



Bank of Thailand

Supervision Report

2004

MESSAGE FROM THE GOVERNOR



In pursuit of medium to long-term financial development strategies, the first phase of the Financial Sector Master Plan was implemented in 2004 to rationalize the structure and roles of the existing financial institutions. Banking consolidation was undertaken through mergers within financial groups under the “One Presence” principle. Of importance is a move toward a new financial landscape with approval for ten applications so far under the new licensing scheme, which covered three new commercial banks, four retail banks, two full branches and one subsidiary. This is the first time that banking consolidation was driven by strategic positioning, rather than by necessity, leading to a more competitive and efficient financial system. As redundant functions have been removed, the scope of business of existing foreign financial institutions has been expanded to introduce additional pressure and strengthen the overall financial system.

Equally important is implementation of prudential measures to rein in consumer credit and to expedite NPL resolution, as well as promotion of good corporate governance and risk management capacity in the banking industry. Moreover, the authorities continued to step up efforts to improve the infrastructure that underpins a more robust financial system. One point in case is development of the central clearing and settlement for debt instruments to enhance the functioning of the payment system and the efficiency of the capital market. With financial stability assured and further reforms being pursued, financial institutions should, therefore, be in a stronger position, poised to meet challenges brought by intensified competition.

To set a roadmap for supervisory enhancement on all fronts, the Bank of Thailand conducted a self-assessment exercise on effective banking supervision against the Basel Core Principles during the year. This benchmarking helped identify gaps in current supervisory practices and remaining infrastructure weaknesses. Further supervisory improvements will build upon these findings to meet the more demanding global banking standards. In line with this, the International Accounting Standard 39 will reflect more accurately the positions of financial institutions, while the New Capital Accord will provide the basis for determining risk-sensitive minimum capital requirements. In order to meet the target timeframe for Basel II implementation, a series of consultative papers on credit risk are being issued, and will be

followed-up with other elements by late 2005. These developments pose challenges for both banks and regulators in many countries worldwide, and Thailand must carefully map out our implementation plan that is consistent with the overall objectives while ensuring a smooth transition process.

Another concern from the external front deals with potential financial imbalances. With increasingly integrated financial markets, developments in systemically important countries could potentially induce volatility in the banking system of small countries. For example, US current account imbalances and expectations on the Chinese renminbi revaluation could have important implications for macroeconomic and financial stability, and consequently, financial institutions. Against this potentially unstable environment, the authorities need to monitor closely global downside risks and react immediately, if required, to maintain macroeconomic and financial stability. Concurrently, banks cannot remain complacent but must be prepared to adopt forward-looking strategies and practical solutions to counter pro-cyclical imbalances. Importantly, they must continue to strengthen their risk management capacities further by periodically stress testing their resilience against extreme but plausible shocks.

Against this background, Thailand will undoubtedly face important challenges in the periods ahead - both in terms of our own domestic reforms and international developments. The authorities will therefore have to remain vigilant over macroeconomic management, foster a more robust regulatory framework to accommodate the new financial structure, and address any remaining supervisory weaknesses. As obvious as it may seem, it is important to stress that Thailand's financial reform agenda hinges importantly on active participation of all stakeholders, with a firm commitment to achieve a more balanced, resilient, and competitive financial system.



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CHAPTER 1

HIGHLIGHT OF MAJOR DEVELOPMENTS IN 2004

In the generally benign financial environment of ample liquidity and low interest rate, domestic consumption and investment continued to drive the economy in 2004. Credit growth picked up considerably, especially corporate loan, while consumer loan growth slowed partly as a result of the Bank of Thailand's tightening prudential regulations on luxurious housing and credit card loans. Profitability of financial institutions almost doubled due mainly to lower interest expenses and provisioning burden. Progress in debt restructuring contributed to a continued reduction in the level of non-performing loans. Despite uncertainties that could slow domestic consumption and investment next year such as higher oil prices, lower-than-expected growth in trading partner economies, and ongoing unrest in the three southern provinces, strong export and corporate performance, favorable employment conditions, and fiscal stimulation should help sustain moderate economic growth. In this context, the Bank of Thailand will continue to guard against possible signs of imbalances and to strengthen the banking system through prudential measures on risk management and corporate governance in order to maintain financial stability.

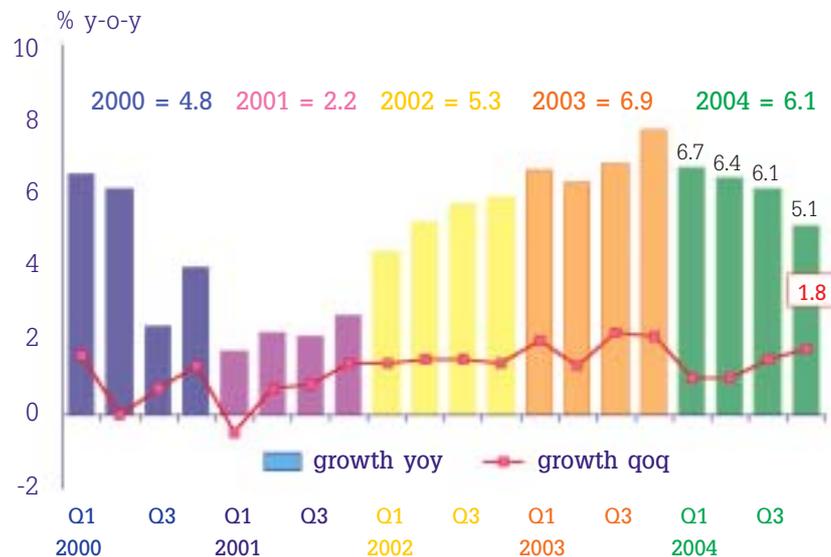
This year also marked an onset of the medium-term structural reform in the financial sector introduced by the Financial Sector Master Plan. Thus far, substantial progress has been made in the first phase, which primarily aims to enhance operational efficiency and minimize redundancy through consolidation of existing financial institutions, resulting in a significant decline in the number of small financial institutions. Meanwhile, the development plan for grass roots financial services is being drafted, implementation of the pilot project on a business model for financial services to the underserved customers is underway, and a clear procedure for handling customer complaints and transparent disclosure of information is promoted. In parallel, competition has been further enhanced, with scope of business for commercial banks broadened to include hire purchase and leasing, factoring, and derivative products. On prudential grounds, tightened regulations on credit card business have been implemented to preempt excessive household debt build-up, while additional guidelines on interest rate risk and operational risk were issued to ensure sound conduct of banking activities and safeguard financial sector stability.

1.1 Economic Development

1.1.1 The Overall Economy

The Thai economy expanded by 6.1 percent in 2004, slightly lower than previous year's growth rate of 6.9 percent. Moderation in economic growth was due to a slowdown in domestic demand amidst higher oil prices, avian flu, and unrest in the three southernmost provinces. The main engines of growth in 2004 were private consumption, investment, and record level of export.

Chart 1: Gross Domestic Product (1998 Prices)



Despite a slowdown from 2003, private consumption continued to be an important contributing factor to growth.

One reason for this slowdown is that much of the pent-up demand for durable goods has been fulfilled. Another reason is the dampened consumer confidence over various uncertainties such as high oil prices and unrest in the three southern provinces. Overall, private consumption expenditure grew by 5.6 percent, down from 6.4 percent in the previous year. The moderation in consumption growth is, however, in line with the sustainable expansion rate in the medium term.

Chart 2: Private Consumption Expenditure Growth

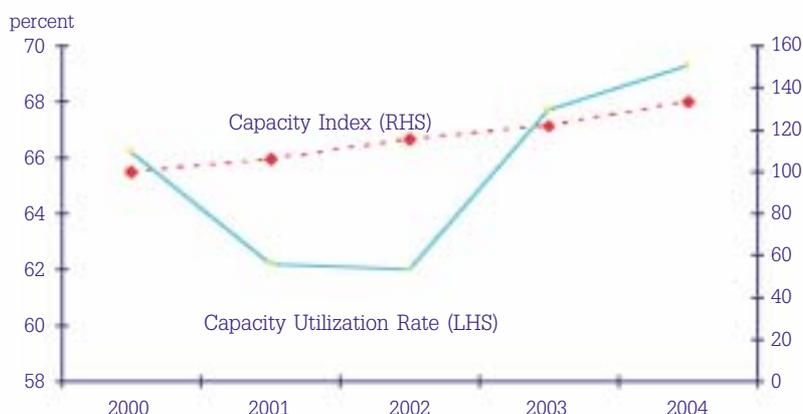


Source : NESDB

Private investment maintained double-digit growth at 15.3 percent in 2004, with construction investment growing by 15.4 percent and machinery and equipment by 15.3 percent. This was mainly due to rising industrial capacity utilization, which reached 72.2 percent in December 2004 and averaged at 69.3 percent for the entire year, up from 67.7 percent in 2003. Continuing low real interest rates and further expansion of business loans also supported private investment. Nevertheless, the share of private investment in GDP, which averaged at 17 percent, is lower than its average of 21 percent during the 1980s, reflecting considerable growth potential in private investment.

Chart 3: Capacity Utilization*

	2000	2001	2002	2003	2004
Capacity Utilization Rate (%)	66.2	62.2	62.0	67.7	69.3
Capacity Index	100.0	105.7	115.4	121.8	133.5



Source : Bank of Thailand

* 69 products accounting for 59.1 percent of the value-added output of the manufacturing sector

Public investment began to expand in 2004, after retrenching for the past five years, due largely to the initiation of large public infrastructure projects as well as the construction of the new airport. High tax revenue and disbursement rate for fiscal year 2004 contributed to the government's policy to sustain the economic growth. This higher-than-expected revenue allowed the government to introduce a mid-year supplementary budget worth 135.5 billion baht starting in April 2004.

Government spending grew by 17.8 percent in fiscal year 2004, higher in terms of both government consumption and investment. Government revenue grew at 17.1 percent in 2004, reflecting the growth of the economy especially in the corporate sector.

Export performance was robust, expanding by 23 percent in value terms, up from 18.2 percent in 2003. This was due mainly to a substantial increase in export prices even though export volume growth moderated marginally. Industries experiencing favorable growth were mainly high-tech products such as electronic goods, vehicles and parts, and plastic and chemical products. However, export of electronic goods slowed since the third quarter of 2004 in tandem with the downward trend in the global electronics cycle.

On the supply side, the **Manufacturing Production Index (MPI) grew 11.1 percent in 2004**, down from 13.8 percent in the previous year. Production of goods for the domestic market fell, while that for export especially electronic and electrical products moderated in line with the global downtrend. As regards agricultural production, output of major crop was adversely affected by drought and declined by 1.2 percent compared with 10.5 percent growth in the previous year. Prices of major crop, however, remained high, especially for rice and rubber, and contributed to strong farm income growth of 16.9 percent.

Chart 4: Manufacturing Production Index Growth*



Source : BOT Survey

*With the coverage of 76 products

As for the services sector, the number of foreign tourists grew by 16.5 percent in 2004 despite the outbreak of avian flu in the first quarter of the year and unrest in the three southern provinces from the second quarter onwards. Satisfactory growth in foreign tourism was partly explained by the low number of foreign tourists in 2003 due to fears over SARS. However, impact of the tsunami in the last week of 2004 is expected to dampen tourism and investment in the south in 2005.

With regard to the corporate sector, robust domestic demand and export growth contributed to the **exceptionally strong performance of listed non-financial firms**. Strong earnings allowed firms to continue the trend in lowering their leverage as evidenced by the decline in the debt-to-equity ratio. As profitability and prospects improved, so did investment in the Thai stock market, especially towards the latter half of the year following the abating uncertainty over avian flu.

Table 1: Corporate Performance of Listed Non-Financial Firms
(Key performance indicators based on the Dupont Analysis)

	2000	2001	2001	2003	2004		
					Q1	Q2	Q3
D/E Ratio	4.1	3.2	2.2	1.5	1.5	1.4	1.4
Asset Turnover (%)	54	58	73	79	83	87	95
Profit Margin (%)	(11)	3	6	10	10	9	12
ROA (%)	(3)	3	5	8	9	8	11
ROE (%)	(15)	13	18	29	21	19	27

Source : Stock Exchange of Thailand and BOT staff's calculation

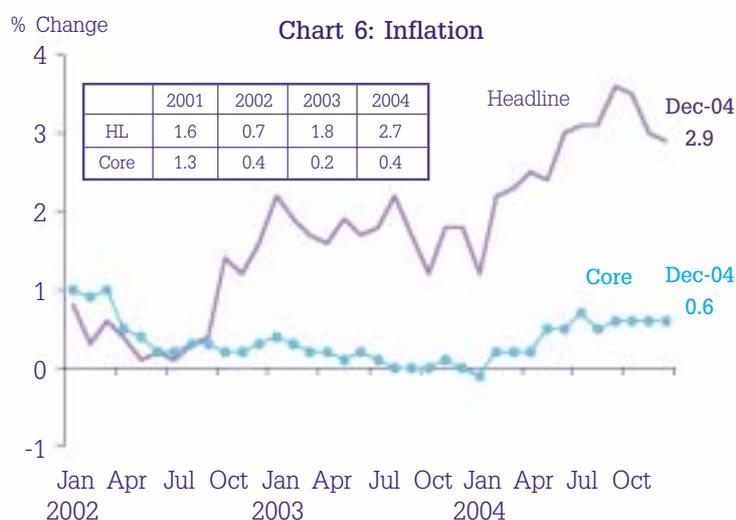
Chart 5: SET Index



Source : Stock Exchange of Thailand

1.1.2 Economic Stability in 2004

Economic stability in 2004 continued to be satisfactory on all accounts. With regard to **internal stability**, inflation remained manageable despite high oil prices. Headline inflation rate averaged at 2.7 percent, up from 1.8 percent in the previous year, in line with the increase in food and energy prices. Core inflation showed minimal feed-through from oil prices and averaged at 0.4 percent, a slight increase from 0.2 percent in the previous year. Unemployment rate was low at 2.1 percent. Fiscal stability was reflected in the low level of public debt at 47.5 percent of GDP.



Source : Ministry of Commerce

In terms of **external stability**, current account remained in surplus at 7.3 billion US dollars or 4.5 percent of GDP. External debt fell slightly from 51.8 billion US dollars at end-2003 to 51.1 billion US dollars at end-2004. Gross international reserves reached 49.8 billion US dollars, roughly four times short-term external debt.

Continuing strong consumption growth has resulted in the **rapid rise of household debt** in Thailand over the past few years. Average debt per household rose from 82,485 baht in 2002 to 104,571 baht in 2004. The increase in household indebtedness was driven by greater financial access, low interest rates, and improved consumer sentiment due to higher income, favorable economic prospects and the fulfillment of pent-up demand since the 1997 crisis. Although Thailand's household debt remains low by international comparison and poses no imminent threat to the macroeconomic stability, the authorities will nevertheless continue to keep a close watch and stand ready to take necessary measures to preempt excessive accumulation of indebtedness.

1.1.3 Economic Outlook in 2005

The Thai economy is expected to grow at a moderate pace of 4.5-5.5 percent in 2005. Factors affecting the slowdown include higher oil prices, lower-than-expected growth in trading partner economies, ongoing unrest in some southern provinces, and drought. As a result, private consumption and investment are expected to slow down marginally. However, given satisfactory export and corporate performance, strong employment conditions, and fiscal stimulation, especially the supplementary budget of 50 billion baht and approval of mega project expenditures of 1.7 trillion baht under a 5-year plan, satisfactory growth is expected to be sustained in the periods ahead.

Table 2: Bank of Thailand Forecast Summary

	2003	2004	2005*	2006*
Economic growth (%)	6.9	6.1	4.5 - 5.5	5.5 - 6.5
Core inflation (%)	0.2	0.4	1.0 - 2.0	2.0 - 3.0
Headline inflation (%)	1.8	2.7	3.0 - 4.0	2.0 - 3.0
Current account (billion USD)	7.8	7.3	1.0 - 2.0	0.0 - 2.0

Source : NESDB, BOT

*Forecast from the Bank of Thailand's *Inflation Report*, April 2005

Against the background of increasing pressure on inflation with more downside risks to growth from both domestic and external uncertainties, the authorities will remain vigilant in ensuring a smooth adjustment in monetary conditions and maintaining economic and financial stability. In particular, macroeconomic management would focus on safeguarding against financial imbalances and ensuring that long-term investment policy is in line with sustainable fiscal and current account positions.

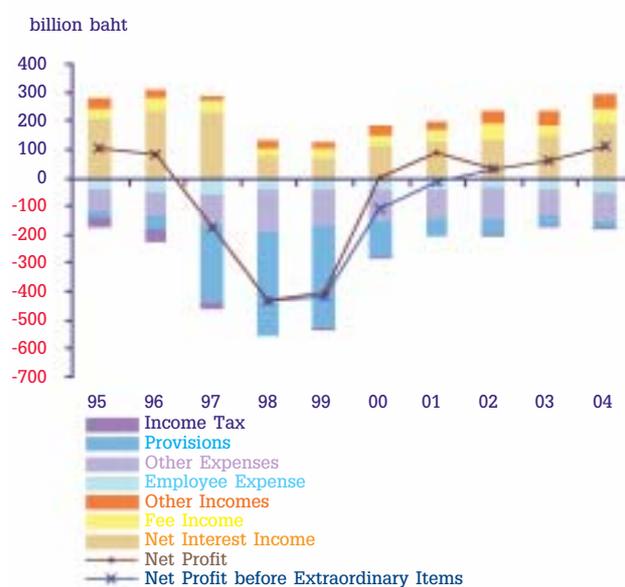
1.2 Financial Sector Development

1.2.1 Financial Institutions

Credit growth picked up pace from 4.5 percent in 2003 to 8.4 percent in 2004, with the outstanding amount of 5.4 trillion baht or 82 percent of GDP. Corporate loan growth accelerated to 7.4 percent compared with a contraction of 0.5 percent the previous year; growth was especially strong in the manufacturing, commerce, services, and real estate sectors. Consumer loan growth slowed to 15.2 percent from 20.1 percent. The increase in debt restructuring, legal execution process, and debt write-offs contributed to the steady decline in NPL ratio to 10.8 percent from 12.7 percent.

Profitability of financial institutions continued to hold up. This year marked the third consecutive year that financial institutions earned net profit (before extraordinary items) with the total net profit of 100 billion baht, almost twice that of last year. Likewise, interest rate spread, net interest margin, and the overall operating efficiency continued to improve. Major factors contributing to improved profitability were substantial increase in fee-based income, decrease in interest expense, progress in debt restructuring, and strategic adjustment towards expansion of high-margin consumer loans.

Chart 7: Performance of FIs



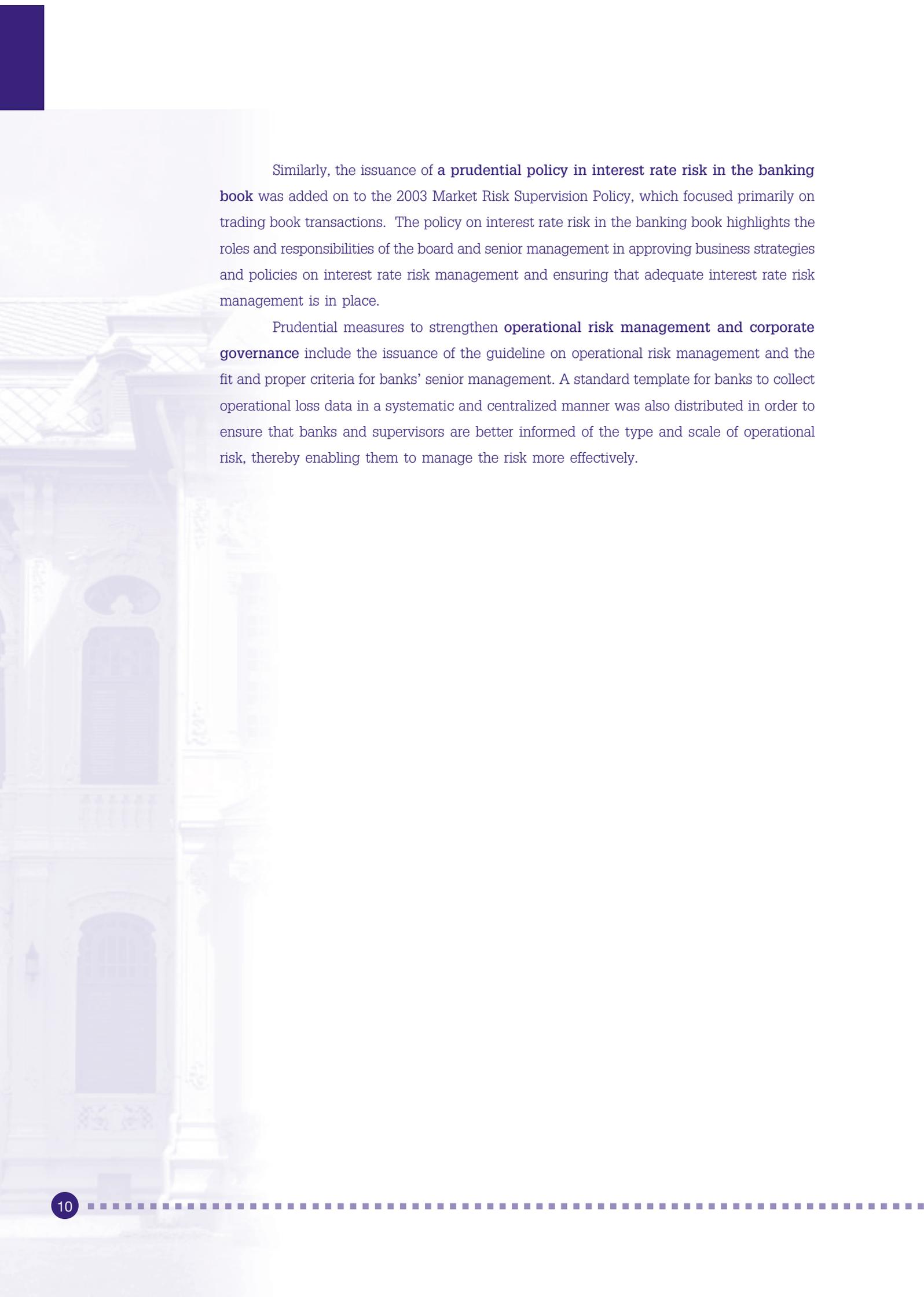
1.2.2 Supervisory and Structural Reforms

The Bank of Thailand continued to strengthen the banking system, increase competition, and protect consumers by means of market-based supervisory guidelines and reforms. Key guidelines and reforms in 2004 are summarized below (more details can be found in Chapter 3 and 4).

In January 2004, the Cabinet endorsed **the Financial Sector Master Plan (FSMP)** which set the course for medium-term reform in the Thai financial sector. The first phase of the implementation focused on **rationalizing the existing structure of the financial sector, enhancing efficiency of existing players, broadening access to financial services, and improving consumer protection.** The second phase will begin after the implementation of the first phase and entail consideration on potential new players. Substantial progress has been made in the first phase of the FSMP. Existing financial groups were asked to comply with the One Presence policy where one financial group is to have only one form of deposit-taking institution. The process includes upgrading and/or merging of finance companies and credit foncier companies to become commercial bank or retail bank, upgrading of international banking facility to full branch and full branch to subsidiary, merging of international banking facility with affiliated commercial bank or full branch. As a result of the rationalization process, the number of financial institutions under the supervision of the Bank of Thailand will be reduced from 83 to 44. Other measures implemented are, for example, removing tax impediments to mergers and acquisitions and drafting of a development plan to increase access to grass roots financial services.

With a view to harnessing market forces to increase competition in the financial sector, the Bank of Thailand allowed banks with appropriate risk management and internal control system to provide **a wider scope of financial services** such as hire purchase and leasing, factoring, electronic money services, certain credit derivatives and plain-vanilla commodity derivatives. Moreover, the scope of private repurchase transactions was extended both in terms of counterparties and instruments and the regulation on leasing of immovable property was relaxed.

In response to the growth in consumer credits, the Bank of Thailand tightened **prudential regulation on credit card business** to prevent excessive build-up of household debts and deter personal spending beyond their means. The minimum monthly payment has been raised, credit limit for each cardholder set, and cancellation of cards delinquent for more than three months required. This precautionary measure complemented the prudential guideline on high-end residential credits issued in 2003.



Similarly, the issuance of a **prudential policy in interest rate risk in the banking book** was added on to the 2003 Market Risk Supervision Policy, which focused primarily on trading book transactions. The policy on interest rate risk in the banking book highlights the roles and responsibilities of the board and senior management in approving business strategies and policies on interest rate risk management and ensuring that adequate interest rate risk management is in place.

Prudential measures to strengthen **operational risk management and corporate governance** include the issuance of the guideline on operational risk management and the fit and proper criteria for banks' senior management. A standard template for banks to collect operational loss data in a systematic and centralized manner was also distributed in order to ensure that banks and supervisors are better informed of the type and scale of operational risk, thereby enabling them to manage the risk more effectively.

CHAPTER 2

FINANCIAL INSTITUTIONS PERFORMANCE AND DEBT RESTRUCTURING PROGRESS

2.1 Structure of the Financial Sector

Table 3: Structure of Financial Institutions (as of December 2004)

(billion baht)

	Thai Bank	Foreign Branches	Stand alone IBFs	Finance Companies	Credit foncier Companies	Total	Deposit-taking Specialized Fls.*	Grand Total
Asset	6,425.4	847.1	17.8	366.0	2.0	7,658.3	1,526.0	9,184.3
Cash and deposits at financial institutions	455.1	66.1	0.3	4.1	0.3	525.9	41.9	567.8
Investments in securities (include R/P)	1,152.6	232.3	0.1	84.6	0.5	1,470.1	371.8	1,841.9
Credit (net) ^{1/}	4,357.5	491.7	17.1	259.4	1.1	5,126.8	692.5	5,819.3
Other assets	460.2	57.0	0.3	17.9	0.1	535.5	419.8	955.3
Liabilities	5,930.8	601.5	0.1	295.1	1.4	6,828.9	1,391.5	8,220.4
Deposits ^{2/}	5,385.0	366.6	0.0	253.7	1.3	6,006.6	1,287.6	7,294.2
Borrowing (include R/P) ^{3/}	419.4	168.3	0.0	35.2	0.0	622.9	67.6	690.5
Other liabilities	126.4	66.7	0.1	6.2	0.1	199.4	36.3	235.7
Equities	494.6	245.6	17.7	70.9	0.7	829.5	134.5	964.0
No. of banks	12	18	4	18	5	57	4	61

* Deposit-taking SFIs include Government Housing Bank, Government Savings Bank, Bank for Agriculture and Agricultural Cooperatives and Islamic Bank of Thailand.

^{1/} including Interbank Credits, Accrued Interest Receivable less Allowance for Possible Loan Losses

^{2/} including Interbank Deposits

^{3/} Including Interbank Borrowing

As of December 2004, 57 financial institutions under the supervision of the Bank of Thailand consisted of 12 Thai banks (8 with IBF license), 18 branches of foreign banks (15 with IBF license), 4 stand-alone IBFs, 18 finance companies and 5 credit foncier companies. During the year, one Thai bank merged with another Thai bank and a specialized financial institution, while one stand-alone IBF closed down.

Financial institutions have remained a major source of fund for the Thai economy, with Thai banks as a major player, followed by four deposit-taking specialized institutions (SFIs), foreign banks and finance companies, respectively. As of December 2004, Thai banks'

loans and deposits accounted for more than 70 percent of all financial institutions, and the four deposit-taking SFIs' share was 18 percent in terms of deposits and 12 percent in terms of loans. The marginal roles of finance companies, credit foncier companies, and stand-alone IBFs are expected to decline further after the implementation of the Financial Sector Master Plan, which promotes consolidation among existing financial institutions within the same financial group (the One Presence Policy) for more efficiency in the financial sector.

As of December 2004, total assets of financial institutions increased by 7.1 percent from the previous year, mainly due to credit expansion and the merger of two Thai banks and a specialized financial institution. Investment in securities declined as financial institutions sold off long-term bonds in anticipation of the increase in interest rate toward the end of the year.

The proportion of deposit to total funding of financial institutions declined, although remaining high at 78.4 percent. Meanwhile, improved profitability and reduction of provisioning burden contributed to the 12.6 percent increase of shareholders' equities.

Chart 8: Assets of FIs*

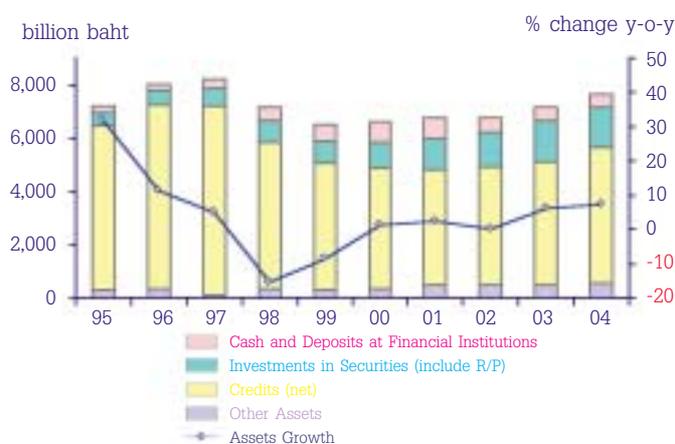
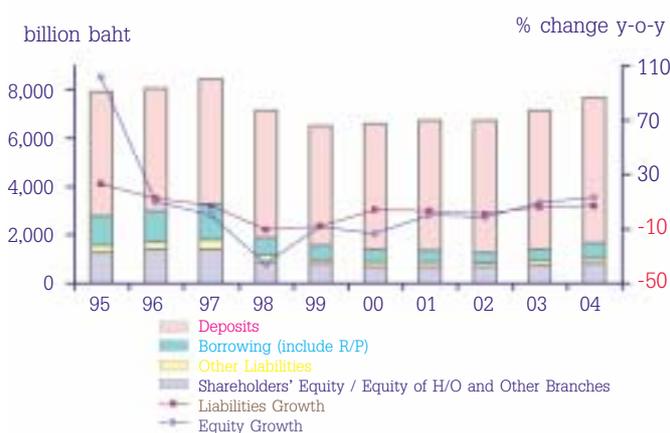


Chart 9: Liabilities and Equities of FIs*



* Financial institutions (FIs) include commercial banks, finance companies, and credit foncier companies.

2.2 Performance of Financial Institutions

2.2.1 Profitability

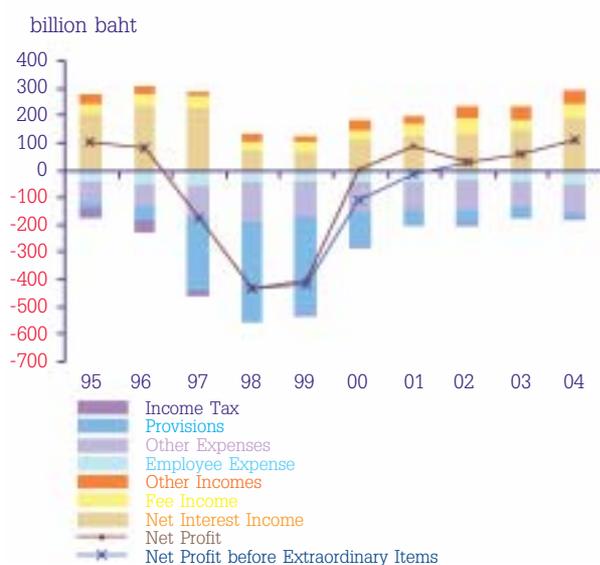
Table 4: Performance of Financial Institutions in 2004

billion baht

Item	Total FIs			Thai Banks		Foreign Branches		Stand-alone IBF		Finance Cos.		Credit Foncier	
	2004	Δyoy	%Δyoy	2004	Δyoy	2004	Δyoy	2004	Δyoy	2004	Δyoy	2004	Δyoy
1. Interest Income	268.58	5.94	2.26	228.84	3.58	20.85	0.19	0.32	-0.11	18.48	2.30	0.09	-0.02
2. Interest Expense	82.42	-34.67	-29.61	69.60	-33.51	6.75	-0.87	0.07	-0.03	5.95	-0.15	0.05	-0.11
3. Net Interest Income (item 1-2)	186.16	40.61	27.90	159.24	37.09	14.10	1.06	0.25	-0.08	12.53	2.45	0.04	0.09
4. Non-interest Income ^{1/}	104.56	16.03	18.11	77.13	2.08	19.14	14.44	-0.04	-0.59	8.30	0.09	0.03	0.01
5. Operating Expense ^{1/}	158.62	26.09	19.69	127.64	9.83	22.31	14.80	0.21	0.02	8.37	1.46	0.09	-0.02
6. Operating Profit (Loss) (item 3+4-5)	132.10	30.55	30.08	108.73	29.34	10.93	0.70	0.00	-0.69	12.46	1.08	-0.02	0.12
7. Provisions	24.04	-17.54	-42.18	30.80	-11.31	-8.58	-4.27	0.00	0.03	1.83	-1.34	-0.01	-0.65
8. Income Tax	4.17	0.03	0.72	0.07	-0.13	3.21	-1.32	0.01	-0.03	0.88	1.51	0.00	0.00
9. Net Profit (before Extraordinary Items) (item 6-7-8)	103.89	48.06	86.08	77.86	40.78	16.30	6.29	-0.01	-0.69	9.75	0.91	-0.01	0.77
10. Extraordinary Items	0.00	-0.34	-100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.34	0.00	0.00
11. Net Profit (Loss) (item 9+10)	103.89	47.72	84.96	77.86	40.78	16.30	6.29	-0.01	-0.69	9.75	0.57	-0.01	0.77

^{1/} One major foreign branch has changed accounting method in recording income of SWAPs transactions from gross to net amount. As a result, non-interest income and operating expense (fee and services expense) previously recorded in Q4/2002 were reversed, causing a significant decrease of both items in 2003.

Chart 10: Performance of FIs



2004 marked the third consecutive year that financial institutions were able to earn net profit (before extraordinary items); total net profits reached 100 billion baht, almost twice the level of the previous year. The main contributors included a decrease in interest expenses (-29.6%) and provisioning burden (-42.2%).

Thai banks took up more than 70 percent of the share in net profits, whereas stand-alone IBFs and credit foncier companies suffered a net loss due to a decrease in loan extension. Credit foncier companies faced the problem of high NPL and foreclosed assets and more intense competition from commercial banks and finance companies.

Factors contributing to continuing increase in financial institutions' **net interest income** were: strategic shift towards high-margin consumer loans; decrease in interest expense in a low interest rate environment; lower cost of fund from redemption and/or refinancing of costly innovative capital instruments (SLIPs/CAPs); and progress in debt restructuring. Net interest income was 186.2 billion baht in 2004 (+27.9% year-on-year), approaching the 1995 level.

Similarly, **interest rate spread** continued to increase, especially that of finance companies, with high-margin hire purchase loans picking up considerably in 2004.

Return on asset (ROA) of financial institutions reached 1.4 percent, marking the first year since the 1997 crisis that ROA was higher than 1 percent, after the previous peak of 1.6 percent in 1995.

Chart 11: Net Interest Margin

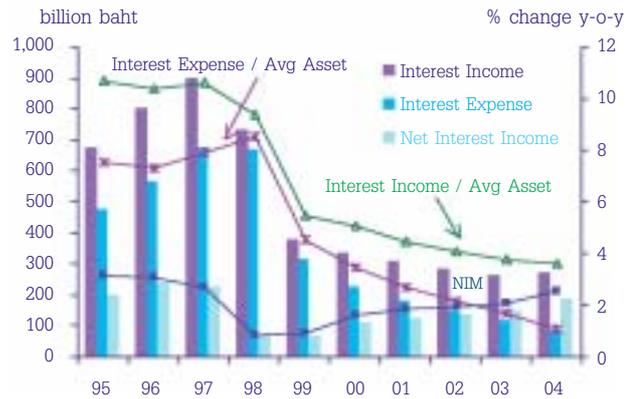


Chart 12: Spread

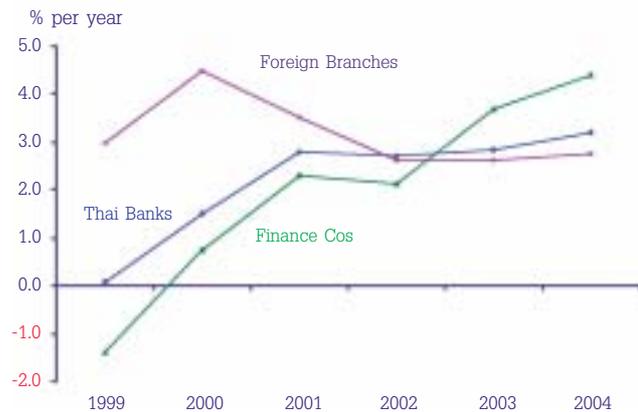


Chart 13: Performance

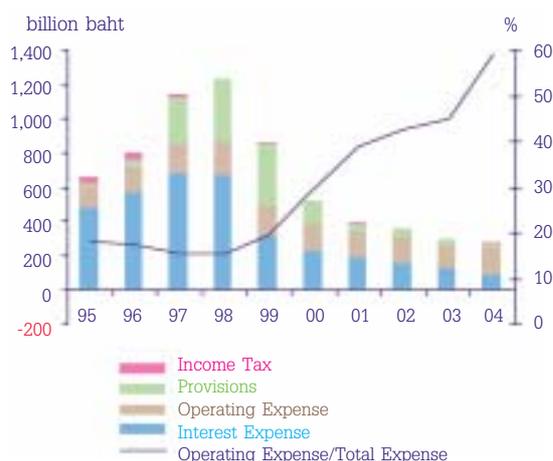


Chart 14: Non-interest Income



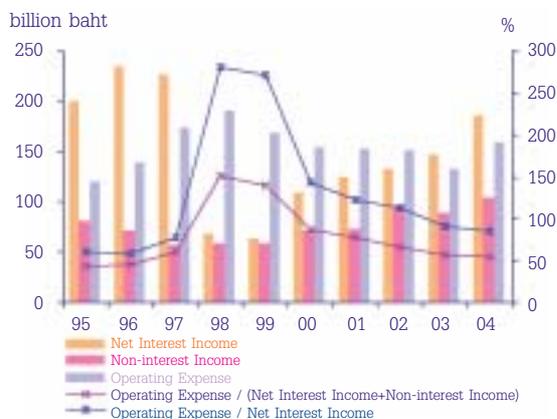
Since the financial crisis, non-interest income continued to account for a larger share of total income, rising from 10.6 percent in 1995 to 28 percent in 2004, while overall non-interest income increased by 16 billion baht from the previous year. Fee-based and services income, which accounted for almost half of non-interest income, increased significantly, whereas gains on investment/foreign exchange trading and profit from investment in subsidiaries and related companies decreased by 6.4 billion baht, owing to the uptrend in interest rate, stronger baht and subdued stock market.

Chart 15: Expense Structure



Operating expense has been a major expense for financial institutions since 2003, while other expenses such as interest expense, provisioning and tax burden continued to decline. The proportion of operating expense to total expense rose from 18.2 percent in 1995 to 58.9 percent in 2004. Almost one-third of all the operating expense was employee expense.

Chart 16: Operating Income and Expense



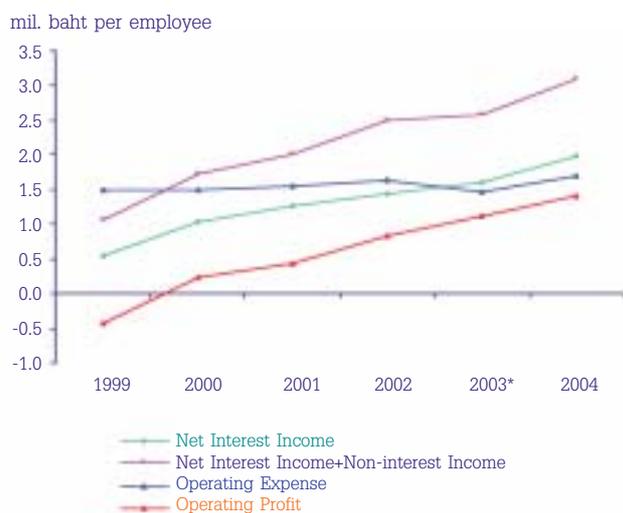
Since 2000, financial institutions have been able to manage net interest income and non-interest income to cover operating expense, especially in 2003 and 2004, when net interest income alone exceeded the operating expense.

2.2.2 Operating Efficiency

Overall operating efficiency of financial institutions continued to improve. The ratio of net interest income to average number of employees and the ratio of net interest income plus non-interest income to average number of employees increased from 0.6 and 1.1 million baht per person in 1999 to 2 and 3.1 million baht per person in 2004, respectively. This mainly resulted from marked improvement in management of net interest income. Operating expense per employee, however, rose slightly to 1.7 million baht as a result of the increase of employees to accommodate business and branch expansion.

Operating profit per employee of Thai banks improved from 1 million baht in 2003 to 1.3 million baht in 2004, which was still lower than that of foreign branches.

Chart 17: Employees' Efficiency



* One major foreign branch has changed accounting method in recording income of SWAPs transactions from gross to net amount. As a result, non-interest income and operating expense (fee and services expense) previously recorded in Q4/2002 were reversed, causing the significant decrease of both items in 2003.

Table 5: Employees' Efficiency by Type of Financial Institutions in 2004

(million baht per employee)

Financial Institutions	Net Interest income	Net Interest income & Non-Interest income	Operating expense	Operating profit
Thai Banks	1.87	2.77	1.50	1.27
Foreign Branches	3.64	8.59	5.76	2.83
Stand-alone IBFs	2.64	2.27	2.20	0.07
Finance Companies	2.90	4.82	1.94	2.88
Credit Foncier Companies	0.72	1.13	1.47	-0.33
Total Financial Institutions	1.99	3.10	1.69	1.41

2.2.3 Loan Portfolio and Provisioning

Table 6: Loans of Financial Institutions*

(billion baht)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Financial Institutions	5,204.6	6,020.1	6,485.8	5,771.6	5,135.5	4,251.7	4,064.6	4,757.7	4,970.4	5,386.9
% Δ yoy	22.8	15.7	7.7	-11.0	-11.0	-17.2	-4.4	17.1	4.5	8.4
Commercial Banks	3,967.3	4,597.6	5,967.3	5,317.8	4,952.2	4,113.9	3,898.9	4,582.7	4,748.6	5,105.1
% Δ yoy	21.0	15.9	29.8	-10.9	-6.9	-16.9	-5.2	17.5	3.6	7.5
Finance Companies	1,230.7	1,415.8	512.4	448.2	179.7	134.4	161.7	170.3	220.5	280.7
% Δ yoy	29.0	15.0	-63.8	-12.5	-59.9	-25.2	20.3	5.3	29.5	27.3
Credit Foncier Companies	6.6	6.7	6.1	5.6	3.6	3.3	3.9	4.7	1.3	1.1
% Δ yoy	10.3	2.4	-8.8	-8.8	-35.6	-7.8	17.6	20.6	-73.5	-13.8
Loans/GDP (%)	124.3	130.6	137.0	124.8	110.7	86.4	79.2	87.4	83.8	81.9

* According to Balance Sheet (excluding interbank loan and deferred revenue)

In 2004, domestic consumption and investment continued to drive the growth of the Thai economy, though at a slower pace than in 2003. The proportion of loans to economic growth (loans/GDP ratio) declined slightly from 2003, suggesting that a number of corporates have sought other cheaper sources of fund through stock and bond markets, retained earning, or other alternatives.

Nevertheless, business and consumer sector still relied on loans from financial institutions as the major source of fund. Loan outstanding rose to 5.4 trillion baht in 2004, representing a year-on-year increase of 8.4 percent, up from 4.5 percent in 2003.

Chart 18: Loans of Financial Institutions



Loan extension by commercial banks increased markedly in 2004, while that of finance companies increased at a slightly slower pace than last year. Loan extension by credit foncier companies, on the other hand, continued to decline since 2003 as a result of their limited scope of business and the burden of high non-performing assets and NPL.

Corporate Loan

Table 7: Corporate Loans of Commercial Banks*

billion baht

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Corporate Loans	3,373.1	3,972.4	5,251.5	4,807.0	4,637.3	4,140.1	3,858.0	4,142.7	4,123.1	4,429.7
% Δ yoy	15.1	17.8	32.2	-8.5	-3.5	-10.7	-6.8	7.4	-0.5	7.4
Manufacturing	959.7	1,188.7	1,833.2	1,577.3	1,535.9	1,322.8	1,163.5	1,234.1	1,229.4	1,442.6
% Δ yoy	19.6	23.9	54.2	-14.0	-2.6	-13.9	-12.0	6.1	-0.4	17.3
Commerce	1,025.8	1,191.2	1,420.0	1,191.8	1,153.4	925.9	796.8	896.6	858.5	909.3
% Δ yoy	14.7	16.1	19.2	-16.1	-3.2	-19.7	-13.9	12.5	-4.3	5.9
Services	316.6	372.5	452.0	439.8	412.3	330.4	293.1	316.7	346.3	413.3
% Δ yoy	13.2	17.7	21.3	-2.7	-6.2	-19.9	-11.3	8.0	9.3	19.4
Real Estate	381.8	418.3	475.0	507.0	521.4	349.6	248.6	260.3	269.9	293.0
% Δ yoy	2.9	9.5	13.6	6.7	2.8	-32.9	-28.9	4.7	3.7	8.6
Others	689.2	801.7	1,071.3	1,091.1	1,014.4	1,211.4	1,355.9	1,434.9	1,419.0	1,371.5
% Δ yoy	18.1	16.3	33.6	1.9	-7.0	19.4	11.9	5.8	-1.1	-3.3

* Including Interbank Loans

Chart 19: Corporate Loans of Commercial Banks



In 2004, commercial banks' corporate loan outstanding totaled 4.4 trillion baht, an accelerated growth rate of 7.4 percent compared to the slight decline in 2003. The majority of the loans went to the manufacturing, commerce, services, and real estate sectors.

Consumer Loan

Table 8: Consumer Loans of Commercial Banks

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Consumer Loans	506.9	603.3	644.7	672.2	533.6	500.1	508.1	589.8	708.6	816.4
% Δ yoy	10.1	19.0	6.9	4.3	-20.6	-6.3	1.6	16.1	20.1	15.2
Housing	370.4	432.6	454.2	417.8	383.8	361.2	356.0	400.5	474.0	544.7
% Δ yoy	24.3	16.8	5.0	-8.0	-8.1	-5.9	-1.4	12.5	18.4	14.9
Credit card *	32.8	40.9	45.5	45.0	33.6	32.6	41.0	57.1	76.2	93.2
% Δ yoy	na.	24.7	11.2	-1.1	-25.3	-3.0	25.8	39.2	33.5	22.3
Personal	103.7	129.8	145.0	209.4	116.2	106.3	111.0	132.3	158.4	178.5
% Δ yoy	na.	25.2	11.7	44.4	-44.5	-8.5	4.4	19.2	19.8	12.7

* Including Krungthai Card Pcl and Krungsriyudhya Card Co.

Chart 20: Consumer Loans of Commercial Banks



Although outstanding consumer loans rose to 816.4 billion baht in 2004, its year-on-year growth rate slowed from 20.1 percent in 2003 to 15.2 percent. Slower loan growth was observed in all components, namely, housing, credit card, and personal loan. This was partly attributed to the Bank of Thailand's regulation on loans to high-end property during the end of 2003 and the tightening of regulation on credit card business in early 2004.

Non-Performing Loan (NPL)

Chart 21: Non-Performing Loan

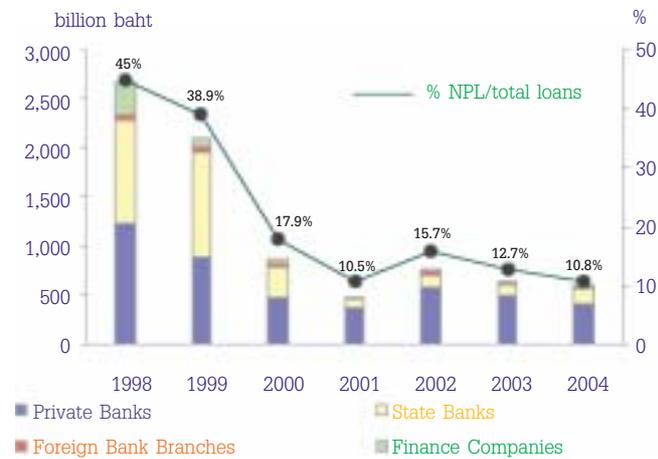
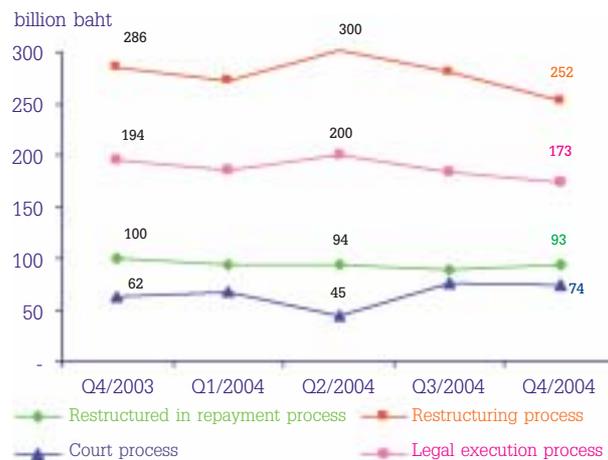
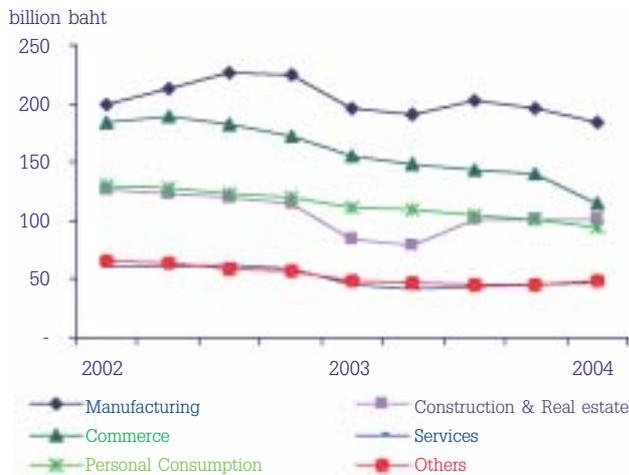


Chart 22: NPL Resolution by Category of Debtors



As of end-December 2004, aggregate NPL of commercial banks and finance companies declined further to 591.9 billion baht (10.8% of total loans) compared to 641.4 billion baht (12.7% of total loans) in 2003. The reduction in NPL resulted largely from the speeding up of debt restructuring, legal execution process, and debt write-offs. This was in line with the revised asset classification and provisioning requirement on NPL that have not been restructured or subject to legal actions (see more detail in Chapter 3). NPL in the court process and NPL sold out increased continuously since the third quarter of 2004. The Bank of Thailand's target NPL ratio of 4 percent in 2005 was based on the premise that the amendment to the AMC Act to facilitate the NPL transfer could be implemented in 2005.

Chart 23: NPL Outstanding Classified by Sectors

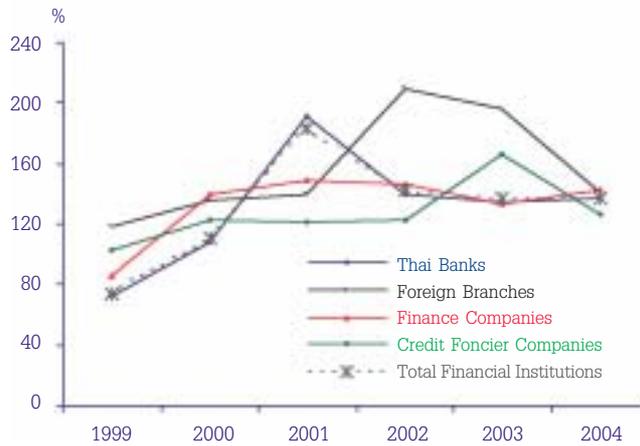


NPL outstanding has shown a downward trend in most economic sectors, except the construction and real estate sector. The largest NPL reduction was in commerce, personal consumption, and manufacturing sector, respectively.

Provisioning

All financial institutions set aside provision at a level higher than regulatory requirement, with the average actual to required provisioning ratio of 137.7 percent, a small increase from last year.

Chart 24: Actual Provisioning : Required Provisioning



The actual to required provisioning ratio of both Thai banks and finance companies increased slightly from 135 percent and 133.5 percent in 2003 to 137.3 percent and 142 percent, respectively. On the other hand, the actual to required provisioning ratio of branches of foreign banks decreased significantly from 197 percent to 141.3 percent, owing to the decrease in actual provision as a result of NPL sold out and to the increase in required provision.

2.2.4 Capital Fund

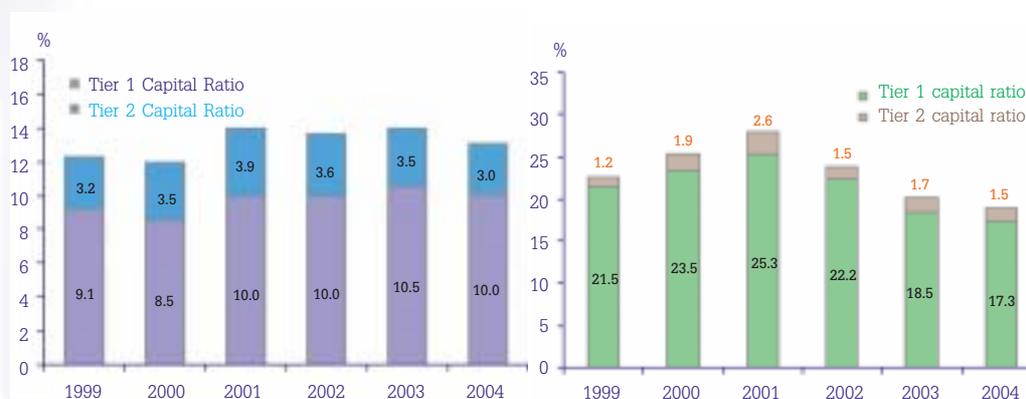
Table 9: Capital Adequacy of Financial Institutions as of December 2004

Financial Institutions	Capital Fund (billion baht)			BIS Ratio (%)		
	Tier - 1	Tier - 2	Total	Tier - 1	Tier - 2	Total
Thai Banks	397.2	147.4	544.6	9.0	3.4	12.4
Foreign Brnaches	91.1	-	91.1	19.6	-	19.6
Total Commercial Banks	488.3	147.4	635.7	10.0	3.0	13.0
Finance Companies	54.5	4.5	59.0	17.3	1.5	18.8
Credit Foncier Companies	0.7	-	0.7	48.5	-	48.5
Total Financial Institutions	543.4	151.9	695.4	10.5	2.9	13.4

As of December 2004, all financial institutions maintained capital adequacy ratio at the level higher than regulatory requirement. Although the average capital adequacy ratio decreased from 14.4 percent in 2003 to 13.4 percent as a result of the increase in risk-weighted asset from loan expansion, the quality of capital remained strong. Tier-1 capital ratio stood at 10.5 percent, and the ratio of Tier 1 capital to total capital was relatively high at 78.1 percent.

Capital fund of all financial institutions increased slightly from last year to 695.4 billion baht. The growth was attributed to improved operating performance, recapitalization of some financial institutions (one Thai bank, two finance companies, and one credit foncier company) in the amount of 3.3 billion baht, issuance of subordinated debt instrument of one Thai bank in the amount of 10 billion baht to accommodate business expansion, and capital injection of 19.5 billion baht from head office and other overseas branches.

Chart 25: BIS Ratio of Commercial Banks Chart 26 : BIS Ratio of Finance Companies



2.3 Progress of Debt Restructuring by Agencies other than Banks

Apart from banks, the key agencies responsible for expediting the process of debt restructuring are the Corporate Debt Restructuring Advisory Committee (CDRAC) and the Thai Asset Management Corporation (TAMC). The former was set up in 1998 as a facilitator or an independent intermediary in voluntary debt workouts with multiple creditors that are usually difficult to reach an agreement. Later CDRAC expanded its activity to small debtors who may not receive enough attention from banks. Such facilitation is possible even for cases in the court process and legal execution process. The latter was established in 2001 by the government to manage impaired assets transferred from financial institutions and private asset management companies, in addition to debt restructuring and business reorganization. The progress on debt restructuring of these two agencies is discussed below.

Since its inception, CDRAC has successfully restructured 11,469 cases with credits outstanding of 1,498.0 billion baht, accounting for 81 percent of all resolved cases. Of the 1,628 target debtors in 2004, CDRAC managed to resolve 1,323 cases, of which 549 cases with credits outstanding of 54.3 billion baht were successfully restructured. Incentive measures supporting debt restructuring were continued exemption of income tax, value-added tax, specific business tax, stamp duties and reduction of land transfer fee, amendment of regulation on legal execution process to boost an auction sale¹, and tightened provisioning policy for NPL that have long been pending without proper restructuring or legal actions. In addition to the target NPL debtors, CDRAC took a proactive role in facilitating/mediating and expediting debt restructuring process of performing debtors likely to face repayment problems with multiple creditors in the near future, provided that the debtors and all creditors entered the process on a voluntary basis. Looking to 2005, CDRAC will continue to resolve the remaining target cases, ensure proper oversight of NPL resolution by financial institutions, facilitate negotiation of cases in the court process and legal execution process, and closely coordinate with other relevant agencies, such as courts, the Legal Execution Department, and the Court Mediation Center to further expedite the debt restructuring process.

¹ The initial prices for the second auction set by the competent officer are lowered from 65 percent to 50 percent of the appraised value, while those for the first auction remain unchanged at 80 percent.



Similarly, TAMC had three successful years of operation since its inception in 2001 with its accumulative concluded cases worth 768.6 billion baht or 98.9 percent of the book value of all the assets acquired. The ratio of debtors that reached favorable conclusions (i.e. debt/business restructuring cases) compared to all the concluded book value increased from 49.9 percent in 2002 to 68.6 percent in 2004 and is expected to improve further to 80 percent in 2005. Such expectation rests on the TAMC's strategy to give debtors a chance to re-negotiate before executing legal proceedings in order to find the best acceptable solutions for all parties concerned. Moreover, TAMC succeeded in accelerating the execution of debt-restructuring agreements, resulting in an increase in cash received compared to the past few years. Specifically, TAMC's cash in hand as of December 2004 was 57.2 billion baht, a remarkable increase compared to cash received at the end of 2002 and 2003, at 5.7 and 29.5 billion baht, respectively. This excess cash allowed TAMC to redeem more than 40 billion baht of its promissory notes ahead of schedule, lessening TAMC's interest payment burden and contingent liabilities of the Financial Institutions Development Fund (FIDF), and contributing to a reduction of the country's public debt.

CHAPTER 3

SUPERVISORY REFORMS

3.1 Supervisory Guidelines

The supervisory guidelines issued in 2004 focused on strengthening financial institutions, increasing competition and protecting consumers based on market-oriented principles, good governance and proper risk management. To prompt banks to speed up the resolution of non-performing loans, the Bank of Thailand has tightened classification and provisioning regulation. Fit and proper criteria for banks' senior management were issued and enforcement action taken to enhance corporate governance. The Bank of Thailand continues to harness market forces and increase competition in the financial sector by allowing banks with appropriate risk management to engage in a wider scope of financial services such as hire purchase and leasing business, factoring, and trading of new derivatives products. As regards consumer protection, increased minimum monthly payment and limit on credit line, among other conditions, have been imposed in order to prevent the build-up of household debts and deter spending beyond the means of credit cardholders. To strengthen risk management practices, the Bank of Thailand has issued prudential policy on interest rate risk in the banking book and guidelines on operational risk management. Key supervisory guidelines implemented in 2004 are described in detail below by their associated risk categories, and a more comprehensive list is provided in the Appendix.

Credit Risk

- **Strengthening of asset classification and provisioning requirement**

To accelerate the resolution of non-performing loans, the Bank of Thailand revised asset classification and provisioning regulation by requiring that collateralized portion of loans classified as doubtful of loss be subject to incremental rate of provisioning based on the length of overdue period, unless the loans have been restructured or legal actions taken by financial institutions against the debtors. With regard to the asset classification, provisioning and write-off, financial institutions are free to use more stringent criteria than those prescribed

by the Bank of Thailand; however, they should follow the prudential procedures set by the Bank of Thailand to ensure that proper internal controls are in place.

● **Tightening of regulation on credit card business**

To protect public interest and forestall excessive spending by cardholders, the Bank of Thailand strengthened the regulation on conducting credit card business as follows:

1. Set clearer definition of basic and supplementary credit cards and qualifications of each type of cardholders.
2. Increase minimum monthly payment from no less than 5 percent to 10 percent of the outstanding debt and require a cancellation of credit cards that are delinquent for more than three months.
3. Require card issuers to comply with the Bank of Thailand's regulation when converting credit card debt into other forms of debt.
4. Set credit limit for each cardholder to no more than five times the average monthly income or cash flows in deposit accounts, effective immediately for new cardholders and from 1 January 2005 for existing cardholders.
5. Require that credit card issuers establish rules or procedures for their staff and external outsourcees when soliciting new cardholders or contacting existing cardholders to offer new types of lending.

Market Risk

● **Prudential policy on interest rate risk in banking book**

To ensure that financial institutions have in place an effective interest rate risk management system and adequate capital consistent with the scope, risk level and complexity of their activities, the Bank of Thailand issued a prudential policy on interest rate risk in banking book to all commercial banks (excluding IBFs), finance companies and credit foncier companies, which can be summarized as follows:

1. Roles and responsibilities of the board and senior management of financial institutions (FIs) are as follows:
 - (a) Approve business strategies and policies on interest rate risk management and delegate authorities to senior management to measure, control, monitor and report risks. The board should be regularly informed of interest rate risk exposure as part of the oversight and control of such risk in accordance with its guidance.

- (b) Ensure that interest rate risk management is adequate and commensurate with the level of risks and complexity of activities, and that risk limits, policies and procedures to control risks are established, with sufficient resources to control the risks.
- (c) Assign individuals or committees to manage interest rate risk and ensure that there is an appropriate separation of duties in key elements of the risk management process.

2. FIs must have appropriate policies and procedures in managing interest rate risk and engaging in new products. These policies should be in a written form and communicated throughout the institutions.

3. Risk measurement, monitoring and control functions:

- (a) FIs should measure interest rate risk, using Earning Approach and/or Economic Value of Equity Approach matching with the scope, volume and the complexity of their activities. Risk managers and the management should clearly understand the underlying assumptions of the measurement methods.
- (b) FIs should establish limits and procedures to control risks within the levels consistent with their internal policies.
- (c) FIs should measure potential loss under stress scenarios and take into account the stress testing results when establishing and reviewing their policies and limits for interest rate risk.
- (d) FIs should have effective information systems to measure, monitor, control, and report their risks. Reports must be provided on a timely basis to the bank's board of directors, senior management and, where appropriate, individual business line managers.

4. Internal controls:

FIs must have adequate internal controls on their interest rate risk management process. Internal control system includes regular independent reviews and evaluations of the effectiveness of interest rate risk management system.

5. Capital adequacy:

FIs should have capital commensurate with their level of interest rate risk.

6. Data compilation and related reports:

FIs must comply with data requirement and related reports as prescribed

by the Bank of Thailand. FIs should also have internal reports, assumptions and other documents used for the preparation of data and reports ready to be submitted to the Bank of Thailand upon request.

The prudential policy on interest rate risk in banking book is to be in effect from January 2006, and FIs have to submit related reports starting from the period ending June 2006.

Operational Risk

● Collection of operational loss data and guidelines on operational risk management

The Bank of Thailand issued a standard template for commercial banks to collect operational loss data in a systematic and centralised manner. This will ensure that banks and supervisors are better informed of the type and scale of operational risk banks are exposed to, thereby enabling them to manage operational risk more effectively. The information can also be used as a basis for operational risk capital calculation under the Basel II implementation.

In addition, guidelines on operational risk management were issued to raise awareness of the board of directors and senior management on the significance of operational risk, and gear toward a development of operational risk management system in commercial banks. The guidelines detail the roles and responsibilities of the board of directors and senior management in establishing appropriate risk management environment, system and processes to identify, assess, monitor, mitigate/control, and report risks, as well as to disclose information regarding the risk management system. The guidelines will assist commercial banks in developing an effective operational risk management framework and business continuity plan commensurate with banks' risk profile and sophistication, which will also be helpful for their preparation for the implementation of the New Basel Capital Accord.

● Criteria for appointing executive directors and senior management of a commercial bank

Recognizing the importance of corporate governance as a cornerstone of risk-based supervision, the Bank of Thailand pressed on with the effort to enhance governance practices in the Thai banking system. The new fit and proper criteria for banks' senior management prohibit commercial banks from appointing any person with specified attributes to the positions of Chairman of the Board of Directors, Chairman of the Executive Board, President or Senior Executive Vice President. Undesirable attributes are, for example, career

history that portends dishonesty, lack of ethics or professionalism, or failure to exercise due care in discharging their duties. This is to ensure that persons with key responsibilities in commercial banks are fit and proper and exhibit high ethical standard and professionalism in their conduct of duties. Should a bank have any doubt or reservation regarding a particular candidate, it may seek advice from the Bank of Thailand before the appointment. In the case that the Bank of Thailand deems a person in any such position not fit and proper, it may order the bank to rectify the situation or impose any conditions as deemed appropriate.

IT Risk

● Guidelines on prevention of ATM card fraud through the use of skimmers

For the benefit of ATM users, the Bank of Thailand issued guidelines on prevention of ATM card fraud through the use of skimmers, which had been used to steal customers' information from ATM terminals to create counterfeit cards. Banks were warned to take necessary security precautions in order to contain possible business impacts and losses arising from frauds, and to preserve customers' confidence in using electronic banking services.

3.2 Reforms to Accommodate Financial Institutions' Operations

Expansion of Business Scope

● Hire purchase and leasing business

To encourage commercial banks to offer more financial services and to provide working capital for small and medium enterprises, the Bank of Thailand has permitted commercial banks to engage in hire purchase and financial lease business of movable assets. Banks may also engage in the sale and lease back transactions, provided that the lessees are juristic persons and that the assets in the transactions are not personal cars. Banks that intend to engage in such business must have written business plans approved by their board of directors. The business plans should contain policies and procedures for business operations, as well as details of management system, risk management system, internal control system, and accounting system. In all, banks must have appropriate expertise, systems and personnel, and cooperate with the authorities with respect to the One Presence policy under the Financial Sector Master Plan.

● Factoring business

In supplementing hire purchase and leasing as an alternative source of fund for small and medium enterprises, the Bank of Thailand has allowed commercial banks to undertake the factoring business, provided that they have appropriate expertise, systems, and personnel. At the minimum, they must have written business plans and risk management procedures in place; arrange for written factoring contracts to cover such details as credit limit, methods used in calculation of interest rate and payments, with one copy delivered to and kept by customers; and inform their customers prior to changing interest rates, charges, and other expenses. Moreover, banks must comply with prudential requirements such as single lending limit, asset classification and provisioning, accounting procedures for the recognition of interest income, and maintenance of capital adequacy ratio, as well as cooperate with the authorities with respect to the One Presence policy under the Financial Sector Master Plan.

● Private repurchase agreement

To increase liquidity in the debt market and to promote secured inter-bank borrowing among financial institutions, which will reduce potential risk and increase flexibility of liquidity management by financial institutions, the Bank of Thailand has extended the scope of private repurchase transactions (private repo) of commercial banks both in terms of counterparties and instruments. Banks may lend/borrow in foreign currencies with non-residents and financial institutions with foreign exchange license; they may also borrow in Thai baht from all juristic persons resident in Thailand and non-residents who have outstanding baht-denominated debt instruments issued in Thailand.

In addition, the coverage of instruments that banks may repurchase has been expanded to include baht-denominated debt issued by international financial institutions, foreign governments, or financial institutions owned by foreign governments as prescribed by the Ministry of Finance, government bonds denominated in foreign currencies, and all debt instruments with credit rating of BBB or above. Such expansion of private repo business scope will also provide the Bank of Thailand with more choices of instruments to be used in conducting monetary policy.

● New derivatives products

To encourage development of the derivatives market in Thailand and provide additional investment and hedging alternatives, commercial banks with effective risk management system and sound risk management policies have been allowed to engage in

the following derivatives transactions, provided that they comply with the regulations on capital adequacy and large exposure:

- investment grade Collateralized Debt Obligation (CDO) within the framework set by the Bank of Thailand
- plain-vanilla commodity-linked derivatives transactions with customers who need a hedge against commodity price risks, with additional conditions that require banks to immediately and completely hedge themselves through back-to-back transactions with other counterparties or through other types of permitted commodity-linked derivatives contracts
- credit derivatives transactions that are referenced to portfolio of assets, namely, First to Default Swaps, First to Default Credit Linked Notes/Deposits, Proportionate CDS and Proportionate CLN/CLD²

In addition, the scope of business of deposits or borrowings with embedded derivatives has been extended to include deposits or borrowings whose returns are linked to indices or a portfolio of variables permitted by the Bank of Thailand and derivatives-embedded deposits/borrowings that give either counterparty the option to buy or sell foreign exchange at a pre-specified rate on the maturity date.

● **Electronic money business**

To support the development of technology and business, the Bank of Thailand has allowed commercial banks to provide electronic money services, subject to prior approval from the Bank of Thailand. Concurrently, the Bank of Thailand issued a policy guideline on supervision of electronic money services, which addresses the risks and effects of electronic money business, as well as supervisory guidelines on how the business should be conducted. The issues of concern include the effects on the financial system and payment system, related risks such as operational risk and liquidity risk, consumer protection, and money laundering issues.

3.3 Other Reforms

● **Regulation on electronic money business conducted by non-banks**

To promote safe and sound electronic money business conducted by non-banks and to protect public interest, the Bank of Thailand, in collaboration with the Ministry of Finance, has set rules, procedures, and conditions governing the conduct of electronic money business by non-banks. The guidelines include such issues as float management, fees,

² CDS = Credit Default Swaps; CLN = Credit Linked Notes; CLD = Credit Linked Deposits

technology security management, redemption of electronic money, consumer's information management, handling of consumers' complaints, accounting practices, and reporting requirements. Business entities intending to provide electronic money services have to seek approval from the Ministry of Finance by submitting application through the Bank of Thailand.

● Treasury center: new framework of corporate financial services

Recognizing the benefits of centralized fund management by non-banks for their group companies that are subsidiaries and affiliates, the Bank of Thailand, with the authorization of the Minister of Finance, issued the procedures and guidelines on the operations of a treasury center.

A treasury center must be a company registered in Thailand. Its scope of activities includes: 1) offering cross border payment services by purchasing foreign currency obligations and receipts from its group; 2) acting on behalf of the group in netting foreign currency obligations with counterparties overseas; 3) managing the group's liquidity; and 4) engaging in foreign exchange risk management with authorized financial institutions. Records of accounting entries and related documents between a treasury center and the group must be kept, and report on foreign exchange transactions must be submitted to the Bank of Thailand.

Through a treasury center, Thai and multi-national corporations in Thailand will benefit in several ways: 1) reduced payment and transaction costs through fewer transactions due to intra-clearing and netting with external parties; 2) reduced interest payments through cash pooling in liquidity management; and 3) increased companies' competitiveness by centralizing resources and financial functions of the group companies. Despite some impact on commercial banks' income from foreign exchange transactions, the overall financial market should benefit from the increased efficiency, increased volume of foreign exchange transactions in Thailand, and skill transfer from new participants, thereby enhancing the development of the Thai financial market in the medium and long term.

Eligible applicants can be any company registered in Thailand or overseas that have at least 3 subsidiaries or affiliates engaging in manufacturing and international trade business in Thailand, Vietnam or other neighboring countries. A request must be made to the Minister of Finance through the Bank of Thailand. If approved, the applicant must set up a new company in Thailand to operate as a sole treasury center for its group.

CHAPTER 4

FINANCIAL SECTOR MASTER PLAN

Endorsed by the Council of the Ministers in January 2004, the Financial Sector Master Plan (FSMP) sets the course for medium-term development of the Thai financial sector, based on three objectives: broadening access to financial services, increasing efficiency of the financial sector, and improving consumer protection. The implementation of the **first phase** during the first three years focuses on consolidating the current structure of the financial sector and enhancing operational efficiency of existing players. The **second phase** will be introduced after the implementation of the first phase and will entail the review and revision of FSMP and consideration on potential entry of new players and capital market development. (Background information on the FSMP can be found in Supervision Report 2003.)

The authorities have made substantial progress on the implementation of the first phase of the FSMP. In terms of **access** to financial services, the development plan for grass roots financial services is being drafted, while implementation of the pilot project on a business model appropriate for provision of financial services to the underserved customers on a commercial basis is underway. **Efficiency** in the banking sector is being improved from a rationalized structure and more robust regulatory framework. The former involves rationalization and consolidation of existing financial institutions, for which ten applications for upgrades have been approved. The latter involves strengthened regulations on risk management, good governance and increased flexibility in the conduct of business. As regards **consumer protection**, financial institutions are encouraged to have in place a clear procedure for handling customer complaints and transparent disclosure of information. Meanwhile, to increase market discipline and reduce moral hazard, the draft Deposit Insurance Act to set up a limited deposit guarantee system is reaching the final stages and being reviewed by the Office of the Council of State.

4.1 Implementation of the Financial Sector Master Plan

Box 1 and Box 2 provide a summary of progress on improving access to financial services and consumer protection. Updates on the process to rationalize the structure and roles of financial institutions and measures to increase efficiency of the financial sector are described below.

Box 1: Measures to Broaden Access to Financial Services

To close the gaps in financial services for low-income households, the Committee for Grass Roots Financial Services was established. The Committee chaired by the Minister of Finance comprises Governor of the Bank of Thailand and representatives from other related institutions, including NGOs and government organizations. The Committee set up a sub-committee consisting of public and private stakeholders to draft the Master Plan for Grass Roots Financial Services. Thus far, the sub-committee has completed its fieldwork research and is in the process of drafting the development plan for grass roots financial services.

In addition, following the seminar on “Financial Services for All: Business Models for the Underserved” in November 2003, a pilot project was proposed by Krung Thai Bank (KTB) to address the unfulfilled needs of potential customers. The pilot project entails an innovative business model that uses computer technology and software to facilitate commercial banks in serving Village Funds and Micro-finance Groups. As such, the Bank of Thailand in cooperation with KTB and the Bank for Agriculture and Agricultural Cooperatives (BAAC), the current leading service providers to Village Funds and Micro-finance Groups, aim to demonstrate that a computerized operation system can efficiently facilitate transactions between commercial service providers and low-income groups, while generating reasonable returns. The Procurement Committee is currently in the process of recruiting IT consultant(s) to implement the project, and the application software is expected to be ready for trial runs within seven months after the consultant has been selected. Once developed, the application software will be installed into workstations at sample Village Funds and Micro-finance Groups. After that, KTB and BAAC will be providing financial services via this new computerized channel. If successful, this business model can be replicated by other interested commercial banks to expand financial services to the underserved customers.

Box 2: Measures to Improve Consumer Protection

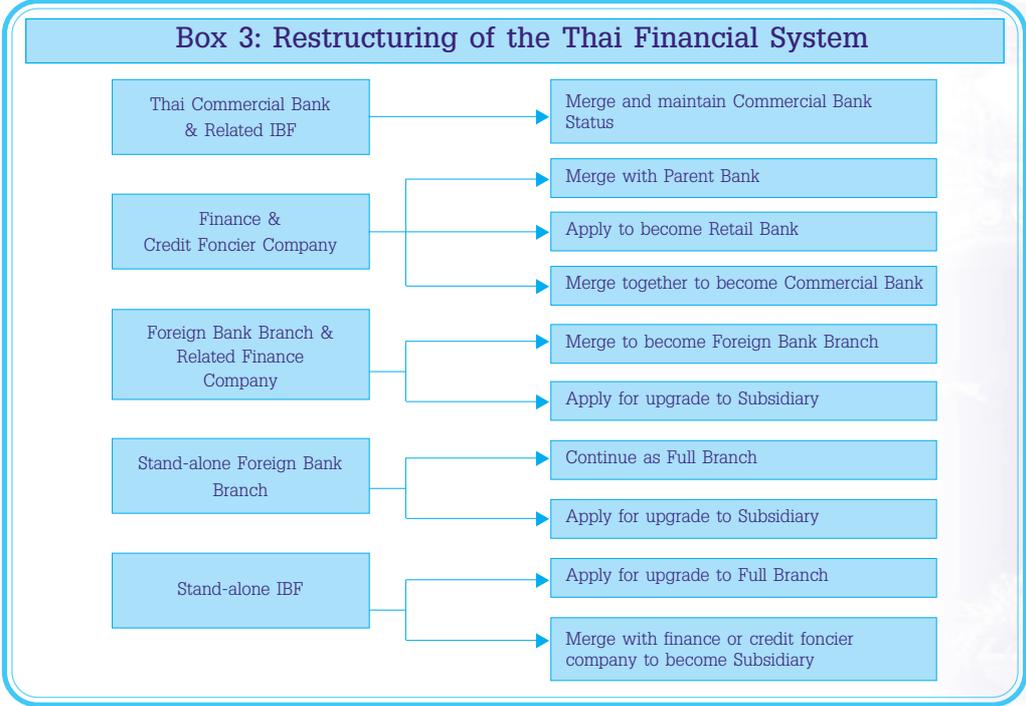
In promoting consumer protection, the Bank of Thailand has continued to support customer protection policy by encouraging a clear procedure for handling customer complaints within financial institutions, and clear and transparent information disclosure in line with international standards. As for the measure to replace the existing blanket guarantee, which essentially distorts the behavior of financial institutions and depositors, with a limited deposit insurance scheme, the government has announced the removal of its guarantee for creditors of financial institutions in November 2003. At present, the Council of Ministers has already approved the draft Deposit Insurance Act and has submitted it to the Office of the Council of State for final review.

Measures to Increase Efficiency of Financial Sector

The recommendations with regard to increasing efficiency of the financial sector involve two aspects. The first concerns the comprehensive reorganization of the financial institutions under the supervision of the Bank of Thailand. The second encompasses measures to improve financial infrastructure and the Bank of Thailand’s ongoing efforts to strengthen financial institutions and to foster market mechanisms.

1. Rationalizing Structure and Roles of Financial Institutions

The FSMP instituted a process to rationalize the types of financial institutions with a view to enhancing efficiency and stemming redundancy inherent in the existing structure, resulting in fewer players. In essence, there will be only two types of Thai financial institutions: commercial bank and retail bank, and two types of foreign financial institutions: foreign bank branch and subsidiary. Finance companies and credit foncier companies were allowed to upgrade to a retail bank, or merge and upgrade to become a commercial bank. The role of foreign-owned financial institutions was also enhanced through the introduction of a subsidiary license. Existing full branches could choose to upgrade to subsidiary, or merge with finance companies and upgrade to subsidiary. Stand-alone international banking facilities could choose to upgrade to full branch, or merge with finance and credit foncier companies and upgrade to subsidiary. This new licensing scheme offered existing financial institutions an opportunity to restructure their organizations to fit into the evolving financial landscape as depicted in Box 3.



Distinction in the scope of business between commercial banks, finance companies, and credit foncier companies was removed, making it redundant to have different types of financial institutions within the same group. In fact, to reap full benefits from the economy of scale and elimination of duplicate functions, there need to be only one type of deposit-taking institution in a financial conglomerate (One Presence policy). Finance or credit foncier companies that have not applied for bank licenses may continue to function as finance or credit foncier companies, or return their licenses and become credit institutions. Nevertheless, they will face tougher competition from commercial banks with lower cost of fund, especially in leasing and hire purchase, among other businesses previously disallowed for commercial banks.

● Approval procedures and evaluation criteria

Upon receiving the applications for all types of license and the plans to merge with related financial institutions, the Bank of Thailand had to verify the documents and forwarded them to the Committee to Review Application to Establish a Commercial Bank in accordance with the Financial Sector Master Plan (the Committee)³. After reviewing the applications, the Committee submitted their recommendations to the Minister of Finance to make the final decision.

The evaluation of financial institutions seeking upgrades contained two parts. The first part concerned the assessment of the financial institution's eligibility to apply for a bank license, covering both quantitative criteria such as capital, NPL and provisioning and qualitative criteria such as corporate governance, role of the board of directors and senior management, risk management, internal control and audit, compliance with laws and regulations, and cooperation with the authorities. The second part entailed the assessment of the financial institution's business plan upon receiving the commercial bank license in order to gauge its readiness to become a bank.

● Summary of the Minister of Finance's approval

Of the 40 applications submitted, four were for commercial bank license, seven for retail bank license, one for subsidiary license, two for full branch license, and 26 for mergers in accordance with the One Presence policy. As at 30 April 2005, the Minister of Finance's approval for the upgrade is shown below.

³ The Committee consists of 1) Governor of the Bank of Thailand (Chairman), 2) Director General, Fiscal Policy Office, the Ministry of Finance, 3) Secretary General, Securities and Exchange Commission, 4) Director General, Department of Insurance, Ministry of Commerce, 5) Deputy Governor, Financial Institutions Stability, Bank of Thailand, 6) Deputy Governor, Monetary Stability, Bank of Thailand, and 7) outside expert, with Assistant Governor, Financial Institutions Policy Group, the Bank of Thailand as a Committee Secretary.

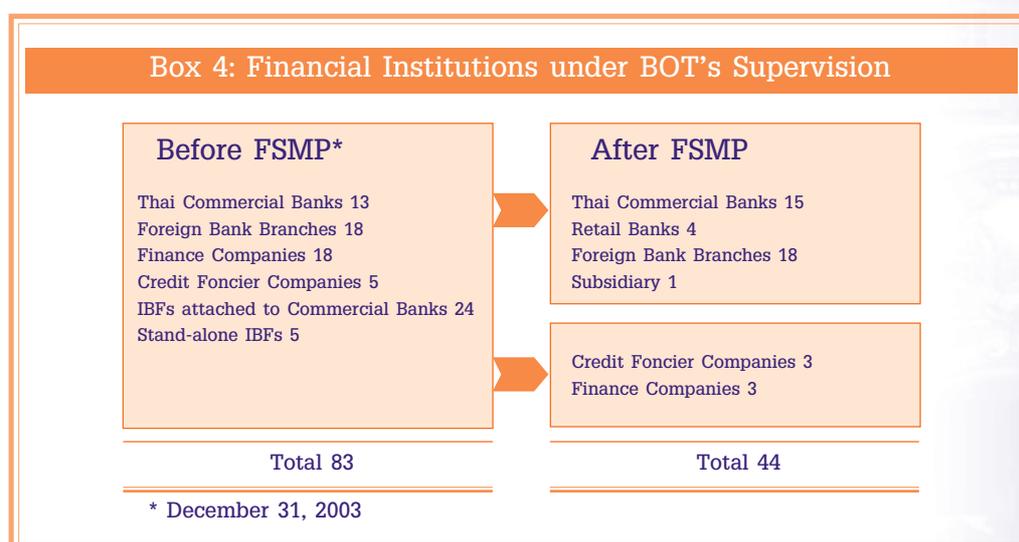
Thai Financial Institutions

	<u>Types of License</u>
1. TISCO Finance PCL merged with Thai Permsap Finance Co. Ltd.	Commercial Bank
2. Kiatnakin Finance PCL merged with Radhanatun Finance PCL	Commercial Bank
3. Asia Credit PCL merged with Bualuang Finance Co. Ltd.	Commercial Bank
4. Thai Keha Credit Foncier Co. Ltd.	Retail Bank
5. Land and Houses Credit Foncier Co. Ltd. merged with Book Club Finance PCL	Retail Bank

Foreign Financial Institutions

6. GE Money Finance PCL	Retail Bank
7. AIG Finance (Thailand) PCL	Retail Bank
8. Societe Generale International Banking Facility	Full Branch
9. UFJ International Banking Facility	Full Branch
10. The International Commercial Bank of China	Subsidiary

As a result of the rationalization process, the number of financial institutions under the supervision of the Bank of Thailand will reduce from 83 at the end of 2003 (before FSMP) to 44 as summarized in Box 4.



2. Fostering a More Robust Regulatory Framework

In addition to the reorganization of the financial institutions under the supervision of the Bank of Thailand, the authorities continued to enhance the regulatory framework to accommodate the new financial structure through various initiatives.

Infrastructure of the financial sector remains a cornerstone of an efficient and competitive financial system. The enactment of the new Financial Institutions Businesses Act, which will empower the Bank of Thailand to supervise financial institutions on a consolidated basis, will be critical in supporting the implementation of the FSMP and upgrading the supervisory regime to international best practice. Enacted since March 2003, the Credit Bureau Act is being amended for refinement on several key issues, and is pending consideration by the Parliament. Moreover, tax impediments to mergers and acquisitions were removed, while the regulations impeding financial sector efficiency such as branch opening requirements relaxed.

At the same time, financial institutions have been strengthened through enhancement of risk management capability, good governance, flexibility in conducting business, as well as the use of alternative business models such as IT outsourcing and back office sharing. With respect to risk management, the Bank of Thailand is in the process of preparing the consultative papers on the New Basel Capital Accord for comments by financial institutions, together with a notification concerning the collection of default data in preparation for the implementation of the New Capital Accord. With regard to improving corporate governance standard, the Bank of Thailand issued a notification in July 2004 to set the fit and proper criteria for directors and senior management of financial institutions. The guidelines were subsequently used to vet the qualifications of directors and senior management within the upgrading plans submitted by financial institutions under the FSMP.

Finally, market mechanisms will be further enhanced through establishment of a clear exit procedure and further development of the capital market. The Bank of Thailand is undertaking comparative studies in order to establish a trigger point and measures to provide orderly exit for troubled financial institutions, as well as streamlining regulations relevant to financial institutions' roles in the development of the capital market.

4.2 Implications of the Financial Sector Master Plan

The implementation of the first phase of the FSMP is bringing about a vital structural change in the banking sector, with more industry consolidation and stronger presence of financial conglomerates based on the “One Presence” principle and expansion of business scope for financial institutions. Cost cutting and income enhancement are no longer limited to reorganization and re-engineering within the same organization. Now, financial institutions with strategic move for growth will be able to reap the benefits from the economies of scale and scope through consolidation or forming a financial group without tax impediments or other regulatory obstacles hindering the process. Alternatively, they may choose to specialize in providing services in some niche markets. In the periods ahead, their ability to thrive amidst these challenges will hinge upon the commitment of the board of directors and senior management and their ability to articulate and implement a strategic plan to integrate their operations, streamline various business processes and compete in their areas of comparative advantage.

CHAPTER 5

SUPERVISION OUTLOOK

In light of the changing financial landscape brought by the implementation of the Financial Sector Master Plan and the advent of various **international standards**, it is imperative that the Bank of Thailand strengthen prudential guidelines and supervisory process to face these **challenges**. Several regulations were issued in 2004 to solidify the financial institutions system with the emphasis on good governance, risk management and market principles. In parallel, the Bank of Thailand has revised the **off-site monitoring and analysis manual** for a more proactive risk-based supervision, incorporating key issues of the supervisory review process under the New Capital Accord. The manual provides comprehensive standardized guidelines to off-site supervisors for key supervisory concerns to ensure consistency and high standard of analysis across supervisors. Stronger linkage of off-site monitoring to the on-site examination will further enhance the supervisory process that should contribute to an environment conducive to safe and sound practices in the banking system.

Among the most eminent international banking standards is the **New Basel Capital Accord (Basel II)** introduced in June 2004 by the Basel Committee on Banking Supervision. The Basel II is being adopted worldwide since its framework comprehensively gauges capital requirement commensurate with risks inherent in individual financial institutions, while providing options of approach dependent on their risk management capacity. In August 2004, the Bank of Thailand announced the Basel II implementation plan to commence the simple approaches at the end of 2008 and the more advanced ones at the end of 2009. The Bank of Thailand's preparation entails issuance of consultative papers and prudential guidelines in consultation with the industry, as well as other technical groundwork such as development of supervisory review procedures, the database of risk-based supervision and a framework for cross-border cooperation with foreign supervisors. Moreover, the implementation of **International Accounting Standard 39 (IAS 39)**, one of the most crucial accounting rules to financial institutions in terms of recognition and measurements of financial instruments, will reflect more accurate financial positions of financial institutions. The Federation of Accounting Professions (FAP) plans to analyze and issue the IAS 39 in phases due to its complexity, while the Bank of Thailand will ensure that prudential regulations are consistent with the IAS 39 and subject to thorough impact assessment prior to enforcement.

The assessment of financial system can be systematically and comprehensively carried out through the **Financial Sector Assessment Program (FSAP)**. Using various tools such as stress testing and analysis of observance of standards and codes, the FSAP helps identify strengths and weaknesses of the financial system as well as prioritize the development needs. Significant progress has been made towards the preparation for the FSAP participation, particularly key modules of the Reports on the Observance of Standards and Codes (ROSCs) and stress testing. The authorities are committed to carrying out reforms and action plans to fill supervisory gaps and correct other infrastructure deficiencies to achieve the overriding objective of boosting the resilience of the Thai financial system independent of the FSAP participation.

Against this background, it is essential that financial institutions carefully adopt a comprehensive business strategy, upgrade risk management capacity and improve overall efficiency in order to cope with the changing financial landscape and more intense competition in the periods ahead.

5.1 Off-site Monitoring and Analysis Manual

As part of the ongoing enhancements to its risk-based supervisory framework, the Bank of Thailand has revised the off-site monitoring and analysis manual, which is used as the basis to conduct ongoing, quarterly supervisory risk assessments. The revised manual incorporates the key elements of the supervisory review process under the Basel II capital framework (Pillar II), with a heavy emphasis placed on linking capital adequacy and supervisory actions with an institution's overall risk profile. One of the principal aims of the off-site manual is to make the best practices analytical "know-how" explicit and transparent for all supervisory colleagues.

Standardization of risk analysis process

The new off-site manual provides structured guidance to the risk analysis process, while prompting supervisory staff to think analytically and to exercise sound professional judgment. The cornerstone of the manual is the development of practical guidelines - on credit, market, liquidity, operational, and strategic risks as well as earnings and capital - that are based on international best practices, but tailored for the Thai context.

While standardized ratios for all key risks are provided as a starting point to facilitate analysis, off-site examiners are required to contextualize these analytical indicators based on the bank's business strategy, balance sheet structure, and other qualitative factors, in order to make valid interpretations and to arrive at proper risk assessments. The use of a structured and well-documented approach to risk analysis will enhance the quality and consistency of off-site risk assessments.

Supervisory planning

The results of the quarterly off-site analysis provide an important input into the timing and focus of on-site examinations. Therefore, more comprehensive off-site risk assessments will allow the Bank of Thailand to tailor its on-site supervisory program on those functional activities that pose the greatest risks for a financial institution at any point in time. In addition, the new approach to off-site supervision will enhance the Bank of Thailand's ability to better allocate and match staff expertise with the requisite skill sets needed to properly assess an institution's risk profile during the on-site examination process.

5.2 The New Basel Capital Accord

After six years of painstaking work, the Basel Committee on Banking Supervision issued the New Basel Capital Accord (Basel II) in June 2004. A revision of the 1988 Capital Accord, the Basel II framework aims to further strengthen the soundness and stability of the international banking system, while aligning with the industry practice of risk management. The new framework comprises three pillars; namely, minimum capital requirement, supervisory review, and market discipline.

The first pillar requires banks to maintain minimum capital for operational risk, in addition to credit risk required under the 1988 Accord and market risk under the 1996 Accord. This new framework provides banks with more options and flexibility in terms of approaches in calculating capital requirement to ensure that the approach adopted reflect the underlying risk involved in business activities and the sophistication of an individual bank's risk management. **The second pillar** is introduced to ensure that banks have adequate capital to support all other material risks in their business, not covered under the first pillar (e.g. interest rate risk in the banking book, reputational and strategic risks), as well as to encourage banks to develop and use better risk management techniques. **The third pillar** aims to encourage market discipline by requiring banks to disclose to market participants a set of key information on the scope of business, capital risk exposure, risk assessment processes, and hence the capital adequacy of the institutions.

Preparation for Pillar I (Minimum Capital Requirement)

As part of the ongoing preparation for the implementation of Basel II, in August 2004, the Bank of Thailand announced the Basel II implementation plan to the Thai Bankers' Association, the Foreign Banks' Association and the Association of Finance Companies. With respect to Pillar I, the minimum capital requirement, the Bank of Thailand intends to make available all the approaches to commercial and retail banks, namely, the Standardized

Approach (SA), Foundation Internal Ratings-Based Approach (FIRB), and Advanced Internal Ratings-Based Approach (AIRB) for credit risk, and Basic Indicator Approach (BIA), Standardized Approach (SA) and Advanced Measurement Approach (AMA) for operational risk. The SA is required as a minimum for operational risk when banks start using the IRB Approach for credit risk. The Basel II capital charge is expected to commence at the end of 2008 for the simple approaches (SA and FIRB), and at the end of 2009 for the more advanced ones (AIRB and AMA). Starting in December 2007, banks that intend to adopt SA and FIRB will be required to run one-year parallel calculation, while those intending to adopt AIRB and AMA two-year parallel calculation. All banks are encouraged to upgrade their risk management capacity and ultimately move to IRB whenever their minimum IRB requirements are met.

The Bank of Thailand’s work plan for Basel II implementation in the short run includes release of a series of consultative papers with specific policies and guidelines for comment from the industry and public hearing, continual bilateral dialogue with commercial banks to ensure their readiness to adopt the Basel II, and intensive training programs for supervisors.

Table 10: Basel II Implementation Timeframe

Year	Description
2005	The BOT is to issue a series of consultative papers and conduct an industry hearing before finalizing the Basel II framework
June 2006	Banks to submit Basel II implementation plans for approval
Year end 2007	Begin parallel calculation of Basel I & Basel II: one year for simple approaches and two years for advanced approaches
Year end 2008	Begin new Basel II capital charge (SA, FIRB) and continue parallel calculation (Advanced Internal Ratings-based Approach (AIRB), Advanced Measurement Approach (AMA))
Year end 2009	Begin new Basel II capital charge (AIRB, AMA)

Preparation for Pillar II (Supervisory Review Process)

Since the beginning of 2004, the Bank of Thailand has prepared for implementation of Pillar II or the supervisory review process. The plan includes preparation for the required infrastructure, data, and risk management systems, on the part of both banks and supervisors.

To build a robust system and efficient risk-based supervision in compliance with the Pillar II framework, the Bank of Thailand plans to:

- develop supervisory review procedures for internal capital adequacy assessment of banks to ensure that banks’ measurement systems and controls can accommodate capital

calculation in accordance with the BOT's guidelines;

- develop supervisory review procedures to assess various risks not included in Pillar I such as credit concentration risk, interest rate risk in the banking book, strategic risk, legal risk, documentation risk, and liquidity risk;

- develop evaluation procedures to ensure accuracy and reliability of banks' internal models used in the calculation of capital requirement for credit risk, market risk, and operational risk;

- build up knowledge and capability, especially on the technical aspects to ensure effective supervision under the Basel II framework;

- develop database of risk-based supervision that incorporates the necessary data for a financial system stress test, Basel II Implementation, and on-site and off-site supervision; and

- establish a framework for cross-border cooperation among supervisors to ensure proper coverage and effective cross-border supervision of international banking groups.

Another important part of the preparation for the Pillar II implementation is the development of prudential guidelines to enhance banks' risk management. In this respect, the Bank of Thailand has issued five prudential guidelines to help banks in developing or improving their risk management system to be in line with the internationally sound practices, namely, prudential guidelines on internal rating system, credit risk management for loan portfolio, credit scoring, risk model validation, and credit and market risk stress testing.

Preparation for Pillar III (Market Discipline)

As regards work on Pillar III, the Bank of Thailand plans to release relevant guidelines in 2006 after issuance of the last guidelines on capital requirements under Pillar I and Pillar II by the end of 2005. The guidelines on Pillar III will lay down frameworks for disclosure of key information that is necessary for the public to enforce market discipline, a supplementary means of regulating financial institutions. The disclosed information should be consistent with information used by banks for their risk management and that provided to senior management and boards of directors, and should cover, at the minimum, capital assigned for each category of risk, quantitative risk of each loan portfolio and risk assessment methodology. In the meantime, the Bank of Thailand already has in place requirements for banks to disclose information that has material effects on their financial conditions such as regulatory capital, loans and accrued interest receivables, provisioning and off-balance sheet items. Moreover, they are encouraged to disclose other information required by Thai Accounting Standards, for example, TAS 47 on related-party disclosure.

5.3 International Accounting Standard 39 - Financial Instruments: Recognition and Measurement

Since its first issuance in 1998, the International Accounting Standard 39 - Financial Instruments: Recognition and Measurement (IAS 39) is considered one of the most important accounting standards for financial institutions. It radically changes the accounting principles for recognition and measurement of all financial instruments that are the main transactions of financial institutions. IAS 39 covers key issues such as fair value accounting, derecognition and impairment of financial assets, accounting for derivatives, and hedge accounting.

As the supervisor of deposit-taking financial institutions, the Bank of Thailand has assessed the implications of IAS 39 for financial institutions' operations and the Bank of Thailand's supervisory functions. The application of IAS 39, especially the fair value accounting and impairment of financial assets, will directly affect the reporting of financial institutions' balance sheets and profit and loss accounts. As regards supervisory functions, the Bank of Thailand has to ensure consistency of the existing or upcoming prudential measures with IAS 39.

The Federation of Accounting Professions, Thailand (FAP) has the responsibility to establish the Thai Accounting Standards (TAS), most of which are in line with the international accounting standards (IAS). The Bank of Thailand is represented in the FAP's Thai Accounting Standards Committee and maintains close cooperation with FAP. Due to the IAS 39's complexity, FAP has taken a step-by-step approach in analyzing each part of the IAS 39 and issuing draft guidelines on various issues such as transferring of financial assets, repurchase agreement, security borrowing and lending, securitization, derivatives, and embedded derivatives.

Furthermore, the Bank of Thailand is in the process of further assessing the impacts of applying IAS 39 to financial institutions in the areas of loan accounting and debt restructuring, accounting for investment, hedge accounting and embedded derivatives, and capital adequacy requirement.

5.4 Financial Sector Assessment Program (FSAP) and Reports on the Observance of Standards and Codes (ROSCs)

The Financial Sector Assessment Program (FSAP), a joint project initiated by the IMF and World Bank, is designed to comprehensively assess strengths and weaknesses of the financial sector of individual countries with a view to fostering financial sector development and efficiency. Embodying a framework for financial stability analysis, the FSAP comprises three main aspects, namely, assessment of financial system vulnerabilities, assessment of financial sector's compliance with international standards and codes, and identification of

follow-up measures to address gaps in institutional and regulatory framework. The FSAP makes use of both qualitative and quantitative analytical tools such as macro-prudential analysis, Financial Soundness Indicators (FSIs), stress testing and the analysis of observance of the relevant standards and codes. Participation in the benchmarking exercise of Reports on Observance of Standards and Codes (ROSCs)⁴ typically covers-although not necessarily all of them in every FSAP-the following ROSC modules: anti-money laundering and countering the financing of terrorism, banking supervision, insurance supervision, monetary and financial policy transparency, payment systems, and securities regulation. Specific standards and codes included in the FSAP may differ from country to country, depending on the relevance and significance to its financial system. The ROSC exercise can also be taken as a stand-alone, i.e. separate from the comprehensive assessment of the FSAP.

Thailand is contemplating participation in the FSAP program, as well as some stand-alone ROSCs, in the near future. Substantial preparatory groundwork has already been in progress, especially those involving self-assessment exercises in banking supervision, insurance supervision, securities regulation, payment systems, and monetary and financial policy transparency. In particular, self-assessment of the Basel Core Principles for Effective Banking Supervision was completed, and actions plans necessary for compliance with the international standard will be implemented within 2005. To enhance transparency in the conduct of financial policy, the Bank of Thailand has been working on self-assessment of ROSC Financial Policy Transparency in banking supervision aspect and coordinating with relevant agencies for other financial aspects such as securities and insurance. In parallel, technical assistance projects have been implemented to ensure that the basic prerequisites to FSAP/ROSC are in place and any remedial actions to other known deficiencies are objectively identified and taken. A timeframe has been set for a decision as to what extent Thailand should participate in the FSAP/ROSC program. Regardless of Thailand's formal participation in part or all of the FSAP/ROSC program, the authorities will continue with the own benchmarking exercises, working closely with other stakeholders to strive for a safe and sound financial system.

⁴ Designed by many standard-setting bodies such as the IMF, World Bank, and Organization for Economic Cooperation and Development (OECD), the ROSC assesses the extent to which a country observes certain international standards and codes, which are benchmarks of good practices in key policy areas. The standards set up so far cover 12 modules, namely, accounting, auditing, anti-money laundering and countering the financing of terrorism, banking supervision, corporate governance, data dissemination, fiscal transparency, insolvency and creditor rights, insurance supervision, monetary and financial policy transparency, payment systems, and securities regulation.

5.5 Stress Testing

Stress testing, one of the key components of the Financial Sector Assessment Program (FSAP), is an analysis of the resilience of the financial system to exceptional but plausible shocks. Stress testing augments the assessment of risks and vulnerabilities arising from macro-financial linkages, and therefore provides a supplementary tool to assess financial system stability. In particular, stress testing is used in conjunction with Financial Soundness Indicators (FSIs) to identify risks and vulnerabilities of the financial system. Such quantitative analysis, in turn, can complement information from assessments of financial sector supervision, providing a comprehensive framework for financial stability analysis.

Thailand's Approaches to FSAP Stress Test

A working group consisting of commercial banks, specialized financial institutions, and the Bank of Thailand was established to oversee the preparation of the stress testing exercise. This exercise focuses on market and credit risk exposures since they make up the majority of risk exposures of the financial institutions. A sensitivity analysis will be applied for market risk stress testing, and the scenario analysis for credit risk stress testing⁵. Nevertheless, for the actual FSAP exercise, the applying methodology, data requirements, and scenarios will be jointly determined by the authorities and the FSAP mission.

For **credit risk** stress testing, a historical method is used to formulate the stress scenario. First, key macroeconomic and financial variables contributing to the recent Asian financial crisis are carefully analyzed and selected⁶. Then the level of shocks for each variable is set by using the largest movement between 1997-1999 that can potentially represent a stress scenario. Each financial institution will assess the impact of the stress scenario and estimate the increase of credit losses in its entire portfolio, the results of which will be submitted to the Bank of Thailand for the aggregation of the overall impact to the banking system.

For **market risk** stress testing, each financial institution will apply a number of single factor movements to its trading book and assess the impact on its profitability and capital adequacy. Factors of interest are, for example, the government bond yield, USD/baht exchange rate, and SET index.

⁵ A sensitivity analysis examines the impact of change in risk factors, one at a time, whereas scenario analysis examines the impact of simultaneous changes in a group of risk factors on the portfolio.

⁶ Selected variables are GDP growth, growth by sector, exchange rate, interest rate, stock index, oil price, government yield, property price, and unemployment rate.

APPENDIX

LIST OF MAJOR POLICY ANNOUNCEMENTS 2004*

1. Increase Flexibility in Business Scope and Business Model

1.1 Commercial banks are allowed to engage in hire purchase and financial lease businesses in movable assets. They may also engage in the sale and lease back transactions, provided that the lessees are juristic persons and that the assets in the transactions are not personal cars. Banks intending to engage in these businesses should have appropriate policy, expertise, systems, and personnel, and must cooperate with the authorities with respect to the One Presence policy under the Financial Sector Master Plan.

1.2 Commercial banks are permitted to undertake the factoring business provided that they have appropriate expertise, systems, and personnel, and cooperate with the authorities with respect to the One Presence policy under the Financial Sector Master Plan.

1.3 Commercial banks are allowed to engage in the following derivatives transactions given that sound risk management policies and effective risk management system are in place:

- investment-grade collateralized debt obligation (CDO) within the framework set by the Bank of Thailand;
- plain-vanilla commodity-linked derivatives transactions with customers who need a hedge against commodity price risks, provided that banks' position as a result of providing the services is immediately and completely hedged through back-to-back transactions; and
- credit derivatives transactions that are referenced to portfolio of assets, namely, First to Default Swaps, First to Default Credit Linked Notes/Deposits, Proportionate CDS and Proportionate CLN/CLD**.

* For a complete list of policies, please visit the Bank of Thailand's website at www.bot.or.th

** CDS = Credit Default Swaps; CLN = Credit Linked Notes; CLD = Credit Linked Deposits

1.4 Commercial banks can provide electronic money services after receiving an approval from the Bank of Thailand.

1.5 The scope of private repurchase transactions (private repo) of commercial banks was extended both in terms of counterparties and instruments. Banks may lend or borrow in foreign currencies with non-residents and financial institutions with foreign exchange license and borrow in Thai baht from all juristic persons resident in Thailand and non-residents who have outstanding baht-denominated debt instruments issued in Thailand. Instruments that can be repurchased have been expanded to include baht-denominated debt issued by international financial institutions, foreign governments, or financial institutions owned by foreign governments as prescribed by the Ministry of Finance; government bonds denominated in foreign currencies; and all debt instruments with credit rating of BBB or above.

1.6 The scope of business related to the deposits or borrowings with embedded derivatives is extended to include those whose returns are linked to financial indices or a portfolio of variables permitted by the Bank of Thailand as well as derivatives-embedded deposits or borrowings that give either counterparty the option to buy or sell foreign exchange at a pre-specified rate on the maturity date.

1.7 The requirements on finance companies, finance and securities companies, and credit foncier companies to dispose under-utilized office space have been relaxed in order to provide them with greater flexibility in managing the lease of such property.

2. Financial Institutions Prudential Policies

2.1 The prudential policy on interest rate risk in the banking book was issued, covering the following aspects:

- (1) Roles and responsibilities of the board and senior management
- (2) Interest rate risk management policies and procedures
- (3) Risk measurement, monitoring and control functions
- (4) Internal controls
- (5) Capital adequacy
- (6) Data compilation and related reports.

Financial institutions must comply with the policy as from January 2006 and must submit related reports starting from the period ending June 2006.

2.2 Fit and proper criteria for banks' senior management was released, for which commercial banks are prohibited from appointing any person with specified attributes to the positions of executive directors or senior management. Should a commercial bank have any doubt or reservation regarding a particular candidate, it may seek advice from the Bank of Thailand before the appointment. In the case that the Bank of Thailand deems a person in any such position not fit and proper, the Bank of Thailand may order the bank to rectify the situation or impose any conditions as deemed appropriate.

2.3 A standard template was distributed to commercial banks and foreign bank branches for collection of operational loss data in a systematic and centralized manner. Guidelines on operational risk management were also issued to raise awareness of the bank's board of directors and senior management and to improve operational risk management discipline of commercial banks.

2.4 The guidelines on prevention of the ATM card fraud through the use of skimmers were announced.

2.5 The asset classification and provisioning regulation was strengthened by requiring that collateralized portion of loans classified as doubtful of loss be subject to incremental rate of provisioning based on the length of overdue period, unless the loans have been restructured or legal actions taken by financial institutions against the debtors.

2.6 The criteria on debt write-off was clarified by specifying that financial institutions could use more stringent criteria than those prescribed by the Bank of Thailand on asset classification, provisioning and write-off.

2.7 The regulations on credit card business was tightened with the following requirements:

- (1) Set clearer definition of basic and supplementary credit cards and qualifications of cardholders.
- (2) Increase minimum monthly payments from no less than 5 percent to 10 percent of outstanding debt.
- (3) Require credit card issuers to comply with the Bank of Thailand's regulation if they convert the credit card debt into other forms of debt.
- (4) Limit credit line for each cardholder to no more than five times the average monthly income or cash flows in deposit accounts.
- (5) Require credit card issuers to establish rules or procedures for their own staff and external outsourcees in soliciting new cardholders or contacting existing cardholders to offer new types of lending.

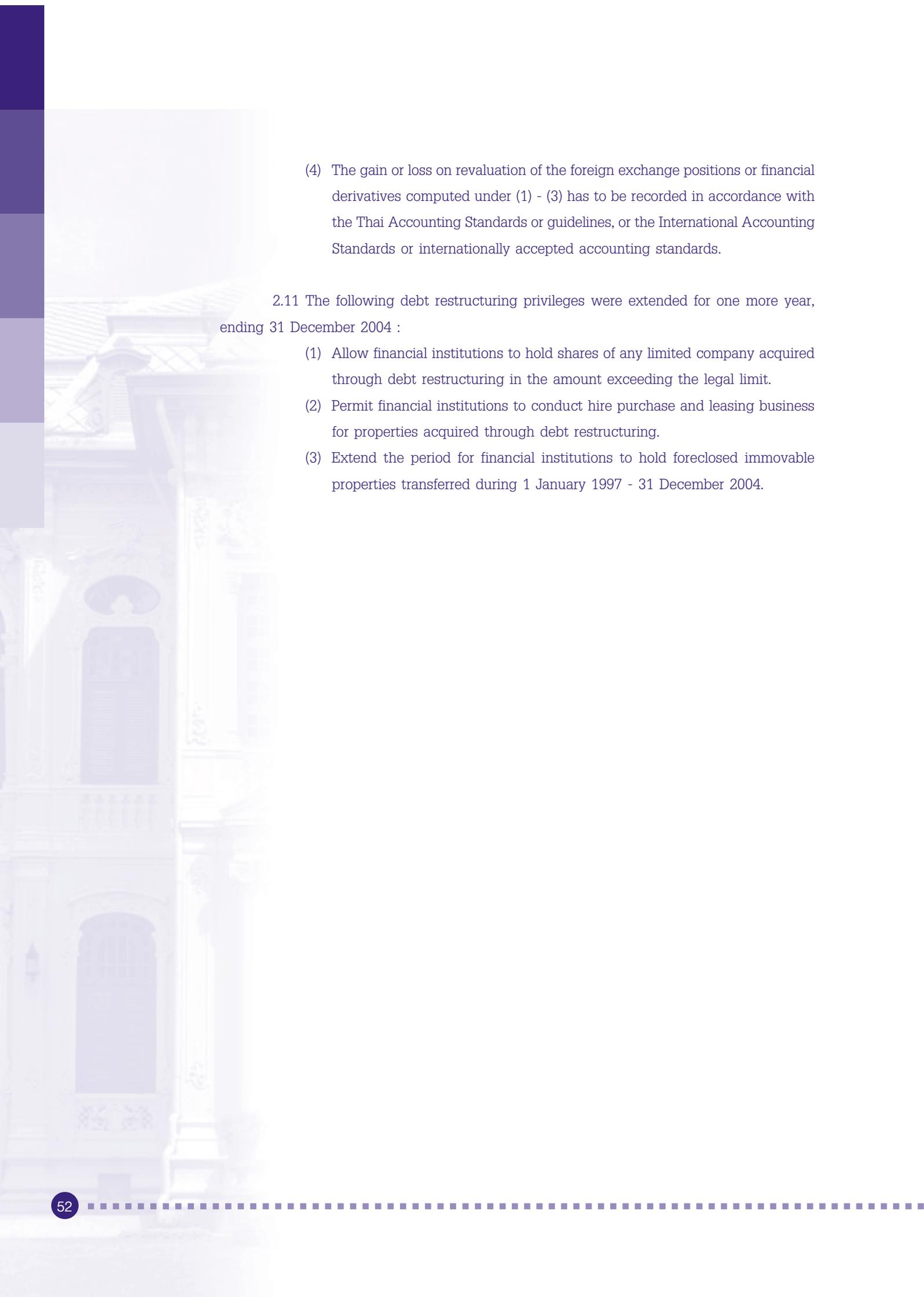
2.8 Waivers were granted on connected lending rules to financial institutions in case that the Ministry of Finance is the connected party and for lending to or investment in mutual funds set up by the government.

2.9 The regulations on maintenance of liquid assets were revised as follows:

- (1) Reduce deposits with the Bank of Thailand, a component of the required liquid assets, from 1 percent to 0.8 percent, provided that commercial banks maintain cash at their central cash centers at no less than 0.2 percent.
- (2) Require that international banking facilities for off-shore lending maintain liquid assets against total deposits, short-term foreign borrowings, and borrowings with embedded derivatives in the same way as commercial banks and international banking facilities for domestic lending.

2.10 The regulations on revaluation and recognition of gain and loss on foreign exchange positions and assessment of fair value of financial derivatives were revised:

- (1) Spot foreign exchange position: Commercial banks have to revalue the assets and liabilities denominated in foreign currency by using the reference exchange rate announced by the Bank of Thailand on the last working day of the month.
- (2) Foreign exchange forward position: Commercial banks have to use a forward rate for the remaining period of each contract in assessing the value of foreign exchange forward position.
- (3) For other foreign exchange derivatives, excluding those mentioned in clause (2), commercial banks have to assess their fair value by applying any of the following methods:
 - (a) Use prices of foreign exchange derivatives of the same type, identical characteristics and currency and with a term equivalent to the remaining term of the derivatives held, which are announced by a reliable source of information such as Bloomberg or Reuters; or
 - (b) Use prices quoted by a counterparty for foreign exchange derivatives which are of the same type, identical characteristics and currency and have a term equivalent to the remaining term of the derivatives held; or
 - (c) Use prices computed from a quantitative model that is theoretically sound and has been verified by an independent expert. Parameters used must be consistent with information publicly available in an active market.

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- (4) The gain or loss on revaluation of the foreign exchange positions or financial derivatives computed under (1) - (3) has to be recorded in accordance with the Thai Accounting Standards or guidelines, or the International Accounting Standards or internationally accepted accounting standards.

2.11 The following debt restructuring privileges were extended for one more year, ending 31 December 2004 :

- (1) Allow financial institutions to hold shares of any limited company acquired through debt restructuring in the amount exceeding the legal limit.
- (2) Permit financial institutions to conduct hire purchase and leasing business for properties acquired through debt restructuring.
- (3) Extend the period for financial institutions to hold foreclosed immovable properties transferred during 1 January 1997 - 31 December 2004.