facie case for closing these institutions rather than supporting them. On the other hand, the banks were quantitatively more important and were at least nominally subject to official regulation, and thus there would seem to be a better case for the support and restructuring operations. The restructuring operations for four of the five commercial banks were better planned, in that they were not undertaken in reaction to a crisis.

The success of the present support arrangements depends on the outlook for a recovery in profitability of the ailing financial institutions. The substantial recovery in the Thai economy in 1987 and 1988 to growth rates of 7-9 percent have improved loan performance, raised the value of collateral, and reversed the weak profit trends and declining bank lending margins noted during the 1980s, thus improving the prospects for success. On the other hand, competition between financial institutions has continued to intensify as the cartel arrangements between banks have continued to break down, keeping profit margins low. A competitive financial system may inevitably require that weaker firms disappear and new firms are permitted to enter, thus requiring a more fundamental restructuring of financial institutions and revisions to the present merger law.

The costs of keeping open the ailing institutions have turned out to be high. The direct annual cost of the support arrangements to the BOT, because of its "soft" loan subsidy, and indirectly to the central government budget, because of the lower BOT profits available for appropriation, is estimated to have amounted to about 1 percent of budgeted revenue in 1987/88 1/ (equivalent to an annual cost of about 0.2 percent of GDP, and 2 percent of reserve money). The profitability of the Krung Thai Bank has also been adversely affected and has required support. Scarce resources--both human and financial--were also tied up in keeping open the ailing

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1/ The contribution of BOT profits to budget revenues declined from B 2.3 billion (1.6 percent of total revenue) in 1984/85 to a budget estimate of B 1.2 billion (0.6 percent of total revenue) in 1987/88. Over this period there has been a doubling of the BOT's net foreign assets, which might have been expected to increase profits, although this may have been offset by a drop in interest rates which would have acted to reduce revenue. The cost to the BOT of its loans to commercial banks and finance and security companies, which amounted to B 28 billion at end-June 1987, might be estimated at B 2 billion annually, assuming an average "soft" loan rate of 1 percent and an average government bond yield of 8 percent.

finance companies which might have been better employed in other activities.

The initial decision to support rather than close the insolvent finance and security companies was taken on the basis of the estimated comparative costs of paying back the depositors of the companies over a ten-year period (estimated in present value terms to be equivalent to 50 percent of the value of deposits assuming that no interest were paid on deposits) and of keeping open the ailing institutions. The estimates indicated that a salvage operation would be less costly. However, the costs of keeping open the ailing institutions turned out to be much higher than anticipated mainly because the magnitude of companies' bad debts was underestimated, the recovery of collateral was more difficult than anticipated, and also because the BOT staff, which took over the management of the companies, lacked commercial banking expertise. As a result the activities of the companies stagnated and their losses continued to increase. In these circumstances, new injections of capital were quickly wiped out and did not improve companies' solvency, but simply went toward paying interest to depositors.

An alternative would have been to develop at an early stage a program which would have involved a larger number of closures or the sale or merger of nonviable institutions with sound institutions. Nonviability might mean that there was a limited probability that the institution would achieve solvency and profitability in a reasonable period of time (say, three to five years). The closure of an institution would have required an injection of public funds to repay depositors. In a case where it would have been possible to sell the institutions (or merge them), which may be preferable to outright closure, it may have been necessary to have an initial injection of public funds equivalent to the institutions' negative net worth. The government budget has had to carry the cost of the support arrangements, albeit indirectly through reduced BOT (and Krung Thai Bank) profits, and the necessary one-time injection of public funds needed to restructure financial institutions might not have added to budgetary costs, taking a number of years together, while removing the burden of support from the authorities. Indeed, selling and merging the ailing companies could have placed them under more competent managements, and hence their operations might not have stagnated, resulting in lower recovery and budgetary costs. Moreover, depositors could have been expected to bear some of the losses of finance companies, since they had benefitted from the previous higher interest rates on finance company deposits. The interest differential paid by finance companies may have included a margin to cover the risks that deposits with finance companies would not be fully repaid, and so depositors may have anticipated some loss.

Such a program would have had to address the impediments to the restructuring of the financial system such as the commercial and bankruptcy laws which have made the closure and merger of financial institutions highly cumbersome, requiring direct intervention by the authorities. An easing of the restriction on foreign participation in local commercial banks, which has been limited to 25 percent of equity, could also have provided an injection of capital funds and management skills that would have facilitated the restructuring of financial institutions.

The BOT was able to restructure financial institutions as part of its support arrangements and in many cases imposed sanctions on bank managements and shareholders. Nevertheless, the approach to supporting existing financial institutions carried risks for financial sector efficiency when it prevented or slowed down a necessary restructuring of the financial sector. In several cases shareholders were also insulated from the full losses incurred by their financial institutions, which could weaken shareholders' incentives to require the highest standards from the managements of the institutions concerned. The capital of banks was ordered reduced in some cases, but in others the shareholders were not penalized or at least did not bear the full losses of their institutions. Moreover, depositors in supported finance companies were fully bailed out by the authorities, even though the interest rates paid by these companies were at a premium to those offered by commercial banks. Intervention by the authorities may have raised problems for "moral hazard" and weakened self-regulatory systems.

VII. Macroeconomic Consequences

As regards the broader economic implications of the support arrangements, there are a number of possible channels by which the financial crisis could have influenced the macroeconomy. Since the BOT "soft" loans had to be invested in government securities sold from the BOT's portfolio, it is probable that a substantial part of the loans was automatically sterilized and therefore did not have direct effects on economic activity. However, the requirement that "soft" loans be invested in government bonds might not prevent some leakage of these loans into other activities; for example, government bond purchases by these institutions might have taken place anyway. The higher budget deficit resulting from the lower profits of the BOT available for appropriation by the Government could contribute to monetary expansion if it were financed through the banking system.

A potentially more serious concern was that the stance of monetary policy was relaxed by the need to improve bank profitability rather than by macroeconomic considerations during 1986 and 1987. During these years the authorities permitted a high level of financial sector liquidity and the growth of reserve money increased sharply, reaching 20 percent in 1987. The increase in liquidity largely reflected balance of payments surpluses. The authorities had at their disposal the instruments--government bond repurchases and issues of central bank bonds--to restrict the liquidity expansion, and indeed the BOT became more active in its money market intervention in 1986 and 1987, but limited the amounts to certain nominal ceilings. As a result, interbank rates fell to very low levels and it has been suggested that this was partly to help weaker financial institutions by reducing borrowing costs; however, as noted above, the increase in liquidity also intensified competition for bank loans and therefore may have reduced bank lending spreads. During 1986 and the first half of 1987 the economy was in the early phases of recovery, inflation was low and the balance of payments was in substantial surplus; therefore a looser financial policy may have been justified by macroeconomic conditions. Hence, there was no great conflict between supporting financial institutions and the macroeconomic policy stance during this period. Circumstances could have been otherwise, and there may be concern that the need for a future tightening of policy on macroeconomic grounds could be delayed by the need to support ailing financial institutions.

As is evident from Chart 4, there was a shift in the behavior of the M2 and M3 monetary aggregates in 1983 and 1984, associated with a movement of deposits out of finance companies into commercial banks following the financial crisis which distorted the monetary aggregates. Our estimated demand equation shows a significant increase in the demand for M2--currency and deposit liabilities of commercial banks--following the emergence of the crisis among finance companies in 1983. 1/ The Thai

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1/ The estimated demand equation for M2 is:

$$\Delta \ln M2 = \underset{(1.05)}{-0.18} + \underset{(2.72)}{0.27}\ln\left(GDP/M2(-1)\right) - \underset{(1.21)}{0.08}\ln\left(GDPA/(GDP - GDPA)\right)$$
$$+ \underset{(3.28)}{0.03}(r_{cb} - r_{fc}) - \underset{(0.48)}{0.01}(r_{cb} - \pi) + \underset{(2.29)}{0.05}D$$

$\bar{R}^2 = 0.52$, DW = 2.09; estimated period 1971 to 1986; t-ratios in parentheses.

where GDP = nominal GDP
GDPA = nominal GDP in agricultural sector
r_{cb} = savings deposit rate at commercial banks
r_{fc} = deposit rate at finance companies
π = rate of consumer price inflation
D = dummy variable for the crisis among finance and security companies, taking value 0 1971 to 1982 and 1 thereafter.

(-1) is the lag operator, ln the log operator, and $\Delta X = X - X(-1)$ is the first difference.

This equation imposes the restriction that the long-run income elasticity of money demand is unity, which is an acceptable statistical restriction. Other equations estimated for M3 did not exhibit a significant shift dummy as would be expected when the shift was mainly between components within M3. The coefficient on the dummy implies that the crisis would cause the M2 aggregate to increase by 18 percent in the long run. Evaluated using end-1982 data, this implies an increase of B 67 billion, equal to the stock of business and household holdings of promissory notes with finance companies at end-1982, prior to the crisis.

authorities have used multiple monetary targets as a guide to policy including the M2 monetary aggregate. The more rapid growth of this aggregate in 1983 and 1984 as a result of the portfolio shift out of finance company accounts into bank deposits could have contributed to the significantly tighter monetary policy during these years. But there would have been no necessary reason to tighten monetary policy simply because of a portfolio shift which would not have had expenditure implications.

Even if policy had not been tightened deliberately, an unanticipated tightening of policy could have occurred through two channels. First, since the cash ratio requirement was higher on bank deposits than on finance company promissory notes (see Table 8), the shift of deposits to banks from finance companies would have raised the demand for cash reserves. The authorities would have had to supply additional cash reserves to avoid an unanticipated tightening of policy, but there is no evidence of this. Second, in 1984 commercial banks were requested to restrict overall credit growth to the private sector and to restrict the opening of import letters of credit. The portfolio shift in deposits out of finance companies into banks meant that finance companies were less able to meet their credit demands and there was a sharp decline in the growth of their loans to the nonbank private sector (see Table 7); hence, there may also have been a portfolio shift which increased the demand for bank loans. Moreover, banks were increasing their lending to the finance companies which may have been caught under the restrictions on credit to the private sector, and which may have further crowded out other private sector borrowers. Thus the effect of the restrictions on commercial bank credit growth could have been tighter than anticipated because of the failure to allow for credit reintermediation and the increased demand for loans by finance companies as a result of the crisis.

The precise impact of the financial crisis on real economic activity, inflation and the balance of payments is very difficult to gauge. During 1983-1985, economic policy had been tightened to correct domestic and external imbalances and economic activity slowed sharply. It is precisely during this period that any disruption to credit availability and a misinterpretation of monetary aggregates because of emergence of the financial crisis could have resulted in a more restrictive policy and hence slower economic activity. Real GDP growth slowed to a very low level by Thai standards in 1984 and 1985 (see Chart 4). As noted, the subsequent recovery in activity was associated with the substantial growth of liquidity support by the BOT and economic activity recovered sharply in 1987 and 1988. Hence the crisis and the subsequent support may have influenced economic activity in a procyclical manner.

VIII. Conclusion and Main Findings

The emergence of distressed financial institutions in Thailand had its origins mainly in weak managerial practices and an inadequate legal, regulatory, and supervisory framework for financial institutions. The indigenous private sector financial institutions were established by trading families and other powerful economic groupings and had a high concentration of ownership and, in several cases, of loan exposure to interrelated entities. Such institutions were not "self-regulatory" in the sense that there was a lack of normal checks and balances between shareholders, directors and management, and this resulted in inherent management weakness. Moreover the regulation of interest rates and restrictions on branching and new bank offices encouraged the rapid growth of substantially unregulated finance companies.

Against this background, a high standard of external supervision and regulation was necessary if institutions were to develop sound and professional practices. However, the initial legislative framework establishing the BOT and covering the operations of financial institutions was very weak and did not give the authorities the powers to regulate or supervise the financial system. Finance companies were officially recognized--which acted to increase public confidence in these companies--but they were not regulated. Hence poor banking practices went on largely unchecked, leading to a problem of delinquent debts and erosion of the capital bases of the banks and finance companies. These problems were brought to the fore with the slowdown in economic activity in the early 1980s.

Initially, intervention occurred in a crisis environment and the authorities did not have flexible powers to intervene in and to restructure the ailing financial institutions. Only in 1985 were the legislative frameworks amended to give the BOT adequate powers to supervise and intervene in the financial institutions. The subsequent intervention in commercial banks using these powers was undertaken before a crisis was allowed to develop. This intervention could be more systematic, involving financial programs that would return banks to solvency. However, cumbersome merger laws have continued to restrict the speed and scope for more fundamental restructuring of the financial system. It is difficult to avoid the conclusion that the crisis first could have been prevented, and second, could have been dealt with more expeditiously if the initial legislative system had been adequate and effectively implemented. That is, the central bank should have been given the appropriate powers to supervise and regulate the financial system and to intervene when the first signs of difficulties emerged.

The Thai authorities took a variety of remedial actions as the problems with financial institutions emerged, including: a substantial strengthening of the legal, regulatory and supervisory arrangements; the takeover of institutions by the Government; financial support through credit lines at market rates; "soft" loans and equity participation; direct intervention to order changes in management and capital restructuring; and mergers and closures with deposit payoffs by the BOT. The support arrangements have maintained confidence in the financial system, but have been costly in terms of the use of public funds and scarce human and financial resources, and risk efficiency in the financial system. In several cases, shareholders have been insulated from the full losses of their financial institutions, and depositors who invested with finance companies and earned higher interest rates have had their deposits underwritten by the authorities. Alternative arrangements might have been less costly and more effective, such as a more active policy of closures and mergers including legislative reform and the involvement of foreign financial institutions. The finance companies were relatively small and unregulated with significant negative net worth, and there would seem to be a good case for closing more of these institutions. More generally, the increased competitive structure of the Thai financial system may require a more fundamental restructuring of financial institutions.

The broader economic consequences of the financial crisis are difficult to gauge. A portfolio shift by depositors and borrowers out of finance companies into commercial banks could have led to an unanticipated tightening of policy because of an increased demand for reserve money and because the restraints on credit expansion by commercial banks may have been more restrictive than expected, since they did not allow for the reintermediation of credit to the banking system. The faster growth of the demand for M2 monetary aggregates could also have added to the monetary policy tightening, and to the already-deflationary policies being followed by the authorities in 1983-85. The subsequent expansion in BOT liquidity support for financial institutions occurred during the recovery phase (1986-87). Hence, to the extent that the financial crisis had real economic effects, these were probably procyclical, leading to a deeper recession (1983-85) and stimulating the recovery (1986-87).