



Bank of Thailand

Supervision Report 2007

**Supplementary Box on Resiliency of the Thai Banking System
to Global Financial Turmoil in 2008**



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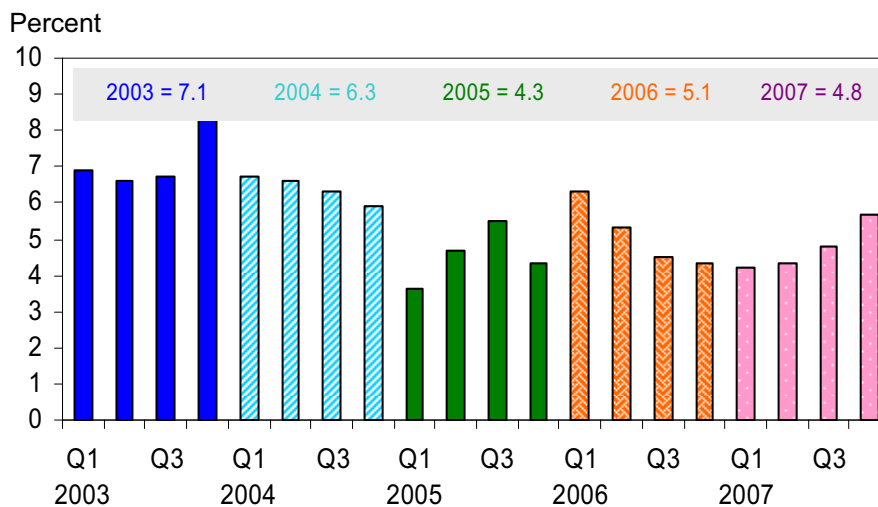
CHAPTER 1

Major Developments in Economic and Financial Market in 2007

1.1 Economic Developments

In 2007, the Thai economy expanded well at the rate of 4.8 percent, the export sector being the major driving force. This corresponded to accelerated manufacturing production, particularly in the export-oriented industries. Meanwhile, domestic demand grew at a slower pace compared to the previous year. However, both consumption and investment began to exhibit signs of recovery in the second half of the year, in line with the speed-up in imports. Overall economic stability remained sound. The current account continued to register a surplus and international reserves stayed at a high level. Average inflation rate was lower than the previous year though accelerating in the fourth quarter as a result of the increase in oil prices.

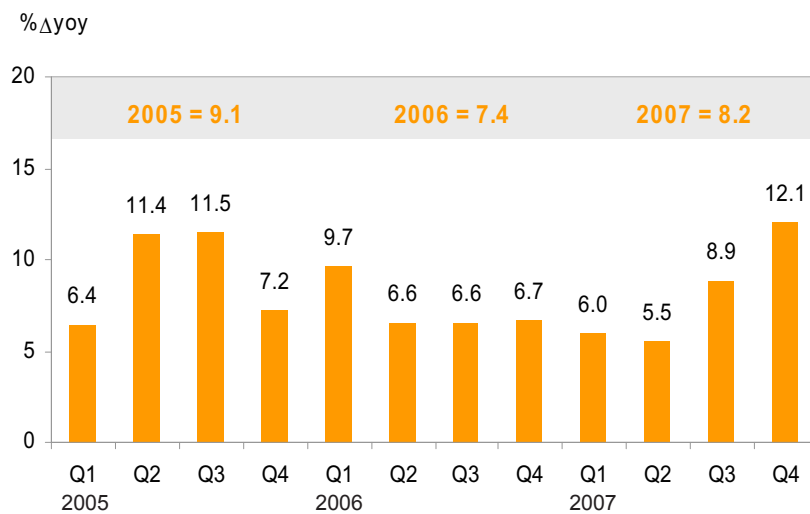
Chart 1 : Gross Domestic Product (1988 Prices)



Source : NESDB

On the supply side, the Manufacturing Production Index (MPI) increased by 8.2 percent, accelerating from last year and thus in line with the production of electronics, electrical appliances, leather products, and chemical products, which were all mainly for exports. With respect to the agricultural sector, farm income from major crops remained satisfactory despite slowing down since last year from the deceleration in both production and in the price of major crops. In the service sector, conditions in tourism were favorable, the number of foreign tourists reaching 14.5 million (4.6 percent up from the preceding year). The expansion of tourism was satisfactory amidst several negative factors such as the explosion incidents in Bangkok on 31 December 2006, smoke problem in the upper Northern region, and the 7 bombings in Hat Yai.

Chart 2 : Manufacturing Production Index Growth*

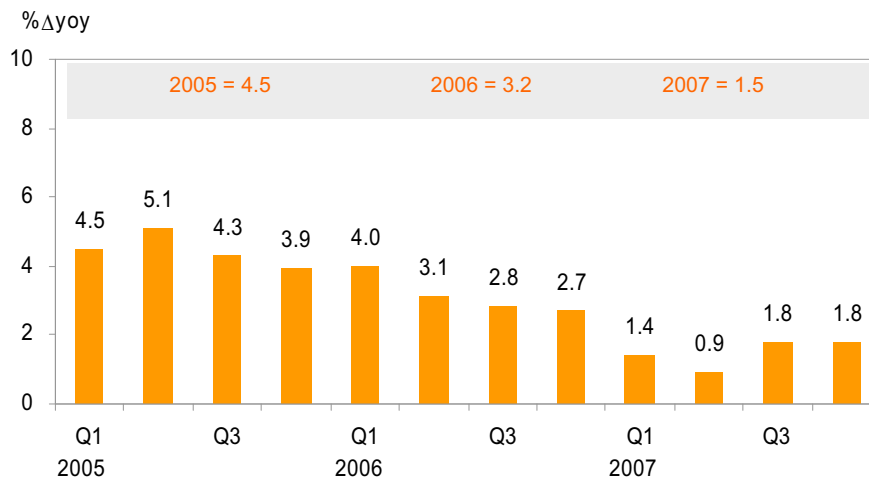


Source : BOT Survey

* With the coverage of 76 products

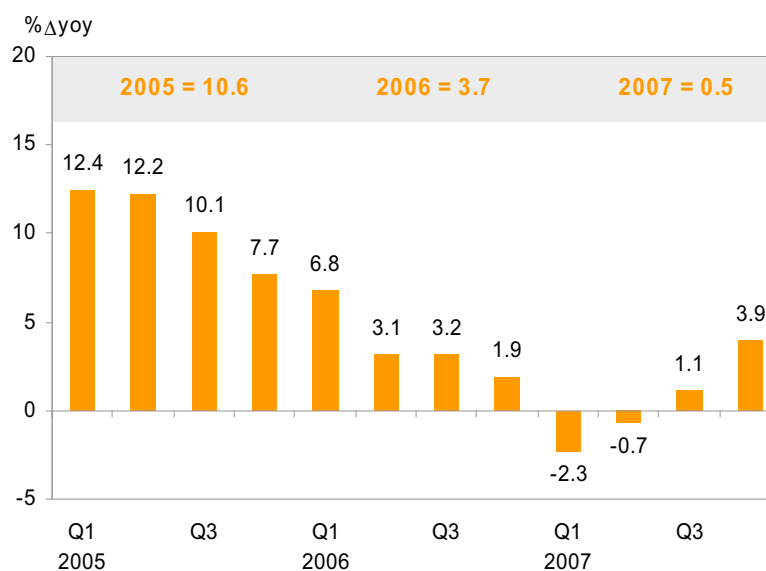
On the demand side, private consumption in 2007 increased by 1.5 percent, decelerating from the previous year's rate of 3.2 percent as a result of weakened consumer confidence. However, private consumption began to gradually improve in the second half of the year, particularly in the fourth quarter when political uncertainties unwound, while interest rates remained low. On the other hand, private investment expanded by only 0.5 percent, slowing down from the last year's growth of 3.7 percent, in line with the deceleration in the machinery and equipment as well as construction categories. This corresponded to the Business Sentiment Index (BSI), which lowered from last year. Nevertheless, in the second half of 2007, machinery and equipment investment improved continuously.

Chart 3 : Private Consumption Expenditure Growth



Source : NESDB

Chart 4 : Private Investment Expenditure Growth



Source : NESDB

On the external front, the trade balance in 2007 registered a surplus of 12.0 billion US dollars, up from a surplus of 1.0 billion US dollars in the previous year. This was attributed to a high export growth of 18.1 percent, accelerating from 17.0 percent in 2006. Exports in the high-technology category continued to achieve satisfactory expansion from the preceding year. Meanwhile, imports rose by 9.6 percent, accelerating from last year. In the first half of 2007, imports continued a decelerating trend from 2006, in line with the weak domestic demand. However, improvements occurred in the second half of the year. For services, income and transfers account recorded a surplus of 2.9 billion US dollars, increasing from last year's surplus of 1.2 billion US dollars. This was in line with the increased receipts from tourism and public investment income. Consequently, the current account recorded a surplus of 14.9 billion US dollars, up from the previous year's surplus of 2.2 billion US dollars.

Meanwhile, net capital flows registered a small outflow in 2007. The unremunerated reserve requirement (URR) on short-term capital inflows resulted in a slowdown of net external borrowing. Moreover, the relaxation of measures on capital outflows caused an increase in portfolio outflows by Thai residents, particularly in the latter half of the year. Nonetheless, after accounting for net errors and omissions, the balance of payments had a surplus of 17.1 billion US dollars.

Table 1 : Balance of Payment

Billion USD	2005	2006	2007	2007	
				H1	H2
Exports (f.o.b.)	109.4	127.9	151.1	70.1	81.1
% change	15.2	17.0	18.1	17.9	18.3
Imports (c.i.f.)	177.6	126.9	139.2	65.5	73.6
% change	25.8	7.9	9.6	6.7	12.4
Trade balance	-8.3	1.0	12.0	4.6	7.4
Services & transfers	0.6	1.2	2.9	1.3	1.7
Current A/C	-7.6	2.2	14.9	5.8	9.1
Capital and financial account	11.1	5.7	-1.1	-2.0	0.8
Monetary authorities	0.2	0.4	-0.6	-0.8	0.1
Government	-1.0	-0.6	-2.1	-1.9	-0.2
Bank	0.2	-7.4	0.4	-6.1	6.4
Others	11.6	13.3	1.2	6.8	-5.5
Balance of payments	5.4	12.7	17.1	5.7	11.4
Reserves	52.1	67.0	87.5	73.0	87.5

Source : Compiled by Bank of Thailand

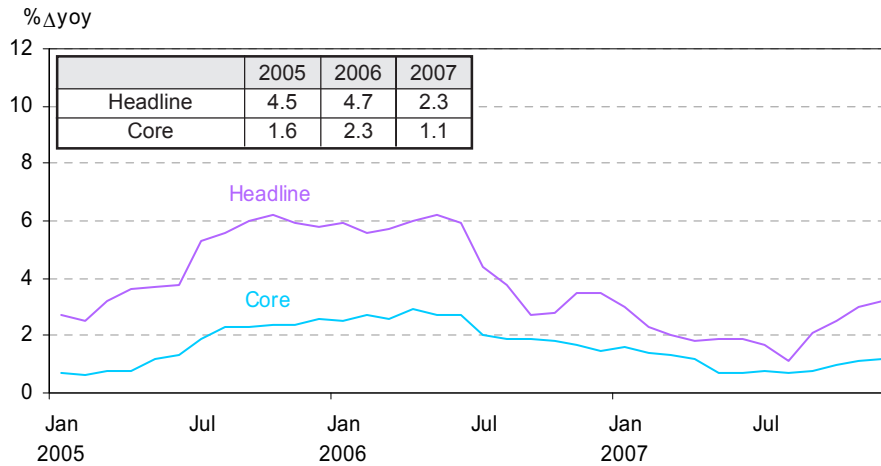
As for fiscal conditions, the government implemented a deficit budget policy in fiscal year 2007. The government budget expenditure was set at 1,566.2 billion baht, with net revenue of 1,420 billion baht and a budget deficit of 146.2 billion baht (1.7 percent of GDP). The government revenue remitted to the Treasury (cash basis) totaled 1,432.7 billion baht, rising by 6.9 percent from the previous fiscal year. This was higher than initially estimated in the budget document, partly because of the extra income from the dissolving of the Exchange Equalization Fund. Meanwhile, government expenditures totaled 1,575 billion baht, increasing by 12.8 percent from the previous fiscal year. The disbursement rate was 93.9 percent, higher than the previous year's rate of 93.4 percent and the target rate of 93.0 percent. This resulted from the government's measures to accelerate the rate of disbursement. As a consequence, the government's cash balance registered a deficit of 94.2 billion baht.

Regarding monetary conditions, money market interest rates continuously adjusted downward in the first half of 2007, following the five cuts in the policy rate by the Monetary Policy Committee (MPC). During the latter half of the year, the rates were stable, in line with the policy rate that was kept unchanged. For the entire year, the 1-day repurchase rate and the overnight interbank rate averaged at 3.77 and 3.79 percent per annum, declining from the previous year's averages of 4.64 and 4.69 percent per annum, respectively. Because of the lower deposit interest rates compared to the previous year, the deposit growth at banks was in a decelerating trend since the beginning of the year. Regarding private credits, a low growth rate was seen since the beginning of 2007, corresponding to the contraction of credits, particularly investment credits, extended to the business sector. This mostly stemmed from the slowdown in domestic demand and fragile business sentiment. Nonetheless, credits extended to the business sector began to expand towards year-end.

In 2007, the baht averaged at 34.56 baht per US dollar, appreciating from the average of 37.93 baht per US dollar in the previous year. This was mainly due to the US dollar depreciation as well as the continued current account surplus. Even though in December the baht appreciated against the US dollar by 6.3 percent from the same period last year, the Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) appreciated by 1.4 and 1.3 percent, respectively.

Overall economic stability in 2007 was satisfactory, with internal stability remaining sound. The headline and core inflation rates were at 2.3 and 1.1 percent, respectively, decreasing from the previous year's averages of 4.7 and 2.3 percent despite the acceleration of headline inflation during the fourth quarter from the increase in oil prices. The unemployment rate and public debt stayed low. Meanwhile, external stability was also satisfactory, with a continued current account surplus and a high ratio of international reserves to short-term debts.

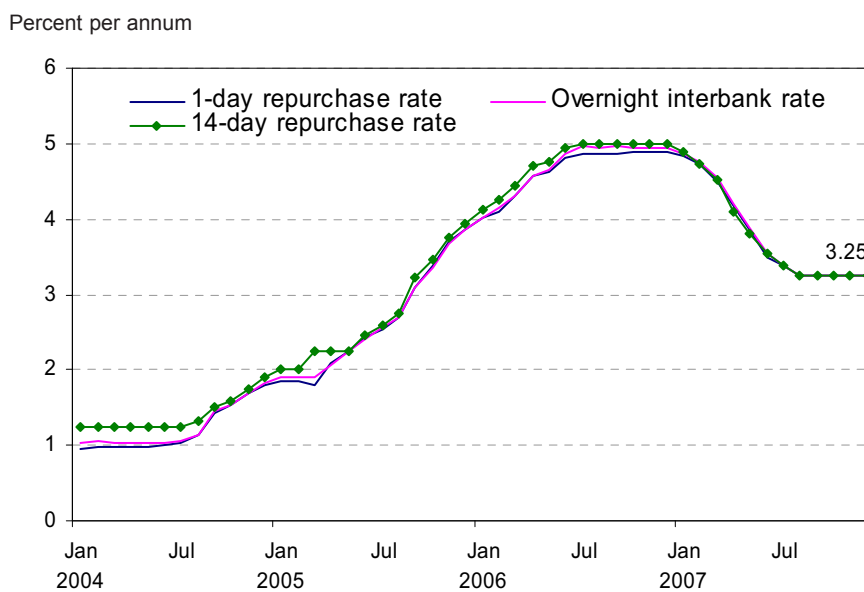
Chart 5 : Inflation



1.2 Developments in Money Market, Foreign Exchange Market, and Capital Market

Money Market

Chart 6 : Money Market Interest Rates

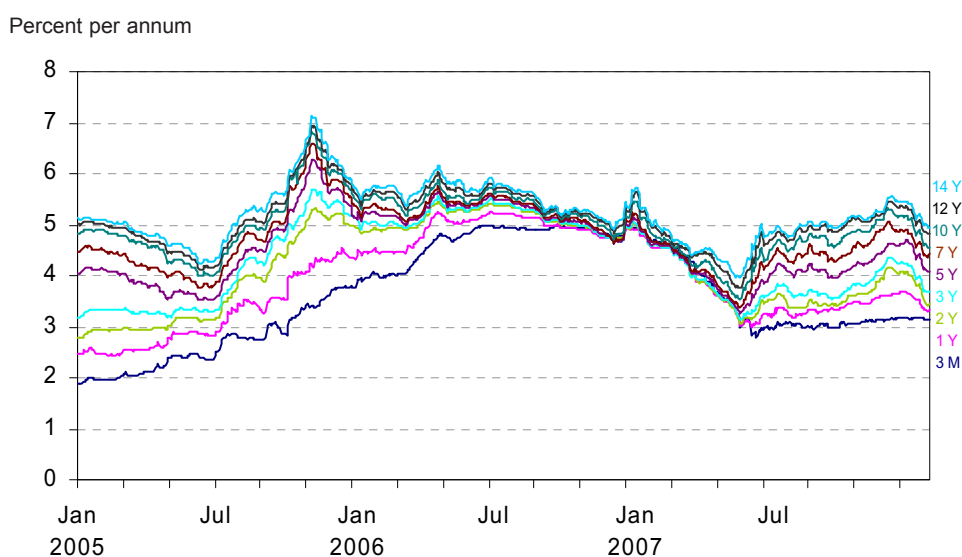


Short-term money market rates in 2007 averaged lower than in the year before, in line with the cumulative policy interest rate^{1/} cut of 175 basis points, from 5 percent per annum as of end-2006 to 3.25 percent per annum by mid-2007. For the entire year, the 1-day repurchase and interbank rates averaged at 3.77 and 3.79 percent per annum, respectively, declining from the previous year's averages of 4.64 and 4.69 percent per annum.

The bulk of the policy interest rate cut was made during the first half of 2007 as the MPC assessed that risks to Thailand's economic growth, particularly domestic demand, had increased while risks to inflation had decreased. Moreover, core inflation was projected to remain within the target range. As for the second half of 2007, the MPC decided to keep the policy interest rate steady at 3.25 percent per annum after assessing that the Thai economy had gained momentum from domestic demand recovery while inflationary pressures started to mount toward the end of the year.

Chart 7 : Government Bond Yields

(3 January 2006 - 28 December 2007)

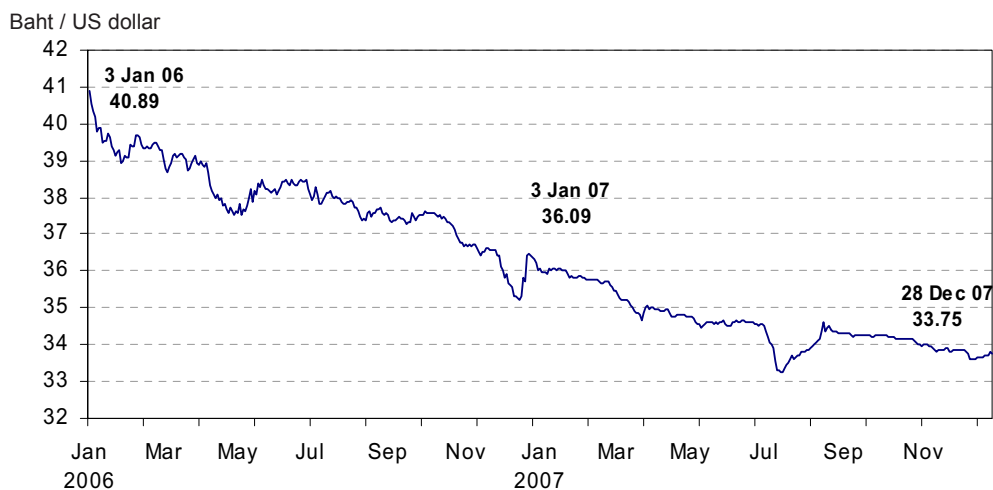


^{1/} As of 17 January 2007, the policy interest rate was changed from the 14-day repurchase rate to the 1-day repurchase rate.

In 2007, government bond yields were also lower and, on average, fluctuated more than in the previous year. In the first half of the year, both short-term and long-term government bond yields declined in line with the policy interest rate cuts. However, around the end of May, medium-term and long-term government bond yields rose markedly as the market expected that the downward policy interest rate cycle would soon come to an end. During the second half of 2007, government bond yields adjusted upward as the market expected an upward policy rate shift in response to rising inflation as well as lower investor appetite for bonds toward the end of the year.

Foreign Exchange Market

Chart 8 : Exchange Rate
(3 January 2006 - 28 December 2007)



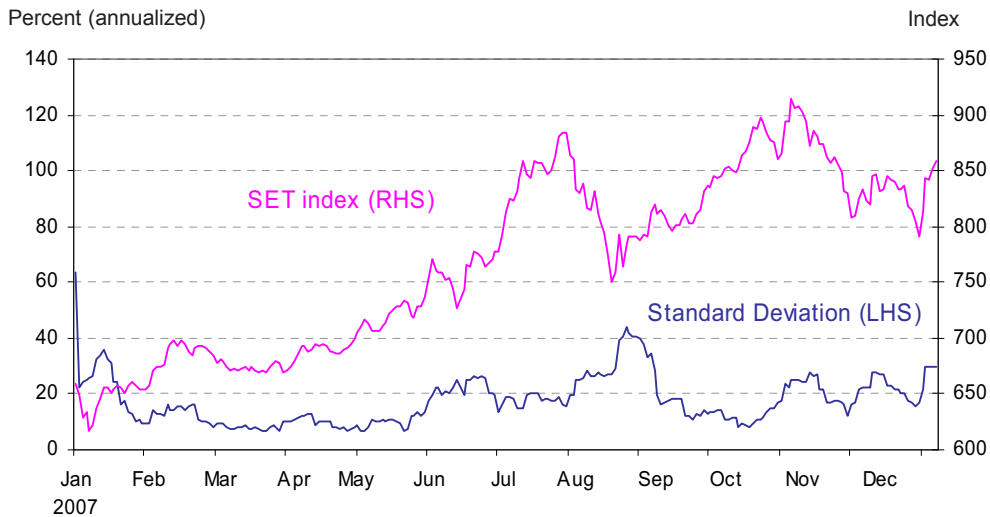
Source : BOT

The Thai baht fluctuated within the range of 33.27-36.09 baht per US dollar in 2007, averaging at 34.56 baht per US dollar and appreciating from the previous year's average of 37.93 baht per US dollar by 9.7 percent. Throughout the year, the currency was on an appreciating trend with the following factors contributing to the strength of the baht:

(1) US dollar decline, a consequence of weak sentiment in the currency on the back of large current account deficits and clearer signs of softening economic growth; (2) pressure from Thailand's current account surpluses, as exporters sold foreign currency receipts in exchange for the baht; and (3) occasional surges of capital flow into the stock market, for instance in early July. Meanwhile, the easing of capital control measures, which allowed for more balanced flows, and the Bank of Thailand's intervention in the foreign exchange market helped slow the appreciation pace. In addition, during July and August, foreign investors' concern about the subprime lending problem in the US mounted, leading to diversification away from regional markets into assets with relatively low risk, e.g. US Treasury bonds. This action caused the baht to depreciate somewhat. The Nominal Effective Exchange Rate (NEER), which is calculated as a weighted average of bilateral exchange rates against Thailand's major trading partners' currencies, averaged at 78.22, appreciating by 6.2 percent from the average level of 73.69 in 2006. The NEER appreciation reflected the fact that the baht had gained against major trading partners' currencies, albeit at a more moderate pace than that made against the US dollar, which depreciated against an index of major currencies. It was noticeable that the bilateral baht-US dollar exchange rate and the NEER moved in the same direction from the beginning of 2007 to August. However, from September to November, the baht appreciated less against the US dollar than against other major and regional currencies, resulting in some decline in the NEER.

Capital market

Chart 9 : SET Index and Historical Volatility



Source : Stock Exchange of Thailand, calculated by BOT

Securities offering in the primary market

In 2007, the corporate sector's issuance of equity and long-term debt securities (bonds with maturity longer than 1 year) amounted to 107.8 and 219.8 billion baht, respectively. Overall funding from the capital market slightly increased from that of last year, reflecting a modest increase in long-term investment demand. Businesses which tapped their funding from the capital market included those in the agriculture, real estate, communication, and energy sectors. In addition, the issuance of short-term debt securities increased from 728.6 billion baht in 2006 to 947.2 billion baht in 2007; issuance was by financial institutions as an alternative source of funds and by non-financial corporations as working capital, reflecting financing cost management and funding source diversification.

Movements in the secondary market

In 2007, the Thai stock market improved from the previous year but remained volatile. The SET index rebounded gradually from the beginning of the year, peaking in the last quarter. This rebound was supported by the economic recovery, the clearer political situation after the successful referendum on the new Constitution and the pick-up of the US stock market. Nonetheless, the stock market experienced large volatility during the year. This was attributable primarily to the global financial turmoil, as evidenced by foreign investors' sell-offs in January, August and end-October as a result of the massive unwinding of the yen carry trade and the increased concerns over the US subprime problem coupled with the poor performances of US financial institutions. In addition, negative domestic factors such as political uncertainty and rumors regarding the removal of the unremunerated reserve requirement (URR) measure on short-term capital flows also came into play.

In the debt securities market, the average daily trading volume in 2007 stood at 73.9 billion baht, up significantly from last year's average of 28.6 billion baht. This was supported by an increase in the issuance of debt securities by public and private sectors as well as the restoring of confidence regarding economic and political situations. Nonetheless, volatility of government bond yields remained high from shifting market expectations of the future policy rate path, rumors on the URR measure, as well as political uncertainty.

CHAPTER 2

Developments in the Banking System

2.1 Key Developments in the Banking System

The year 2007 was particularly challenging for the Thai banking system as it faced both internal and external challenges, including the domestic and global economic slowdown, political uncertainty, oil price hikes, and the pervasive US subprime mortgage problem. At the same time, commercial banks continued to prepare for implementation of strengthened risk-based supervisory framework to promote risk management capability, including Basel II and consolidated supervision which will be effective by the end of 2008. Despite this, the Thai banking system has shown flexibility and resilience in adjusting to global forces and managing potential risks.

In 2007, the banking system registered its seventh consecutive year of profit and increased capital that will help facilitate further business expansion. This contributed towards a continued upward trend of the capital to risk-asset ratio (BIS ratio) and helped to provide cushioning against global financial challenges.

In line with the challenging economic and financial environment, loan growth decelerated as a result of softening demand. Liquidity in the banking system remained favorable, although total deposits expanded at a decelerated rate as savings shifted to mutual funds and other debt instruments, in search for enhanced yield. Amidst intense competition in the banking sector, banks implemented competitive strategy including modernizing their services, expanding their networks, and differentiating themselves by offering more financial products such as short-term bills of exchange (B/E), special deposits, and cross-selling of products such as by acting as broker for life insurance and selling of mutual fund products. In

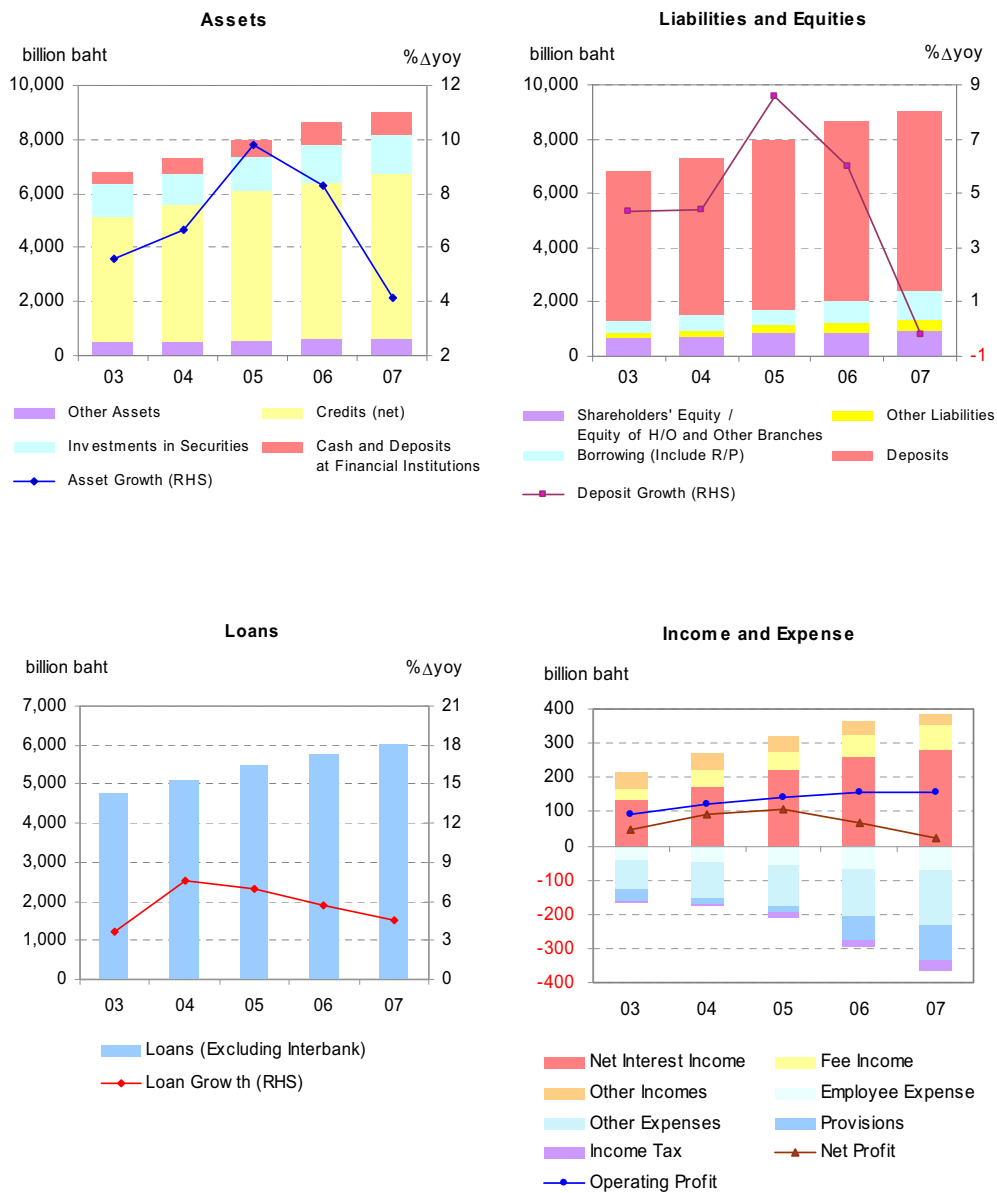
addition, banks turned their attentions increasingly to retail banking and SME businesses as these offered better diversification and enhanced margins compared to those from traditional corporate banking. At the same time, banks became more cautious about foreign investment and readjusted their foreign investment portfolios, especially after the US subprime mortgage problem. The direct impact of US subprime problem on the Thai banking sector is very small due to the very small exposure to CDOs and problem assets and the reliance of Thai banks on local deposits as main sources of funds. (please refer also to Box: Resiliency of the Thai Banking System to Global Financial Turmoil in 2008). Nevertheless, banks and supervisors were cautious on the risk from second-round impact via slowdown in the real sector, and have emphasized the importance of vigilance on risk monitoring including implementing stress tests to ensure adequacy of capital, liquidity, and most importantly, risk management strategy.

Against this background, the three key financial legislations, namely, the Amended Bank of Thailand Act, the Financial Institutions Businesses Act, and the Deposit Protection Agency Act, were passed at the end of 2007. These Acts will become effective in 2008. These legislations will increase the Bank of Thailand's operational independence, strengthened risk-based supervision, and consumer protection. This will, in turn, enhance confidence in the Thai banking system.

2.2 Performance of the Banking System

2.2.1 Growth and Profitability

Chart 10 : Balance Sheet and Profits of the Banking System



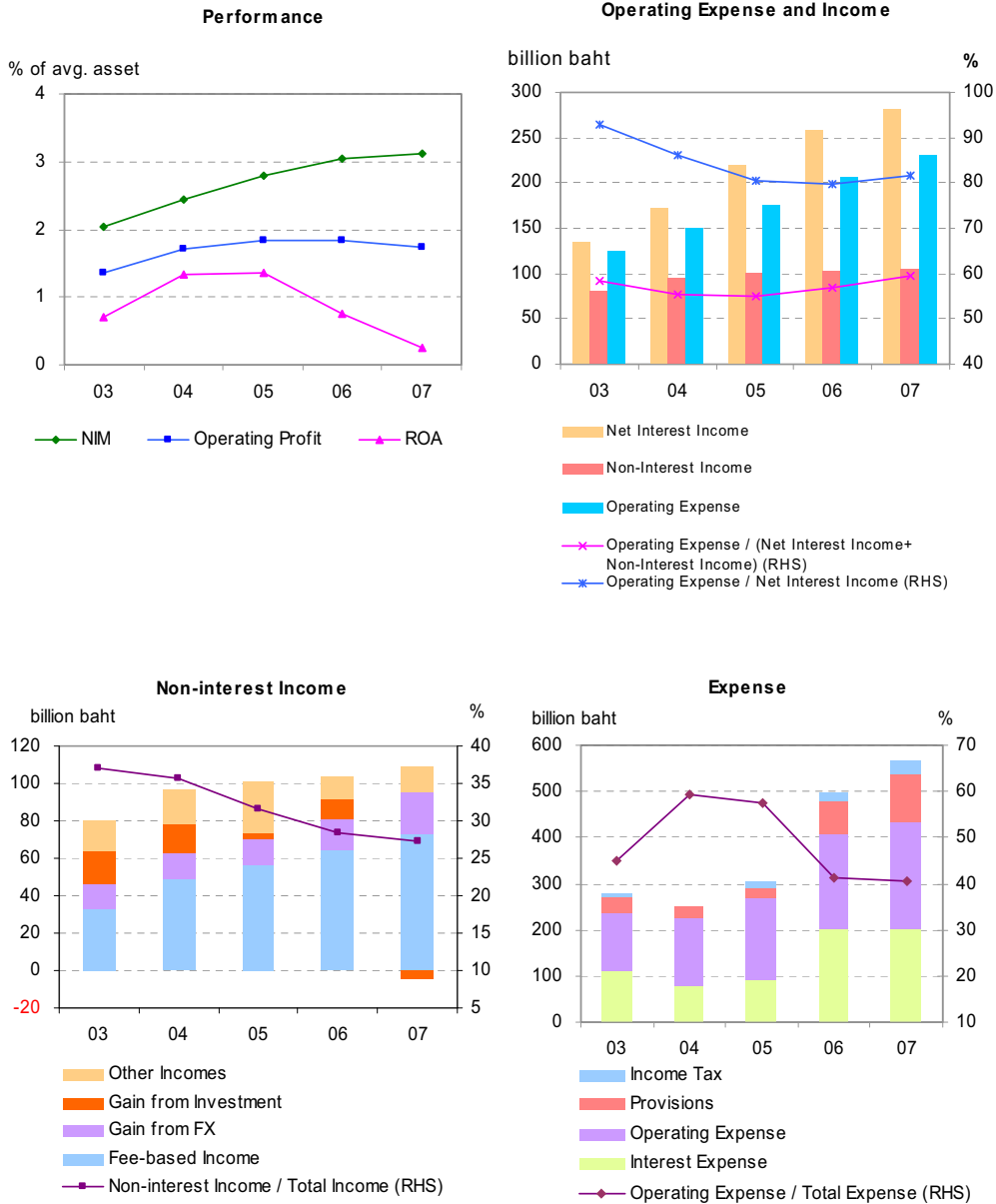
Source : BOT

Total assets of the banking system grew at a moderate rate of 4.1 percent on the back of the slowdown in loan growth and decline in investment in securities and other assets.

Deposit growth (including interbank deposit) dropped to -0.2 percent, falling sharply from the previous year as a result of the downward trend in interest rates and shift of deposits to mutual funds (especially the Long Term Equity Funds (LTF) and Retirement Mutual Funds (RMF), which offer higher yields and are tax deductible). Furthermore, banks increased their funds mobilization by issuing bills of exchange (B/E) that offer higher interest rates than fixed deposits with similar maturities.

Despite the slowdown in loan growth in 2007, commercial banks continued to make profits. Whilst the banking system's net interest margin increased to 3.1 percent due partly to decreases in deposit interest rates, total operating profit increased slightly registering at 157 billion baht, up by 0.4 percent from the previous year. Net profit after provisions and tax declined from the previous year to 23.6 billion baht as a result of the provisioning requirement under the second and third phase of the International Accounting Standard No. 39 (IAS 39) implementation. At the same time, the return on asset (ROA) decreased from 0.8 percent in 2006 to 0.3 percent in 2007.

Chart 11 : Income and Expense of the Banking System

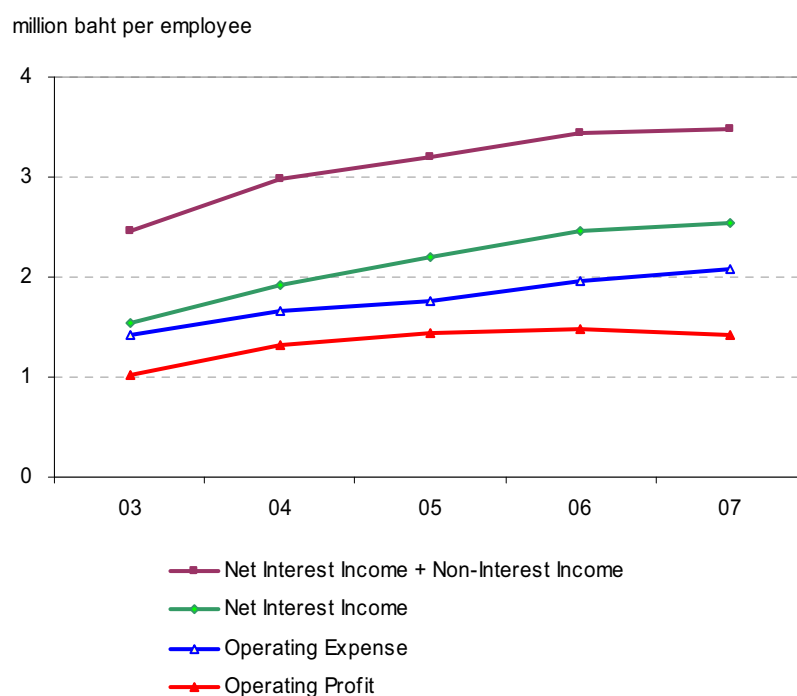


Source : BOT

Net interest remained the core income component, constituting 72.8 percent of total income. The ratio of non-interest income to total income declined over the past three years as a result of a fall in the other-income category, with impairment of capital investment loss of 13 billion baht.

On operating efficiency, the indicator of income per employee of the banking system continued to improve, especially that of the four major banks and two hybrid banks. Operating expenses also rose noticeably in 2007 as a result of goodwill impairment charges, losses from sale of assets, and IT system development expenses. Operating profit per employee therefore diminished slightly, primarily in local commercial banks.

Chart 12 : Employees' Efficiency of the Banking System



Source : BOT

Table 2 : Employees' Efficiency by Type of Commercial Banks in 2007

Unit : million baht per employee

Banking System	Net Interest Income	Net Interest Income & Non-Interest Income	Operating Expense	Operating Profit
4 Major Banks*	2.6	3.6	1.8	1.8
Hybrid Banks**	2.6	3.7	2.1	1.6
Total Banking System	2.5	3.5	2.0	1.5

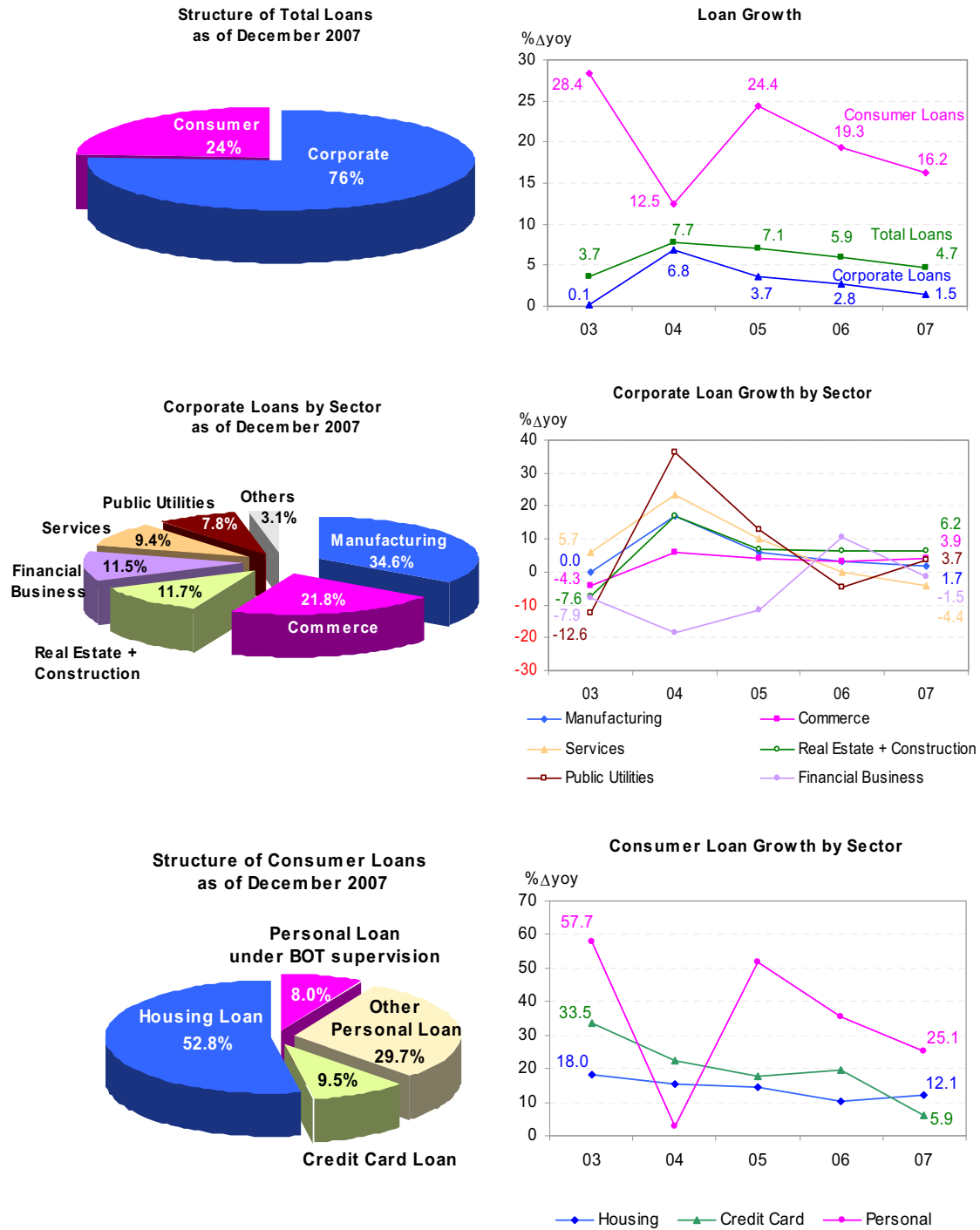
Source : BOT

* 4 Major Banks : BBL, KTB, SCB and KBANK

** Hybrid Banks : SCBT and UOB

2.2.2 Structure and Quality of Loan Portfolio

Chart 13 : Structure and Growth of Loan Portfolio



Source : BOT

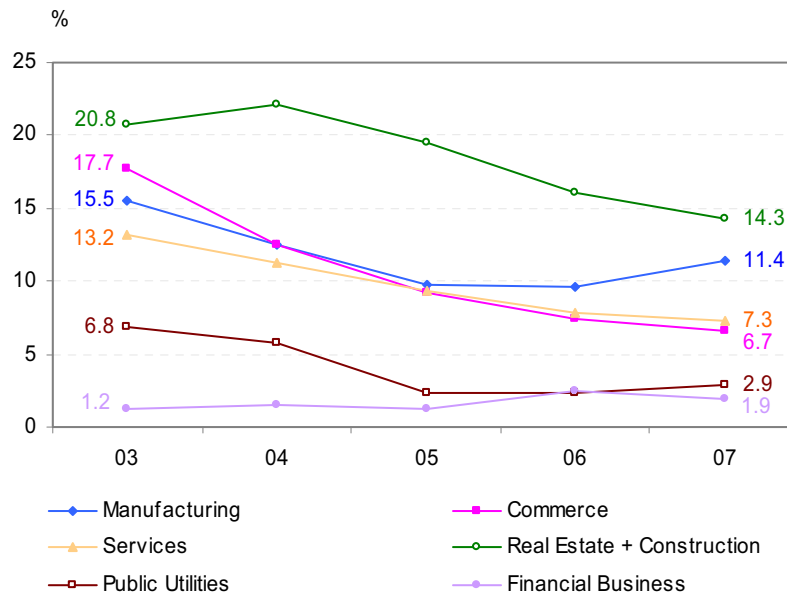
Loan growth of the banking system, excluding inter-bank lending, decelerated during the first three quarters of 2007, registering a trough of 2.6 percent in the third quarter due to softening domestic demand, political uncertainty, and oil price hikes. Bank loans also faced increased competition from debt market financing, in which wholesale funding had lower costs. However, the corporate sector's confidence improved during the fourth quarter as the political situation became more stable and clear after the election. Thus, total loan growth for 2007 continued to grow at 4.7 percent, moderating from 5.9 percent in 2006.

2.2.2.1 Corporate Loans

Corporate loans, which accounted for 76 percent of the total loan portfolio, slowed down. Corporate loan growth decreased from 2.8 percent in 2006 to 1.5 percent in 2007, with the largest contraction of 0.9 percent in the third quarter. The slowdown in loan growth was essentially caused by manufacturing sector, whose loan growth moderated to 1.7 percent, compared to 3.3 percent in the previous year. This was primarily due to the slowdown of loans for food, rubber, rubber products, machinery and electrical appliances. Moreover, contraction of loans for services sector—mainly hotels and restaurants (by 4.4 percent) and financial business sector including loans to holding and affiliated leasing companies (by 1.5 percent) were in line with shift of funding in the private sector from loans to debenture issuance.

Nonetheless, loan growth of two key sectors increased. Loans to public utilities grew by 3.7 percent, mainly attributed to electricity generation and land transportation. Loans to commerce sector, especially retail businesses, expanded by 3.9 percent.

Chart 14 : Ratio of Gross NPL to Total Loans by Business Sector



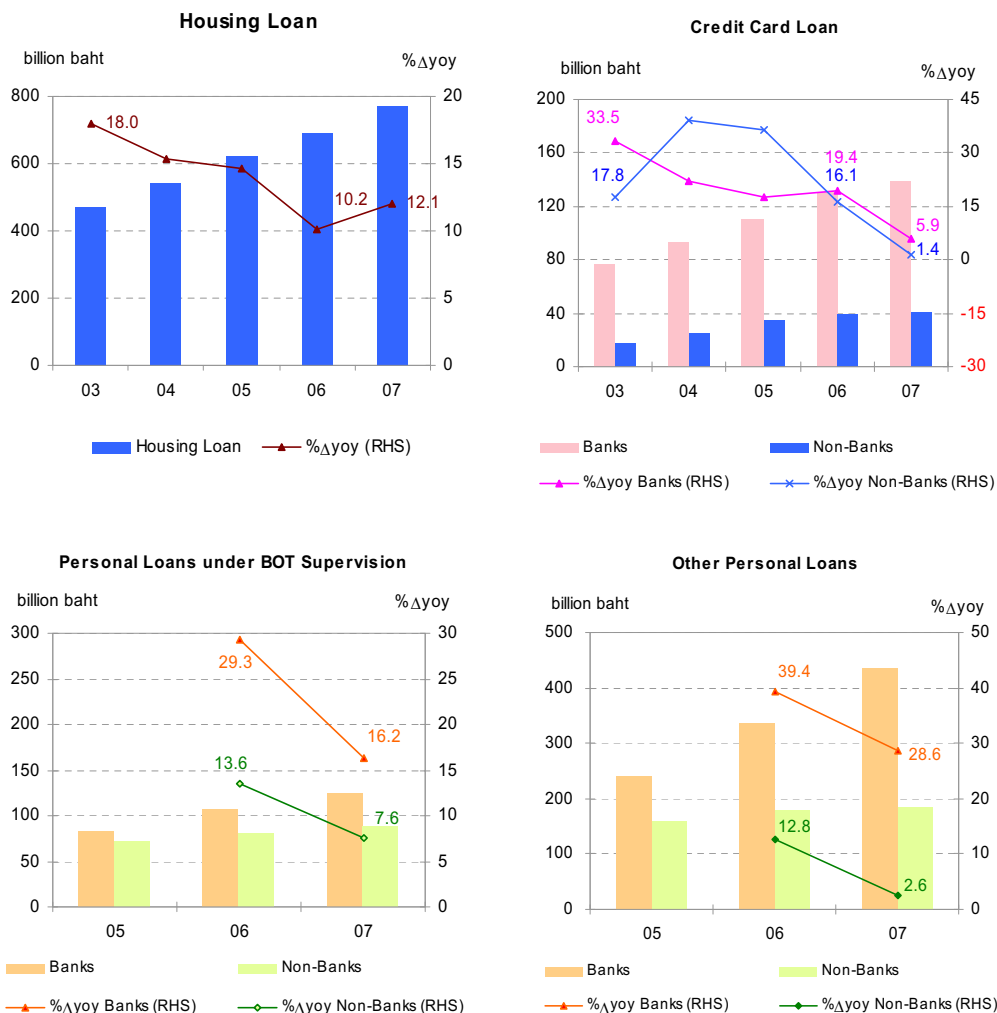
Source : BOT

Although non-performing loans (NPL) of corporate loans increased by 17.3 billion baht, the NPL ratio of corporate loans continued to decline from the previous year. Exceptions were the manufacturing and public utilities sectors, which NPL ratio stood at 11.4 percent of total loans (compared to 9.6 percent in 2006) and 2.9 percent (compared to 2.4 percent in 2006), respectively.

2.2.2.2 Consumer Loans

Overall consumer loan growth fell slightly from 19.3 percent at the end of last year to 16.2 percent. The growth of credit card and personal loans moderated due to increased caution in consumer spending amidst the higher cost of living. Housing loans continued to accelerate, supported by interest rate decline and the last phase of the government stimulus package for the second-hand housing market.

Chart 15 : Consumer Loans



Source : BOT

Despite a slight slowdown, consumer loan growth was still relatively high as banks continued to focus more on retail banking, which offers favorable interest margins.

- Housing loans, which represented 52.8 percent of consumer loans, grew by 12.1 percent, rising from 10.2 percent in the previous year. In the future, this type of loan will benefit from the implementation of the Escrow Account Act, which came into effect on 20 May 2008. Should a project fail, buyers will receive all paid installments plus interest. The Bank of

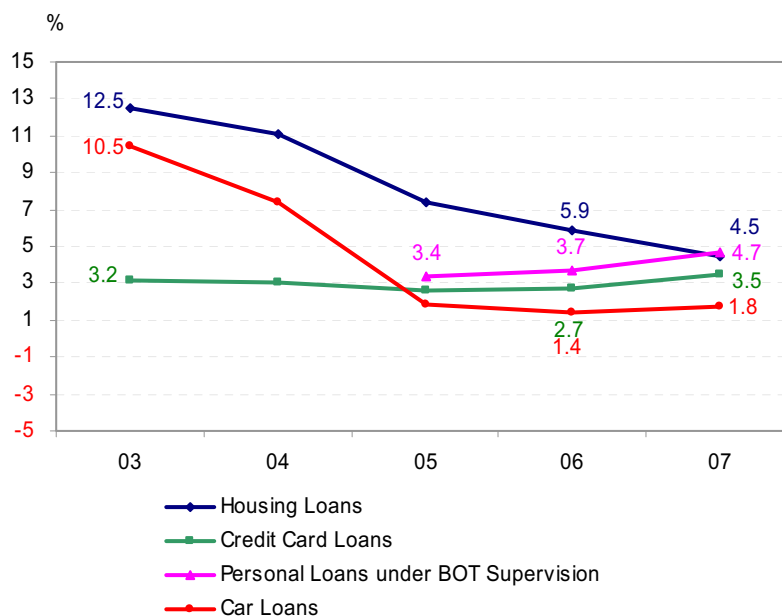
Thailand has the authority to endorse commercial banks or juristic persons to act as an escrow agent.

- Credit card loan growth fell sharply from 19.4 percent last year to 5.9 percent due to the economic slowdown, greater caution in consumer spending, and the more stringent credit approval process for new customers. The majority of the growth was from extending credit limits for existing good-quality customers.

- Personal loans expanded at a slower rate, compared to the previous year. Personal loans under BOT supervision, which accounted for 95 percent of unsecured credits, grew by 16.2 percent, slowing down from the previous year. Meanwhile, other personal loans growth moderated to 28.6 percent, due mainly to car loans expansion by new commercial banks that were upgraded from finance companies.

The NPL ratio of consumer loans continued to decline to 4.0 percent, mainly attributable to the decline in housing loan NPL as a result of lower interest rates. The NPL ratio of credit card loans, personal loans under BOT supervision, and car loans increased slightly as a result of the lower repayment ability of low-income households caused by the increase in cost of living.

Chart 16 : Ratio of Gross NPL to Total Loans
by Type of Consumer Loans

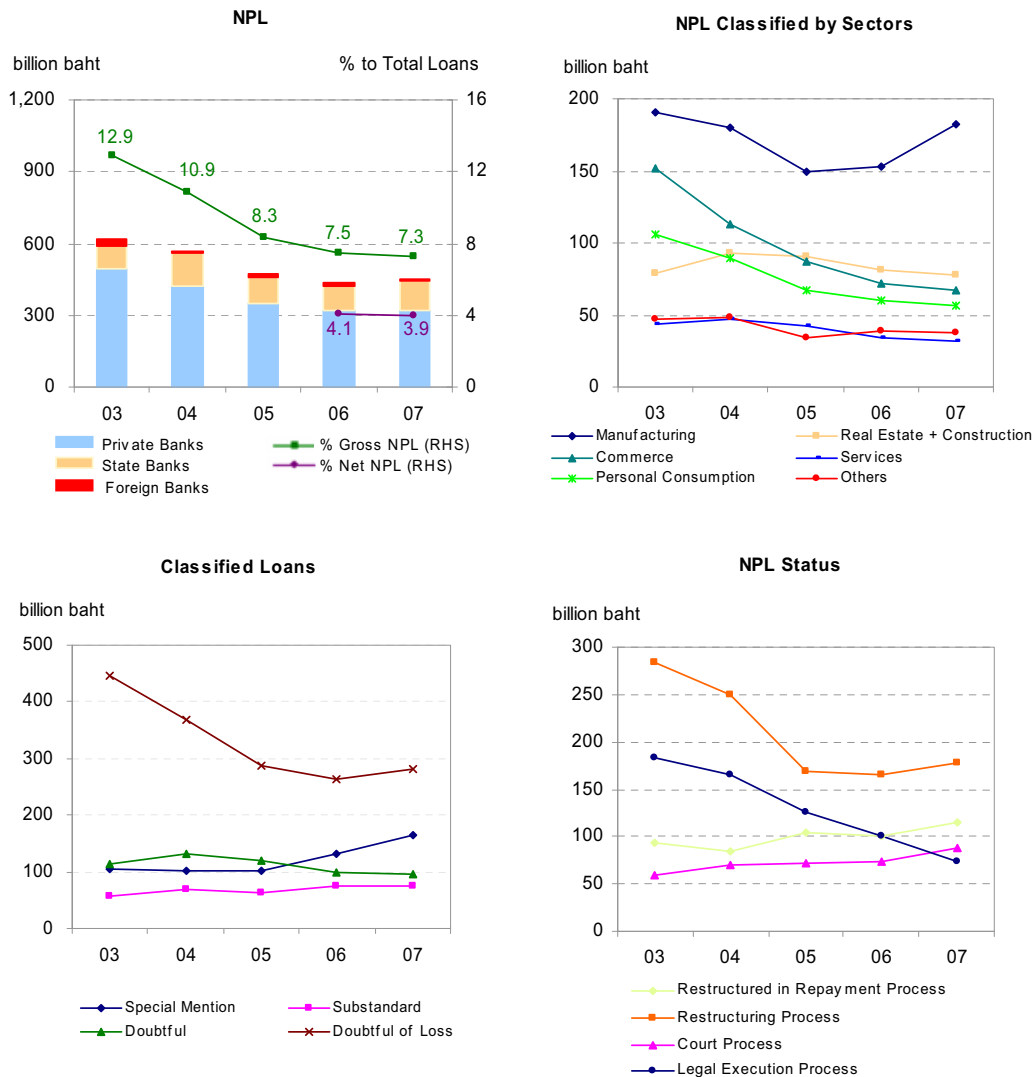


Source : BOT

A key challenge to risk management in the context of consumer loans is the economic slowdown, especially in light of global risks and inflation pressures on disposable incomes. The Bank of Thailand has closely monitored consumer loans and has issued a number of macro-prudential guidelines over the past five years, including a policy on loan approval standards for credit card loans so as to ensure that borrowers have adequate incomes, a policy on disclosure of interest and fee charges on credit card and personal loans under supervision, as well as on the close monitoring of luxury housing with prescribed ceiling on loan-to-value ratios. Additionally, commercial banks have improved their risk management systems significantly, as fostered by the Bank of Thailand under risk-based supervision and preparation for Basel II implementation.

2.2.3 Non-Performing Loans (NPL)

Chart 17 : Loan Quality



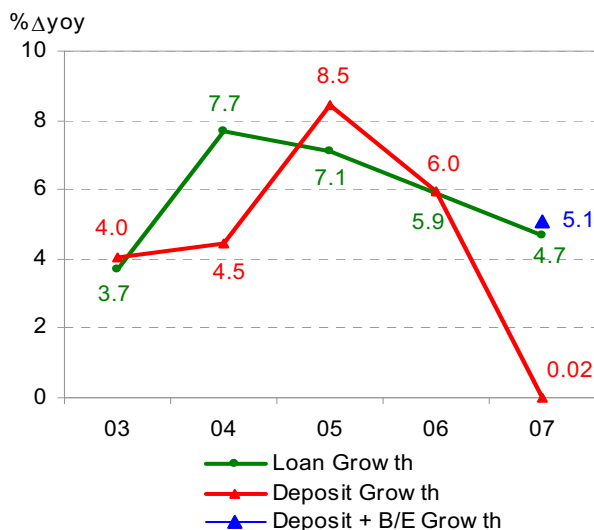
Source : BOT

The ratio of gross non-performing loans (gross NPL) to total loans of the banking system declined slightly from 7.5 percent in 2006 to 7.3 percent, while the ratio of non-performing loans net of provisions (net NPL) reduced from 4.1 percent to 3.9 percent as a result of debt repayment, write-offs and sell-offs as well as an increase in total loans.

Gross NPL amounted to 453 billion baht, a 13 billion baht increase from last year, attributed to NPL in the manufacturing sector (food and beverage, textiles and clothing). Gross NPL increase was attributable to the economic slowdown and cost increases due to oil price hikes.

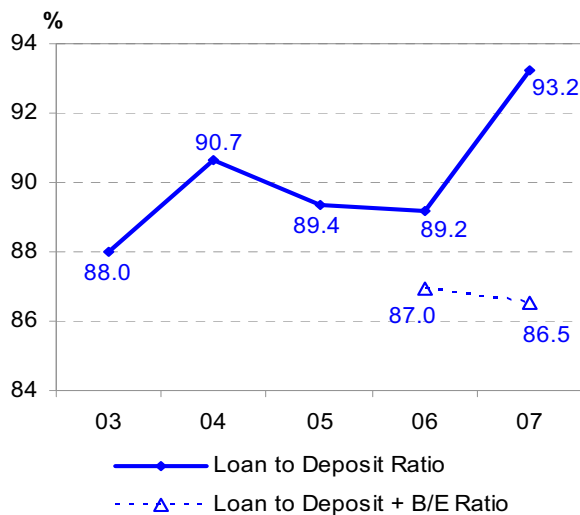
2.2.4 Liquidity and Funding

Chart 18 : Growth of Deposits and Loans
(Excluding Interbank)



Source : BOT

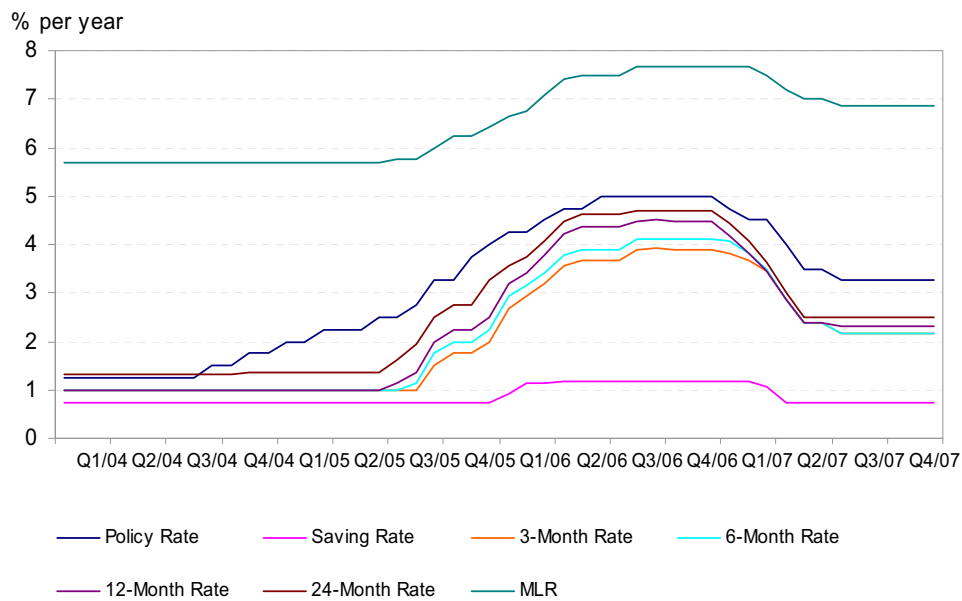
Chart 19 : Loan to Deposit Ratio



Source : BOT

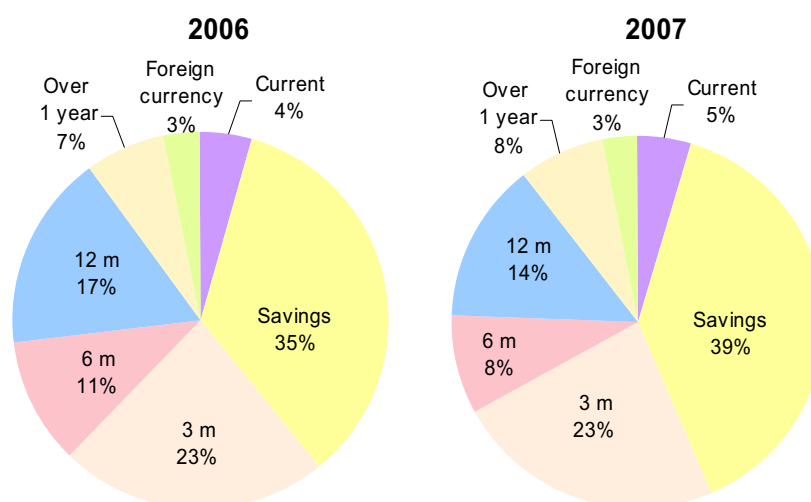
Notwithstanding the slowdown in loan growth, deposit growth declined even more as a result of downward trend of interest rates during the first half of the year, prompting depositors to shift from deposits to investment in mutual funds, saving bonds, as well as banks' bills of exchange (B/E), as the Bank of Thailand allowed commercial banks to issue bills of exchange to customers in September 2006. Loan to deposit ratio (L/D ratio) increased to 93.2 percent, while the ratio of loan to fund mobilized by deposit and B/E (L/D+B/E ratio) declined to 86.5 percent.

**Chart 20 : Policy Rate and Interest Rate
of Four Large Banks**



Source : BOT

Chart 21 : Composition of Deposit Account



Source : BOT

The term structure of deposits shifted towards the shorter-end, in line with the end of high interest rates on fixed deposits. The share of savings deposits rose to 39 percent of total deposits.

Deposits in local commercial banks accounted for 91 percent of total deposits in the banking system, 68 percent of which were retail deposits, with a majority of these in savings accounts. Concurrently, 79 percent of deposits in foreign banks were corporate accounts with short-term maturities.

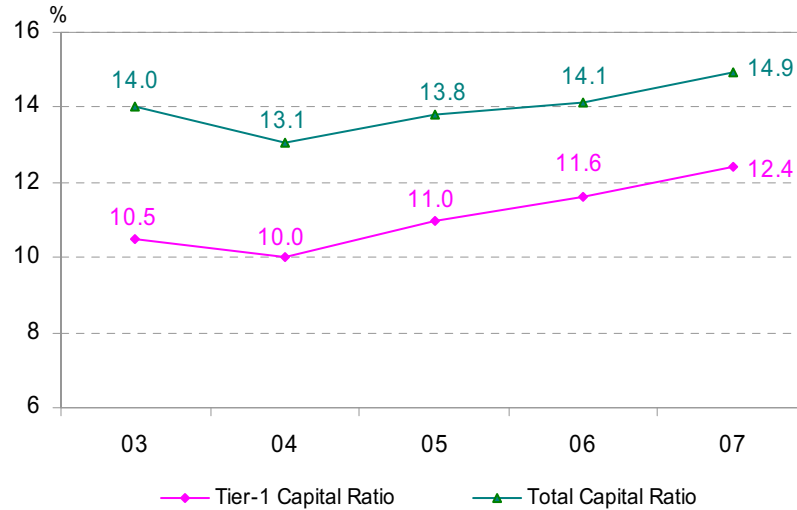
2.2.5 Capital Adequacy

Table 3 : Capital Adequacy of the Banking System

Financial Institutions	Capital Fund (Billion Baht)			CAR (%)		
	Tier-1	Tier-2	Total	Tier-1	Tier-2	Total
Thai banks	637.9	156.8	794.7	11.7	2.9	14.6
Foreign branches	145.8	0.0	145.8	17.3	0.0	17.3
Total commercial banks	783.7	156.8	940.5	12.4	2.5	14.9

Source : BOT

Chart 22 : Capital Adequacy Ratio



Source : BOT

Capital adequacy ratio (CAR) of the banking system strengthened further, increasing from 14.1 percent in 2006 to 14.9 percent in 2007. This reflected banks' capital increases to facilitate business expansion and mergers and acquisitions, as well as the 23.6 billion baht net profit of the banking system. Total capital increase of the banking system in 2007 was 95 billion baht, 83.6 percent of which was of local commercial banks. The CAR of local commercial banks averaged at 14.6 percent, while that of foreign banks was 17.3 percent.

CHAPTER 3

Major Developments in Supervisory Framework

3.1 Measures to Strengthen Risk Management

3.1.1 Improvement in Risk Management and Basel II Readiness

Basel II implementation is on schedule: Pillar 1 is to be implemented at the end of 2008, Pillar 2 in 2010, and Pillar 3 in mid-2009. Being at the final stage, most of the activities now focus on practical issues.

Following last year's releases of the final draft guidelines, the Bank of Thailand issued a consultative paper on securitization under Standardized Approach (SA) for industry comments, followed by the guideline on recognition of external credit assessment institutions (ECAIs) and completion of ECAI recognition and mapping process. In addition, the quantitative impact study (QIS) on capital was completed. Based on the QIS results, the Bank of Thailand released Basel II report templates for the parallel calculation, which started at the end of 2007. Supervisory activities continued from last year, with on-site examinations of management awareness, gap identification, measurements, and IT readiness.

During the third quarter of 2007, banks submitted the final applications declaring their approaches for credit and operational risk capital calculation. Most banks opted for SA for credit risk. In contrast, there was a divide among the approaches for operational risk (please see details below).

As Basel II implementation intensified, close and effective communication between Thai banks and supervisors were enhanced. Various communication channels were established and utilized. For example, in June 2007, a formal working group was established by Thai banks to discuss and share their experiences on Basel II implementation. This can be considered as a streamlined industry hearing in which banks can address practical issues directly to the Bank of Thailand for quick response.

In 2008, the main policy development activities are to refine the final guidelines to address practical issues and to issue the actual Basel II Notification under the new Financial Institutions Businesses Act. On the supervision side, the Bank of Thailand will continue the Basel II implementation examination process and start to approve banks' options. Examples include the use of 100 percent risk-weight for all corporate exposure under SA, use of the Alternative Standardized Approach (ASA) and Standardized Approach for operational risk (SA-OR), and use of the Internal Ratings-Based Approach (IRB) for credit risk.

**Table 4 : Chosen Approach for Credit and Operational Risk
Capital Calculation**

	Credit Risk			Operational Risk			Total
	SSA	SA	IRB	BIA	ASA	SA-OR	
Banks registered in Thailand	-	17	1	6	2	10	18
Foreign bank branches	-	13	3	8	1	7	16
Total	-	30	4	14	3	17	34

Source : BOT

3.1.2 Implementation of Consolidated Supervision

After releasing consolidated supervision guidelines for commercial banks in 2006, the Bank of Thailand has approved the financial group structure of fourteen local commercial banks with existing subsidiaries. During 2007, the Bank of Thailand closely evaluated difficulties that may arise from compliance with the guidelines, and conducted the quantitative impact study on group-wide capital adequacy, limit on intra-group transactions, and limit on large exposure.

Furthermore, the supplemental guideline to consolidated supervision was formulated to address such issues as the scope of business of subsidiaries, limits on investment in subsidiaries, intra-group transactions, and lending to related entities, as well as group risk management (market risk, liquidity risk and operational risk, etc.). This supplement is scheduled to be distributed

for industry comment in 2008, and will eventually be incorporated into a full set of consolidated supervision policies to be issued after the Financial Institutions Businesses Act becomes effective in August 2008.

3.1.3 Implementation of International Accounting Standard No. 39 (IAS 39)

The Bank of Thailand continued to prepare for the implementation of IAS 39. The process includes studying the accounting standards, drafting practical guidelines and regulations, and assessing financial and operating impacts on financial institutions.

Prior to the implementation of IAS 39 by the Federation of Accounting Professions, the Bank of Thailand has already prescribed two prudential regulations related to IAS 39.

1. Regulation on loan loss provisioning which has been in effect since the end of 2006. The regulation required financial institutions to gradually increase provision to 100 percent for all loans classified as substandard and doubtful; up from 20 percent and 50 percent, respectively. The provisioning amount is calculated based on the difference between loans outstanding and the present value of expected cash flows, either by means of repayments or liquidating collaterals. All banks have fully complied with the rule in 2007. This regulation helped to strengthen the financial position of banks, and therefore their resiliency to risk.

2. Regulations on accounting, measurement, and the disclosure of structured products such as Collateralized Debt Obligations (CDOs) and other structured notes, the details of which are described in Section 3.2.2.

Furthermore, in November 2007, the Bank of Thailand issued a questionnaire to assess financial institutions' readiness for IAS 32, IAS 39 and IFRS 7. The questionnaire was intended to raise awareness among financial institutions on accounting issues pertaining to financial instruments and fair value measurement.

3.2 Expanded Business Scope and Supervision

3.2.1 Expanding Business Scope with Respect to Equity and Bond Derivatives

The Bank of Thailand has permitted commercial banks to undertake limited equity and bond derivatives businesses. General permission is granted for plain vanilla equity derivatives and plain vanilla bond derivatives, while prior approval from BOT must be obtained on a case-by-case basis for other types of equity or bond derivatives.

Commercial banks undertaking such business must comply with all the relevant prudential guidelines issued by the Bank of Thailand including those concerning capital requirement, single lending limit and foreign exchange position.

3.2.2 Transactions with Embedded Derivatives and CDOs

The Bank of Thailand has revised the regulation on deposits and borrowings with embedded derivatives and the regulation on CDO investment as follows:

- Commercial banks are required to classify, recognize and assess the fair value of deposits or borrowings with embedded derivatives according to IAS 39, whereby the embedded derivatives of a hybrid instrument must be bifurcated, assessed, and accounted for separately from their hosts if they are not closely related to the host contract. In such cases, the embedded derivatives must be treated as derivatives and must be assessed and accounted for at fair value through profit and loss. Otherwise, the hybrid instrument must be accounted for according to its host contract.

- Requirements on risk management were specified in more detail to ensure good practice of efficient risk management with

- emphasis and clarification on the Board of Directors' responsibilities of approving and monitoring the products
- clarification on risk analysis, including relevant risk factors
- details of issues to be covered in product and risk management policy and procedures
- details of the required risk management system

3.2.3 Consumer Protection when Undertaking Derivatives Transactions

The Bank of Thailand has issued a guideline to introduce the concept of client suitability and raise awareness among commercial banks on the importance of customer protection when undertaking derivatives businesses. The guideline requires banks to offer derivatives transactions to customers with due care by conducting client suitability analysis, providing true and complete information, handling customers' complaints in a fair and timely manner, and carrying out appropriate internal control processes.

3.2.4 Expand Business Scope of AMCs

To expand the business scope of asset management companies (AMCs) in accordance with the Act amending the Emergency Decree on Asset Management Company B.E. 2541 B.E. 2550, the Bank of Thailand has issued the following guidelines for AMCs:

- AMCs may purchase assets from discontinued financial institutions, in addition to non-performing assets from operating financial institutions.
- AMCs may be appointed to manage non-performing assets of operating financial institutions or assets of discontinued financial institutions.

3.3 Measures to Strengthen Supervisory Framework

3.3.1 Financial Sector Assessment Program

Since the beginning of 2007, Thailand has officially entered the Financial Sector Assessment Program (FSAP), a joint initiative of the International Monetary Fund and the World Bank aimed at a comprehensive assessment of the financial system stability and an analysis of its linkages with economic stability and the strength of related policy and supervisory frameworks.

The final outcome of the assessment on banking supervisory framework indicates a high degree of compliance with the international standards. One major shortcoming found was the legal framework for banking supervision, as it does not explicitly facilitate the operational independence of the Bank of Thailand in implementing banking supervision policies, nor does it explicitly allow for consolidated supervision and prompt corrective actions. However, after the FSAP discussions, Thailand has passed three key legislations on the financial sector, namely, the Amended Bank of Thailand Act, the Financial Institutions Businesses Act, and the Deposit Protection Agency Act. These legislations have addressed most of the legal and regulatory shortcomings identified in the FSAP assessment of the standards.

3.3.2 New Laws : BOT Act, FIBA, DPA Act

In 2007, the Parliament passed three key legislations on the financial sector, namely, the Amended Bank of Thailand Act (No.4) B.E. 2551 (amending the Bank of Thailand Act B.E. 2485), the Financial Institutions Businesses Act B.E. 2551 (FIBA), and the Deposit Protection Agency Act B.E. 2551 (DPA). The amended BOT Act came into force in March 2008, except provisions related to the DPA Act, while the FIBA and the DPA Act became effective in August 2008. The key features of these laws are as follows:

(1) The Amended BOT Act

The amended BOT Act explicitly prescribes the objectives of the Bank of Thailand in maintaining monetary stability, financial institutions system stability and payment systems stability. The Act also stipulates the independence, transparency and accountability of the Bank of Thailand, as well as expanded the Bank of Thailand's capacity to manage assets and conduct monetary policy more efficiently. Under the Act, four committees - the Court of Directors, the Monetary Policy Committee, the Financial Institutions Policy Committee and the Payment Systems Committee - are responsible for supervising the operations of the Bank of Thailand. The process for appointing and dismissing, as well as the term of the Governor has been specified in the law explicitly.

(2) The FIBA

The FIBA, which replaces the Commercial Banking Act B.E. 2505 and the Act on the Undertaking of Finance Business, Securities Business and Credit Foncier Business B.E. 2522, aims to strengthen supervisory framework of the financial institution system. The role and responsibility of regulators is clearly specified in FIBA, with the Bank of Thailand empowered to supervise and close financial institutions, whilst the Ministry of Finance is empowered to grant and revoke license. Furthermore, the Bank of Thailand is empowered to conduct consolidated supervision over financial conglomerates, implement prudential regulation to comply with the Basel Core Principles, and oversee consumer protection. The compulsory measure for intervention in financial institutions linked to the level of capital, the so called Prompt Corrective Action, has been introduced. The Act has stipulated provisions concerning fairness and consumer protection such as financial institutions' duty to disclose information regarding fees, interest and other expenses, and limitations on the amount of principal guarantee.

(3) The DPA Act

The DPA Act is aimed to replace the blanket deposit guarantee scheme with limited deposit insurance. The Deposit Protection Agency, to be established as a juristic person under this Act, is responsible for providing compensation to depositors when a financial institution's license is revoked and acting as a liquidator for such an institution. All deposits in domestic currency in the Kingdom, excluding Non-resident Baht Accounts, will be insured on the maximum coverage of one million baht per depositor per financial institution. On the first year of its establishment, the DPA will insure full amounts of deposits. Afterwards, the coverage amount will be reduced year by year to 100 million, 50 million, 10 million and finally 1 million baht by August 2012. (Deposit guaranty coverage has been revised in 2008, please see Box on Resiliency of the Thai Banking System to Global Financial Turmoil in 2008.)

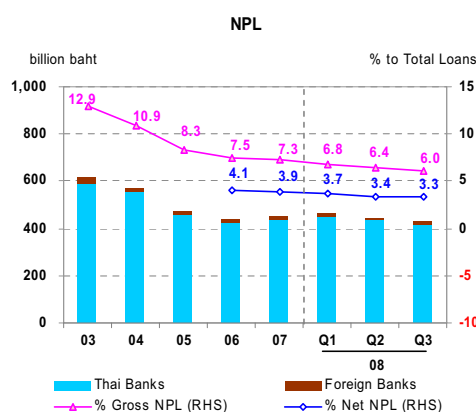
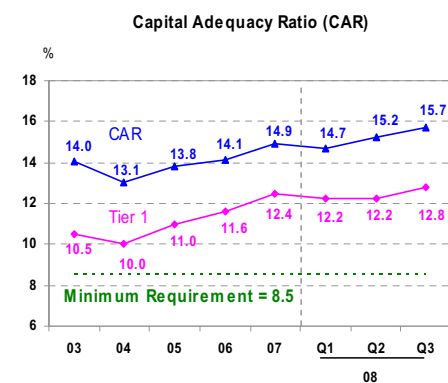
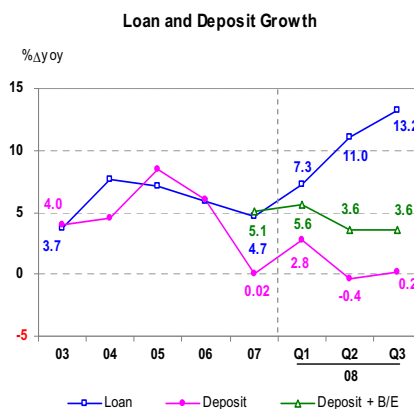
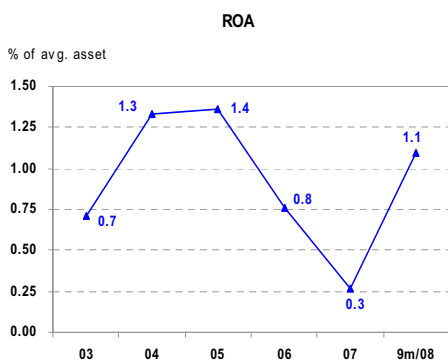
Box : Resiliency of the Thai Banking System to Global Financial Turmoil in 2008

I. Impact of the global financial turmoil on the Thai banking system

The direct impact of the financial turmoil so far on the Thai banking sector during the first 9 months of 2008 has been very limited due to the low direct exposure of Thai banks to CDOs and other problem assets. As of September 2008, exposure to CDOs was 0.02 percent of total assets. All subprime related CDOs have already been unwounded since January 2008 with CDOs exposures having also been fully provisioned for in line with the International Accounting Standards No. 39 (IAS 39). Moreover, Thai banks have low reliance on overseas funding, with up to about 80 percent of banks' source of fund as of September 2008 coming from domestic deposits and bills of exchange.

However, the second-round or indirect impact from the global economic slowdown remains an important downside risk that needs to be carefully managed. As such, the Thai authorities are vigilant in monitoring and assessing the domestic liquidity conditions, asset quality (NPLs), along with ensuring a stable macroeconomic environment, supported by low inflation, strong external position with high international reserves and low external debt.

The Thai banking system's financial strength and risk management is also robust, reflected by solid profits, credit growth, high capital fund, and declining NPLs. This strong banking environment should provide support for banks to weather the impact from the turmoil. In addition, the authorities stand ready to put in place any necessary measures to ensure economic and financial stability, going forward.



Source : BOT

II. Framework to safeguard banking system stability

Currently, the Bank of Thailand (BOT) uses both macro-prudential and micro-prudential framework in monitoring and safeguarding financial stability. The macro-prudential framework is designed to analyze the interlink between macroeconomic stability and financial system stability, comprising key components such as an early warning system, and regular dialogues with the market participants including bank management, external and internal auditors, and business sectors. The micro-prudential framework consists of both on-site and off-site risk-based supervision.

Progress to comply with international best practices is also at the forefront of our agenda, and has contributed to the improved risk management and resiliency of the banking system. The strength of the banking system was confirmed by the positive assessment in the Financial Sector Assessment Program (FSAP) of the International Monetary Fund and the World Bank in 2007, whereby the overall banking system was assessed to be robust even in face of extreme simulated stress-test scenarios. Overall, the banking regulatory framework broadly meets international best practices stipulated in the core principles in banking supervision of the Bank for International Settlements (BIS). Moreover, the BOT continues to be on track for the move towards improved risk-based supervision in line with Basel II guidelines. Furthermore, the new Financial Institutions Businesses Act, which came into effect in August 2008, has also strengthened the BOT's legal power to implement consolidated supervision, prompt corrective action, and strengthening governance of board of directors and senior management of banks. All of the above initiatives together with the BOT's ongoing efforts on consumer protection, corporate governance, and surveillance capabilities, would help ensure proper safeguards of the Thai banking system stability.

Despite all the aforementioned groundwork, a coherent framework of key strategies and policies is also needed to help steer the financial system and the economy through this global turmoil which full impact is yet to be felt. The key strategies include maintaining confidence by ensuring strong risk management ability of banks and capital adequacy, as well as implementing appropriate counter-cyclical macroeconomic policies. Concrete actions have also been taken. In this regard, recent policy responses included: (1) a policy interest rate cut by 100 basis points in December 2008; (2) an extension of full guarantee on deposit

for 3 years; (3) a step-up in surveillance efforts e.g. on-site and off-site supervision, information disclosures and more frequent policy dialogues with financial institutions; and (4) regular stress tests of banks using the global financial turmoil scenario, which so far have shown high resiliency of the Thai banking sector, and also importantly, the agility of bank management's strategies and policies in managing the evolving risk.



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