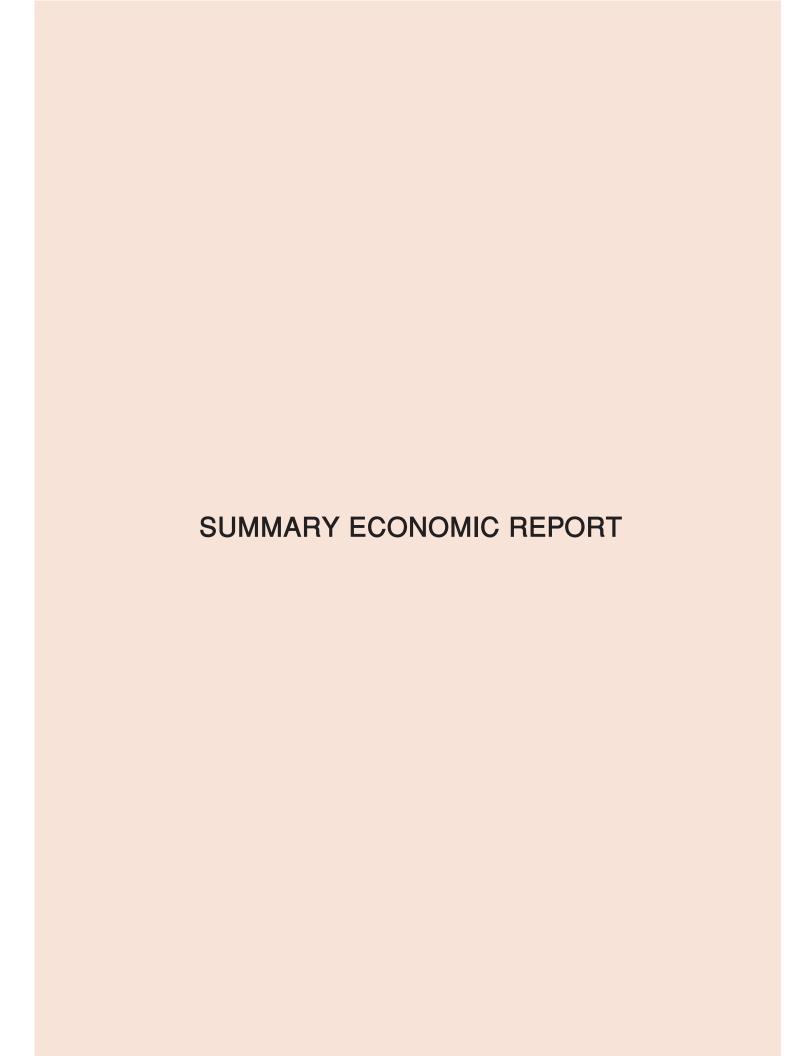


# ANNUAL ECONOMIC REPORT 2009

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# **Economic Performance in 2009**

In 2009, the overall economy contracted by 2.3 percent year-on-year (yoy), the first time in a decade, due to the global financial crisis which significantly affected Thailand's major trading partner countries. As a result, the Thai exports sharply shrank which also caused continuing impacts on manufacturing productions, business confidence, as well as domestic consumption and investment. During the first quarter of 2009, the Thai economy was most severely affected by the global economic crisis. However, in the second half of the year, the Thai economy showed signs of recovery following the world economic recovery as well as accommodative monetary and fiscal policies which helped stimulate the economy and shoring up producer and consumer confidence. Private consumption was boosted by favorable farm and tourism incomes as well as rebounding employment. Meanwhile, exports and imports ameliorated in tandem with manufacturing productions which satisfactorily expanded almost across the board, both productions for domestic uses and for exports. Nevertheless, private investment, although starting to soar, remained at a low level.

	Growth	rate (Δ%)	Contribution to	GDP growth (%)
	2008	2009	2008	2009
Consumption	3.0	-0.1	1.8	0.0
Private	2.7	-1.1	1.4	-0.6
Public	4.6	5.8	0.4	0.5
Investment	1.2	-9.0	0.3	-2.0
Private	3.2	-12.8	0.5	-2.1
Public	-4.6	2.7	-0.3	0.1
Domestic Demand	2.5	-2.4	2.1	-2.0
Change in Inventories	58.6*	-98.7*	1.3	-3.6
Net Exports of Goods and Services	s -6.5	23.5	-1.0	3.4
Exports of Goods and Services	5.1	-12.7	3.6	-9.2
Imports of Goods and Services	8.5	-21.8	4.6	-12.6
Gross Domestic Product	2.5	-2.3	2.5	-2.3

Source: Office of the National Economic and Social Development Board

Overall economic stability remained sound, reflecting in high level of international reserves, continual surpluses in trade balance and current account as well as low inflation and unemployment rates.

## Supply side

With regard to the agricultural sector, major crop productions, especially rice and tapioca, fell sharply mainly from unattractive prices compared with those of last year. Major crop prices in 2009 also decreased from those of the previous year in response to a decline in demand for both food and energy crops following the world economic crisis. Nonetheless, agricultural prices continued to improve in the second half of the year in line with the global demand recovery, especially exports of agricultural products to China. Moreover, world grain productions in agricultural year 2008/2009 trended downwards due to unpropitious weather, affecting plantations in many countries around the world which contributed to increases in prices of rice and various agricultural products during the end of the year. Decreases in crop productions and prices in 2009 contributed to a drop in farm income by 9.4 percent from last year.

Manufacturing Productions in 2009 contracted by 5.1 percent. During the first half of the year, productions declined almost across the board, particularly vehicle industry, owing to a drop in both domestic and external demand. However, manufacturing productions began to improve and became more broad-based in the second half of the year, partly due to recovering economic conditions of trading partner countries,

rising domestic demand from the government's economic stimulus measures, and stock replenishment. In addition, it was worth highlighting that electronics production already returned to its pre-crisis level in the fourth quarter.

Capacity Utilization Rate in 2009 averaged at 61.0 percent, decreasing from 67.7 percent in 2008. In the first quarter of the year, capacity utilization rate dropped almost all industries. However, it had constantly risen since the second quarter, corresponding to improving manufacturing productions, especially electronics industry. In the last quarter of 2009, capacity utilization rate averaged at 66.0 percent, a rate close to that of the pre-crisis period.

In the service sector, tourism in 2009 contracted in line with the number of foreign tourist arrivals. In the first half of 2009, the number of foreign tourist arrivals declined by 16.1 percent yoy according to economic conditions of key traveler countries. Moreover, domestic political problems prompted many Asian countries to issue travel warnings for Thailand. However, in the latter half of the year, economic conditions of key traveler countries began to pick up, together with the mitigations in political risks and pandemic 2009 influenza, resulting in a 12.4 percent yoy growth in the number of foreign tourist arrivals. This contributed to a contraction of the number of foreign tourist arrivals by 3.0 percent in 2009. Occupancy rate stood at 49.2 percent in 2009, declining from 56.2 percent in the previous year.

Overall real estate sector in 2009 expanded from the previous year. An increase in demand for real estate was reflected in a growth of 9.6 percent in the registration number of

transferred residential properties in Bangkok and vicinity, as consumers accelerated their property registrations due to the uncertainties in the extension of benefits from the property stimulus measures which were supposed to be terminated at the end of March 2009. Rebounding demand in the second half of the year following the economic recovery also contributed to demand expanding. Overall real estate supply in 2009 expanded by 9.5 percent from last year, as reflected in a growth in the number of new housing registrations in Bangkok and vicinity. Excluding Baan Eua Athorn (BEA) condominium, overall real estate supply slightly expanded by 1.6 percent. For newly-launched real estate projects in Bangkok and vicinity, the average price per unit increased in response to rising land prices in metropolitan areas. Meanwhile, prices of low- and middle-ended quality-adjusted houses with lands declined from 2008.

#### 2. Demand side

Private consumption in 2009 dropped by 1.1 percent yoy. In the first quarter of the year, private consumption declined in line with domestic economic recession and softening consumer confidence. Private sector reduced spending on both durable and non-durable goods. Household spending during the rest of the year ameliorated following recovering economic conditions as well as the government's stimulus measures. Private consumption, especially of durable goods such as vehicles and electrical appliances, resumed expansion in the fourth quarter due to favorable farm income from rising crop prices, and improving consumer confidence.

**Private investment** in 2009 contracted by 12.8 percent yoy. During the first half of the year,

private investment declined from the world economic crisis and political uncertainties, but improved in the second half of the year mainly in response to the economic recovery and rebounding investor confidence. Nevertheless, most capital investments were for replacement of depreciated machineries and equipments. Meanwhile, investment in construction remained at a low level throughout the year.

On the external front, the trade balance in 2009 registered a substantial surplus from the previous year. Although exports markedly contracted in response to the economic recession of trading partner countries, imports registered a sharper drop from a decline in domestic demand. Export value in 2009, amounting to 150.9 billion US dollars, contracted by 13.9 percent from last year. Meanwhile, import value, totaling to 131.5 billion US dollars, declined by 24.9 percent from the past year. Services, income and transfers account also recorded a surplus of 0.9 billion US dollars, decreasing from an excess of 1.5 billion US dollars in 2008 mainly due to a considerable drop in tourism income in the first half of 2009 and a decrease in investment returns. As a consequence, the current account surplus stood at 20.3 billion US dollars, rising from a surplus of 1.6 billion US dollars last year.

Net capital account in 2009 recorded a deficit of 1.2 billion US dollars, compared to a surplus of 14.6 billion US dollars in the previous year. The deficit was mainly attributable to capital outflows from Thai investments abroad, both in portfolio investments, especially in Korean government bonds, and direct investment which was in line with the Thai government's policy to encourage Thai investments abroad. Moreover, foreign direct investments in 2009

declined from the previous year, particularly from the US, Singapore and Japan due to effects from the global financial crisis. Nevertheless, foreign portfolio investments turned to a surplus following clearer signs of the global economic recovery, especially in Asia. Therefore, in addition to the large current account surplus, the balance of payments in 2009 registered a surplus of 24.1 billion US dollars, a slight decline from the previous year.

With regard to fiscal conditions in fiscal year 2009, the government continued a deficit budget policy in a larger size, increasing from a deficit of 1.8 percent of GDP to 3.9 percent of GDP this fiscal year (including the supplementary budget of 116.7 billion baht) to shore up and stimulate the economy during the global economic crisis. Moreover, during the end of fiscal year 2009 the government launched the Strong Thailand 2012 Project, and the loan disbursement under which totaled 14.9 billion baht. As a result, the budget expenditure (excluding principal loan repayment) amounted to 1,803.0 billion baht, increasing by 13.9 percent from the previous fiscal year. Meanwhile, the government's revenue collection was lower than the target owing to the economic recession and government's tax cut measures. Consequently, the government's revenue (cash basis) was 1,409.7 billion baht, decreasing by 8.8 percent from the last fiscal year, and lower than the budget document by 190.3 billion baht. Due to higher expenditure and lower revenue collection of the government, the overall cash balance in fiscal year 2009 recorded a deficit of 420.3 billion baht, or 4.8 percent of GDP.

For fiscal year 2010, the government continued its deficit budget policy by setting the

budget expenditure at 1,700 billion baht, and the estimated net revenue at 1,350 billion baht, resulting in a budget deficit of 350 billion baht, or 3.8 percent of GDP. Moreover, the government has incurred additional non-budgetary borrowing to invest in the Strong Thailand 2012 Project amounting to 335 billion baht, or 3.7 percent of GDP.

In the first quarter of fiscal year 2010, the budget expenditure (excluding principal loan repayment) totaled 449.8 billion baht, increasing by 11.3 percent from the same period of the previous fiscal year. Together with loan disbursement under the Strong Thailand 2012 Project of 20.2 billion baht, the government's revenue (cash basis) stood at 352.9 billion baht, increasing by 27.0 percent from the same period of the last fiscal year as a result of excise tax rate hikes in petroleum, alcoholic beverage and beer, as well as recovering economic conditions. As the government expenditure was higher than its revenue, the overall cash balance recorded a deficit of 128.8 billion baht. This resulted in an increase in the level of public debt from 37.3 percent of GDP at the end of fiscal year 2008 to 43.9 percent of GDP at the end of the first quarter of fiscal year 2009.

## 3. Monetary conditions

Both reference lending and deposit interest rates of commercial banks<sup>1/</sup> declined in response to the Monetary Policy Committee's (MPC) 3 consecutive policy interest rate cuts

(during the beginning of 2009) to 1.25 percent per annum. The minimum loan rate (MLR) of 4 largest commercial banks averaged at 5.86 percent per annum, compared to 6.75 percent per annum at the end of 2008. Likewise, the average 3-month, 6-month, and 12-month time deposit rates of 4 largest commercial banks stood equivalently at 0.70 percent per annum at the end of 2009, compared to last year's average at 2.28, 2.34 and 2.54 percent per annum, respectively.

Depository corporations' private credit<sup>2/</sup> at the end of 2009 expanded by 3.7 percent from a growth of 8.5 percent last year. During January-October 2009, private credit decelerated following the economic recession. Nevertheless, household credits grew satisfactorily, especially mortgage loans. Private credit began to accelerate during the end of 2009 due to (1) the government's Fast Track Scheme to accommodate specialized financial institutions' private credit expansion, (2) rising demand for credits from improving economic confidence and conditions, and (3) banks' less stringent credit standards compared with the beginning of the year. Meanwhile, deposits including bill of exchanges (B/E) at depository corporations during the first half of 2009 continued to expand from that of the previous year as investors shifted from risky assets towards deposits. Nevertheless, deposits (including B/E) at depository corporations decelerated during the latter half of the year, partly due to more investment in higher-return assets, government savings bond and BOT bond.

Average interest rates of 4 largest commercial banks

Deposit corporations comprise of Domestically Registered Commercial Banks, Branches of Foreign Banks, International Banking Facilities, Finance Companies, Specialized Banks, Thrift and Credit Cooperatives, and Money Market Mutual Funds.

Deposits (including B/E) grew by 6.6 percent at the end of 2009 from last year's expansion of 9.0 percent. Commercial banks' liquidity remained eased as loan to deposit (including B/E) ratio of overall commercial banks in 20093/ averaged at 85.3 percent, decreasing from the previous year's average of 87.9 percent.

Monetary base slowed down in the first half of 2009 in line with economic conditions, but still increased corresponding to improvements in economic activities and domestic demand for consumption. At the end of the year, monetary base grew by 6.1 percent, decelerating from an 11.3 percent expansion in 2008. Broad money<sup>4</sup>, during the beginning of 2009 still registered a marked expansion which was close to that of the fourth quarter of last year regardless of the domestic economic contraction. This was partly due to an increase in financial institutions' deposits as a result of shifted investment from risky assets towards deposits. However, broad money had continued to decelerate since the middle of the year in response to an adjustment in investment from risky financial assets towards deposits. Overall broad money at the end of 2009 stood at 10,610.1 billion baht, expanding by 6.7 percent, but decelerating from an expansion of 9.2 percent last year.

Baht-to-US dollar exchange rate in 2009 averaged at 34.32 baht per US dollar, weakening from an average of 33.38 baht per US dollar in 2008. In the first quarter of 2009, the baht depreciated from investors' concerns over problems in the US and the European financial systems, as well as more than expected global

economic contraction. Consequently, investors shifted their investments from risky assets towards US dollar denominated assets. Later, however, the baht trended upwards in response to the depreciation of US dollar, improving investor confidence in the global economic recovery, and continual current account surplus. Towards the end of the year, the baht registered a downward trend, partly due to an increasing year-end demand for US dollar of domestic investors and financial institutions, as well as the downgrades of sovereign ratings of Greece and Mexico, leading to a temporary risk aversion.

Nominal Effective Exchange Rate (NEER) slightly weakened from an average of 77.90 in 2008 to 77.13 in 2009, reflecting the depreciation of baht against trading partners' currencies. Meanwhile, in 2009, Real Effective Exchange Rate (REER) or price-adjusted NEER to reflect the country's competitiveness averaged at 89.22, decreasing from an average of 91.24 last year, mainly following declines in NEER and domestic inflation rate compared with those of trading partners. Compared to that of the previous year, the depreciation of REER showed an improvement in Thailand's competitiveness.

Overall economic stability remained sound. External stability remained resilient as reflected by continued current account surplus and high level of international reserves. At the end of December 2009, international reserves stood at 138.4 billion US dollars, increasing from 111.0 billion US dollars last year, on the back of low external debts. Regarding internal stability, headline inflation recorded a negative rate of 0.9

Preliminary data and subject to change
 New definition of Broad Money which includes Bill of Exchange, Money Market Fund and Cooperatives is used in this report consistent with the international basis.

percent in 2009, declining markedly from 5.5 percent in 2008, following a notable decline in energy prices, the government's stimulus measures, as well as the economic contraction. With these latter two factors, the core inflation rate registered at 0.3 percent, declining from 2.4 percent in the previous year. Unemployment rate showed an improving trend in line with the economic recovery, lowering from 2.1 percent in the first quarter to 1.7 percent in the second quarter, and finally to 1.0 percent in the last quarter of 2009.

#### 4. Economic Outlook for 2010

The MPC assessed that the Thai economy, both demand and supply, continued to expand satisfactorily from the last quarter of 2009. Meanwhile, favorable global economic

recovery helped support an expansion in exports. However, the MPC viewed that going forward domestic political uncertainty would have adverse impact on confidences of consumer, investor, and tourists. Hence, the MPC decided to revise the economic growth for 2010 downwards in the range of 4.3-5.8<sup>5/</sup>. On inflationary pressure, the MPC assessed that price pressure would be heightened since pressure on costs of raw materials accelerated for some time would gradually be passed through to consumer prices following an improvement in domestic demand. However, the government's decision to extend the expiration of its cost of living subsidy measures to the end of the second quarter of 2010 contributed to the estimated headline and core inflation rates in 2010 to be in the ranges of 3.3-4.8 and 1.0-2.0 percent, respectively.

<sup>&</sup>lt;sup>5/</sup> As of April 2010

## Thailand's Key Economic Indicators

	2008	2009		2009		
	2008	2009	Quarter 1	Quarter 2	Quarter 3	Quarter 4
(% from the same period of last year, unless specified otherwise)						
Gross Domestic Product <sup>1/</sup>	2.5	-2.3	-7.1	-4.9	-2.7	5.8
The Real Sector						
Farm Income	33.1	-9.4	2.5	-21.5	-17.0	0.2
Crop Production	9.0	-2.0	2.5	-6.4	-2.4	-2.5
Crop Price	22.1	-7.5	0.0	-16.1	-14.9	2.8
Manufacturing Production Index, without seasonal adjustment (level)	190.2	180.5	162.4	171.9	186.0	201.4
Manufacturing Production Index, without seasonal adjustment	5.3	-5.1	-18.5	-9.2	-5.0	14.2
Industrial Capacity Utilization (%)	67.6	61.0	57.9	58.4	61.5	66.0
Number of Tourists (million persons)	14.6	14.1	3.6	3.0	3.3	4.3
Number of Tourists	0.8	-3.0	-15.7	-16.5	-2.8	27.9
Occupancy rate (%)	56.2	49.2	53.4	42.1	47.2	54.1
Domestic Demand						
Private Consumption Index	3.6	-2.5	-5.3	-4.3	-2.5	2.3
Private Investment Index	2.9	-11.2	-15.8	-15.4	-11.2	-1.7
Government Cash Balance (billions of baht)	-96.5	-401.4	-240.2	57.8	-90.3	-128.8
Price and Employment						
Headline Inflation	5.5	-0.9	-0.3	-2.8	-2.2	1.9
Core Inflation (excluding raw food and energy)	2.4	0.3	1.7	-0.1	-0.5	0.1
Unemployment Rate (%)	1.4	1.5	2.1	1.7	1.2	1.0
External Accounts (Billions of US\$, unless specified otherwise)						
Export <sup>2/</sup>	175.2	150.9	33.3	34.0	40.7	42.9
$\Delta\%$	15.9	-13.9	-20.0	-26.1	-17.5	12.2
Import <sup>2/</sup>	175.1	131.5	25.6	30.1	35.6	40.2
$\Delta\%$	26.5	-24.9	-37.6	-33.0	-28.3	1.4
Trade Balance	0.1	19.4	7.7	3.9	5.1	2.7
Current Account <sup>3/</sup>	1.6	20.3	9.5	2.8	3.7	4.3
Net Capital Flow <sup>3/4/</sup>	14.6	-1.2	-3.2	-3.5	2.8	2.6
Balance of Payments	24.7	24.1	7.4	1.3	7.7	7.8
Official Reserves (Billions of US\$)	111.0	138.4	116.2	120.8	131.8	138.4
Monetary Statistics (End of period) (Billions of baht)						
Monetary Base	1,039.7	1,103.4	974.2	980.7	983.2	1,103.4
$\Delta\%$	11.3	6.1	4.2	8.2	8.9	6.1
Narrow Money	1,041.2	1,174.6	1,033.0	1,025.6	1,052.1	1,174.6
$\Delta\%$	4.1	12.8	3.2	3.9	7.7	12.8
Broad Money	9,948.7	10,610.1	10,241.0	10,143.0	10,120.6	10,610.1
$\Delta\%$	9.2	6.7	9.0	9.1	7.6	6.7
Depository corporations' deposits (including bill of exchange) <sup>5/</sup>	9,787.3	10,434.6	10,167.3	10,104.1	10,019.0	10,434.6
$\Delta\%$	9.0	6.6	8.8	9.3	7.7	6.6
Depository Corporations Private Credits <sup>5/</sup>	8,565.2	8,832.7	8,460.7	8,473.6	8,510.4	8,832.7
$\Delta\%$	9.3	3.1	6.4	2.9	0.4	3.1
Interest Rates (% per annum)						
Repurchase Rate, 1 day (closing rate daily average)	3.38	1.42	1.89	1.27	1.25	1.25
		12/	1.07	1.18	1.15	1.15
Overnight Interbank Rate (mode daily average)	3.35	1.34	1.87	1.10	1.13	1.13
Overnight Interbank Rate (mode daily average)	3.35 1.75-2.00	0.65-1.00	0.75-1.00	0.65-1.00	0.65-1.00	0.65-1.00
Overnight Interbank Rate (mode daily average) Fixed Deposit Rate (1 year) <sup>6/</sup>						

Note: 1/ At constant price 2/ BOP Basis 3/ From October 2006, the reinvested earning data (R.E.) is included in the Financial Account, with corresponding contra entry under "Investment Income" item by the same amount in the Current Account. Also, adjustments are made to the Balance of Payments data series to reflect RE since 2001.

Investment Income Item by the same amount in the Current Account. Also, adjustments are made to the Balance of Payments data series to reflect RE since 2001.

(Detail on BOT Press release No.45/2006) http://www.bot.or.th/bothomepage/General/PressReleasesAndSpeeches/PressReleases/news2549/Eng/n4549e.htm

The latest net capital flow data shown is preliminary which will be revised in the following month.

Depository Corporations comprise Domestically Registered Commercial Banks, Branches of Foreign Banks, International Banking Facilities, Finance Companies, Specialized Banks, Thrift and Credit Cooperatives and Money Market Mutual Funds.

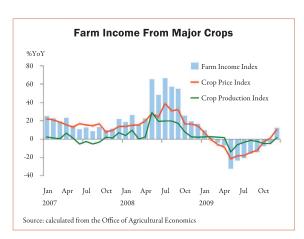
 $<sup>\</sup>Delta$ % represent percentage change from the same period last year

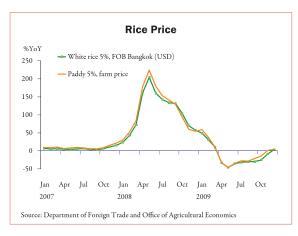


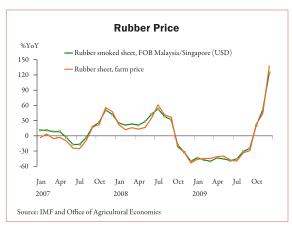
# **Agricultural Sector**

Farm Income from Major Crops, Crop Production and Crop Price

			2009					
%YoY	2008	2009	Q1	Q2	Q3	Q4		
Farm income	33.1	-9.4	2.5	-21.5	-17.0	0.2		
Crop production	9.0	-2.0	2.5	-6.4	-2.4	-2.5		
Crop price	22.1	-7.5	0.0	-16.1	-14.9	2.8		



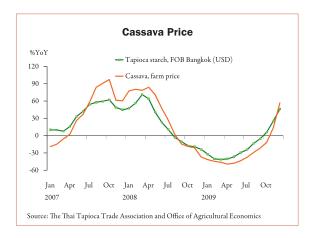


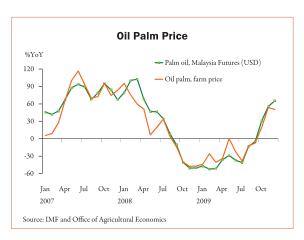


According to the National Economic and Social Development Board (NESDB), agricultural production in 2009 declined by 0.6 percent from the previous year. This corresponded to the contraction in crop production index which fell by 2.0 percent from the previous year, mainly from lower productions of oil palm, rubber and paddies. A drop in oil palm production resulted from the crop's cyclical nature that normally provided high yield every two years. Moreover, unfavorable climate in the southern region of Thailand towards the end of the year disrupted the supply of oil palm and rubber. A decline in rice output was due mainly to a reduction in planting areas following less attractive price and an outbreak of planthopper in the fourth quarter. Similarly, an invasion of cassava mealybug in many regions damaged the production of cassava and caused farmers to reduce planting areas and shift to cultivate other crops such as sugarcane.

Crop price index in 2009 contracted by 7.5 percent from that of the previous year, particularly in the second and third quarters by 16.1 and 14.9 percent, respectively. This was in line with diminished demand for food and energy crops such as paddies, rubber, cassava and maize, amid the global economic crisis. Owing to the recovery of global demand especially from China in the second half of the year, crop price improved constantly as an expansion of 2.8 percent was observed in the last quarter. Exports of agricultural products to China for industrial uses increased, including rubber for automotive industry, glutinous rice for alcohol beverages, and tapioca chips for ethanol industry. Moreover, farming areas in many countries such as India,

China and the Philippines were adversely affected by natural disasters, contributing to an increase in prices of rice and other agricultural products during the end of the year.





Prices of livestock and fishery increased from the previous year by 3.6 and 1.7 percent, respectively. An increase in livestock price was due to lower supply of fowls and swine while the demand for consumption steadily increased. For fishery, a rising price was driven by an increase in price of sea fish, whereas the price of shrimp decreased from the preceding year. Despite increases in prices of livestock and fishery, Thai agricultural price index exhibited a decline of 5.2 percent from that of the previous year due mainly to a decrease in crop price.

#### Outlook for 2010

As for 2010, farm income is expected to expand from a strong growth in crop price while crop production will be constrained by ongoing droughts and pest outbreaks which might be more severe than the end of the previous year. Farmers need to terminate their plantings in order to cut the pests' epidemic cycle. Thus, the productions of rice and cassava are expected to decline from the previous year, whereas productions of oil palm, rubber and sugarcane are expected to rise due to an increase in expected harvesting areas and a shift of productions from cassava and maize to sugarcane following an attractive sugarcane price.

A strong growth in major crop prices is expected in 2010 from an increase in prices of such crops as rubber, Hom Mali and other paddies, cassava, sugarcane, and oil palm. This owes to 1) a contraction in the world supply of rice and sugarcane as a result natural disasters in India, China and the Philippines; 2) the recovery of global demand especially from China, causing exports of Thai agricultural products for China's industrial uses to rise; and 3) an ongoing outbreak of planthopper and mealybug that will cut the supply of rice and cassava.

# Thai Agricultural Prices

(Unit: Baht/tonne)

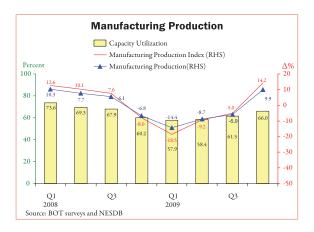
	2008	2009		20	009	
	2008	2009	Q1	Q2	Q3	Q4
Agricultural Price Index (1995 =100)	269.0	255.1	250.5	249.9	247.6	272.3
$\Delta\%$	19.3	-5.2	1.3	-12.6	-11.0	3.0
1. Crop Price Index <sup>1/</sup> (1995 =100)	336.0	310.7	304.7	303.9	296.6	337.7
$\Delta\%$	22.1	-7.5	0.0	-16.1	-14.9	2.8
Hom Mali Paddy	13,700	13,513	12,708	13,262	13,927	14,287
$\Delta\%$	56.2	-1.4	8.8	-21.2	1.6	12.1
Paddy Class 1 (5%)	10,676	9,717	10,142	9,925	9,567	9,077
$\Delta\%$	63.5	-9.0	27.6	-21.4	-19.5	-9.7
Rubber	76,549	56,358	43,584	52,068	58,029	73,827
$\Delta\%$	11.0	-26.4	-45.0	-42.8	-37.7	58.9
Maize	7,850	6,139	6,409	6,253	5,568	6,029
$\Delta\%$	15.4	-21.8	-18.4	-21.5	-36.0	-7.3
Cassava	1,808	1,252	1,171	1,166	1,219	1,494
$\Delta\%$	23.8	-30.7	-44.1	-47.0	-30.0	17.4
2. Livestock Price Index (1995 = 100)	151.2	156.6	148.7	159.7	160.0	158.0
$\Delta\%$	16.0	3.6	1.1	2.2	5.1	5.8
3. Fishery Price Index <sup>2/</sup> (1995 = 100)	174.4	177.3	180.7	168.7	180.1	179.7
$\Delta\%$	7.2	1.7	9.1	-2.9	-0.8	1.7
4. Forestry Price Index (1995 = 100)	126.8	153.5	153.7	153.4	153.4	153.4
$\Delta\%$	3.3	21.0	21.2	20.9	20.9	20.9

Source: The Farm Price Index is constructed from the data of the Fish Marketing Organization, Office of Agricultural Economics, and Bureau of Trade and Economic Indices

Note:  $\Delta\%$  represents percentage change from the same period last year  $^{1/}$  referred by the vegetable and fruit indices from Office of Agricultural Economics

 $<sup>^{2/}\,\,</sup>$  adjusted weights between vannamei and black tiger shrimps since 2008

# **Manufacturing Sector**

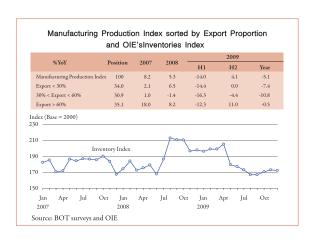


#### Manufacturing Production Index\*

(Year-on-year percentage change)

Y 1 .	Weight			2009 <sup>p/</sup>			
Industry	2000	2007	2008	H1	H2	Year	
Textiles	12.23	-2.5	-2.1	-4.0	-8.6	-6.2	
Electronics	10.31	25.3	14.9	-11.0	14.6	2.2	
Petroleum	9.48	1.2	2.7	-0.7	9.6	4.3	
Vehicles and Equipment	6.85	4.0	14.8	-40.0	-5.9	-23.3	
Food	6.82	4.5	3.1	-3.7	4.5	-0.3	
Beverages	5.11	3.3	2.9	-7.1	-10.3	-8.7	
Electrical Appliances	5.05	6.0	4.9	-27.7	1.2	-14.6	
Leather and Leather Products	2.79	22.7	-68.9	-25.7	-5.9	-16.8	
Chemical Products	2.36	7.4	-6.1	-4.6	14.0	4.1	
Iron and Steel Products	2.21	-2.3	-9.8	-35.2	24.2	-11.0	
Construction Materials	1.84	-3.6	-8.6	-9.2	2.5	-3.6	
Others	10.62	1.8	-4.9	-9.0	-1.3	-5.2	
Total*	75.68	8.2	5.3	-14.0	4.0	-5.1	

Note: \* Covering 76 products with 75.7 percent of overall value added in the manufacturing sector <sup>PV</sup>. Preliminary Data Source: BOT surveys



According to the report of NESDB, manufacturing production in 2009 declined by 5.1 percent from the previous year, in line with Manufacturing Production Index (MPI)<sup>6/</sup> which decreased by 5.1 percent from last year. Decreases were observed in almost all sectors except electronics, petroleum and chemical products. The decline was largely attributable to a reduction in both domestic and foreign demand in the first half of 2009 in tandem with the global economic slowdown. On the other hand, in the second half of the year, MPI increased in almost all sectors, especially export-oriented industries (share of exports in production greater than 60 percent) following high productions of hard disk drive, integrated circuits (IC) and television. This was partly due to recovery of trading partner's economic conditions as well as higher domestic demand, and re-building of inventory which was depleted during the second half of 2008. Manufacturing production in 2010 is expected to expand continuously in many sectors such as electronics, petroleum, vehicles and iron and steel, as a result of increased order books.

Capacity Utilization Rate averaged at 61.0 percent, lower than 67.6 percent in the previous year. In the first quarter of 2009, capacity utilization rate decreased in many sectors, comparing to the fourth quarter of 2008. Nevertheless, capacity utilization rate had gradually increased since the second quarter of the year, consistent with the recovery in manufacturing production especially electronics sector. Capacity utilization in the fourth quarter registered at 66.0 percent, close to the level before the global economic crisis.

 $<sup>^{6/}</sup>$  Covered 75.7 percent of the overall value added in manufacturing sector of NESDB

Capital Utilization\*
(Unit: Percent)

	Average			2009 <sup>p/</sup>			
Industry	1995-1996	2007	2008	HI	H2	Year	
Electronics	77.1	76.1	67.2	52.7	69.5	61.3	
Petroleum	88.6	83.5	81.7	79.4	77.2	78.3	
Vehicles and Equipment	74.7	73.3	75.1	43.5	63.9	53.7	
Beverages	69.0	73.2	74.3	68.2	61.6	64.8	
Electrical Appliances	87.1	70.2	61.6	47.8	58.4	53.2	
Food	40.4	58.2	60.5	67.8	53.4	60.6	
Leather and Leather Products	-	53.4	25.8	25.3	26.1	25.7	
Chemical Products	91.4	95.9	88.4	85.2	89.8	87.5	
Iron and Steel Products	58.1	55.4	50.7	38.6	50.5	44.6	
Construction Materials	87.9	78.4	73.3	67.2	69.7	68.4	
Pulp and Paper Products	77.6	90.8	81.0	74.0	81.0	77.5	
Rubber and Rubber Products	73.1	61.0	60.5	51.3	56.6	53.9	
Others	81.8	61.3	55.5	50.5	53.1	51.8	
Total*	76.7	72.5	67.6	58.2	64.9	61.0	

Note: \* Covering 69 products with 59.1 percent of overall value added in the manufacturing sector 

[P] Preliminary Data

Source: BOT surveys

Details of manufacturing production and capacity utilization by sectors were as follows:

Textiles production, especially garment, reduced continuously from last year. This was due to a decrease in external demand, particularly from the US. Manufacturers responded by expanding their markets to the EU. Nevertheless, synthetic fibers production began to recover during the second and third quarters of 2009, and markedly increased in the fourth quarter, following an expansion of both domestic and external demand.

Vehicles and equipments production decreased significantly especially in the first half the year, following a huge drop in external demand. Production for exports declined markedly, more than production for domestic sales. Nonetheless, vehicles production increased in the second half of the year, following demand recoveries from domestic and foreign markets, contributing to increases in productions of both passenger and commercial cars. The capacity utilization rate, thus, increased from 43.5 percent in the first half of the year to 63.9 percent in the second half of the year.

**Food** production, particularly frozen seafood and canned pineapple, declined considerably in the first half of the year as a result

of softened demand and lack of raw materials. However, production increased towards the end of the year due to an increase in demand in canned seafood product, following the global economic recovery and a drop in raw materials prices. The capacity utilization rate stood at 60.6 percent, close to 60.5 percent in 2008.

Beverages production decreased from the previous year. Beer and liquor production dropped noticeably, following the economic slowdown and increased retail prices after the government raised excise tax rate on alcoholic beverage on 7 May 2009. Capacity utilization of the industry therefore declined from 74.3 percent in the previous year to 64.8 percent in 2009.

Electrical appliances production fell considerably from previous year, following a decline in demand from both domestic and foreign markets. Productions decreased for all products, especially televisions, air-conditionings, refrigerators and washing machines. Nevertheless, productions recovered in the fourth quarter of 2009, particularly television production due partly to both domestic and foreign governments' stimulus packages. FIFA World Cup 2010, to be held in the mid of 2010, caused television manufacturers to begin expanding their capacity towards the end of the year to serve the demand which was expected to constantly rise. The capacity utilization of the industry dropped from 61.6 percent in 2008 to 53.2 percent this year.

Iron and steel industry and construction materials production continued to decline from the previous year, especially in the first half of the year. The deterioration was mainly due to slowdowns in construction and manufacturing sectors, particularly vehicles and electrical appliances industries, as well as a slowdown in mega project investment.

However, production of hot and cold-rolled sheet began to expand in the fourth quarter, following recoveries in vehicles and electrical appliances industries. The capacity utilization of these industries fell from 50.7 percent and 73.3 percent in the previous year to 44.6 percent and 68.4 percent in 2009, respectively.

Electronics production in 2009 moderated considerably from the previous year, particularly integrated circuits (IC) and hard disk drive productions as a result of a significant decline in foreign demand. Nevertheless, production continued to expand in the second and third quarters, and rose significantly in the fourth quarter, hitting its record high. This improvement was from an increase in demand for personal computer (PC) and non - PC group such as electronics product, camera and surveillance camera, partly due to the government's stimulus packages and changing consumer behavior towards more digital contents. This caused manufacturers in these sectors to start expanding their investments and productions. The capacity utilization rate stood at 61.3 percent, declining from 67.2 percent in the previous year.

Petroleum production expanded from the previous year, especially in the second half of the year, following an increase in domestic demand after a significant reduction in fuel price. The decrease of average Dubai crude oil price from 94.18 US dollars per barrel in 2008 to 61.9 US dollars per barrel in 2009, coupled with an improvement in consumer confidence caused manufacturers to expand their capacity during the first half of the year to serve domestic demand

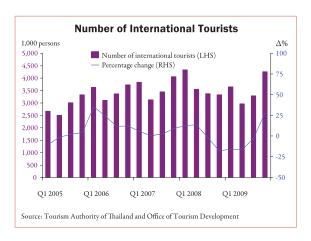
which was expected to rise. The capacity utilization rate was at 78.3 percent, decreasing from 81.7 percent in the previous year.

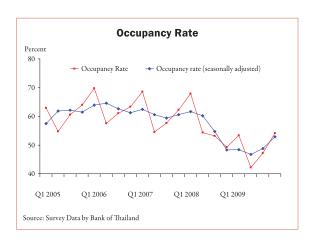
Chemical production increased in almost all products from the previous year, especially in the second half of the year, following the capacity expansion of upstream petrochemical manufacturers to serve domestic demand which was expected to rise in the future. The capacity utilization rate was down from 88.4 percent last year to 87.5 percent this year.

Rubber and Rubber product production decreased noticeably in the first half of 2009, but continued to increase in the second half of the year, following an improvement in the productions of chained industries, particularly vehicles industry. Rubber glove production expanded well, in line with demand from public health services. Consequently, the capacity utilization rose from 51.3 percent in the first half of the year to 56.6 percent in the second half of the year.

Pulp and paper production slightly decreased in almost all products due to a decline in demand from both domestic and foreign markets. Nonetheless, production began to gradually increase in the second quarter and expanded considerably in the fourth quarter, especially craft paper products which were used in packaging export goods. This growth was in line with exports which began to recover during the end of the year. The capacity utilization rate decreased from 81.0 percent in 2008 to 77.5 percent this year.

# **Services**





International Tourists Classified by Nationality

	Δ	%	Market Share (%)			
Country	2008	2009	2008	2009		
East asia	-0.1	-6.9	52.1	50.0		
- Malaysia	17.3	-2.6	12.4	12.4		
- China	-8.9	-5.9	5.7	5.5		
- Japan	-9.7	-12.9	7.9	7.1		
- Korea	-17.9	-30.5	6.1	4.4		
Europe	2.1	1.9	27.3	28.7		
Americas	-1.7	-5.9	6.2	6.0		
South Asia	0.3	16.2	4.9	5.8		
Ocenia	4.2	-7.4	5.5	5.2		
Middle East	6.4	4.2	3.2	3.4		
Africa	-0.8	-5.5	0.8	0.8		

Source: Tourism Authority of Thailand and Office of Tourism Development

### **Tourism and Hotel Industry**

For the tourism and hotel industry in 2009, the number of foreign tourist arrivals totaled 14.1 million persons, dropping by 3.0 percent from the previous year. The first half of the year continued to see a large decrease in the number of foreign tourists from the fourth quarter of 2008 in line with the global economic slowdown, coupled with political unrest that became increasingly severe in April, and the outbreak of the 2009 H1N1 flu during the mid 2009 in many countries, including Thailand. In the second half of the year, however, the number of foreign tourists expanded constantly by 12.4 percent from the same period of previous year in tandem with a pick up in the economies of major markets for Thai tourism. Tourism revenue from foreigners in 2009 amounted to 543.8 billion baht, decreasing by 9.8 percent from the previous year.

In 2009, the structure of foreign tourists classified by nationality was similar to the previous year. Tourists from East Asian countries continued to account for the largest share of 50.0 percent of the total number of foreign tourists, declining slightly from the previous year. This was mainly due to a drop in tourists from Japan and Korea as this group of tourists was quite sensitive to domestic political instability. Furthermore, these economies recovered at a slower rate than other countries.

The number of tourists from Europe in the first half of the year continued to decrease from the end of 2008 in tandem with political instability. However, the latter half of the year saw a rise in the number of tourists due to the cooperation between the government and private sectors in organizing road show activities to promote tourism. The share of tourists from the US declined slightly from that of the previous year, given its sluggish economy.

However, the number of tourists from South Asia, especially India, and the Middle East countries, which were new target markets, expanded significantly in 2009 in line with their growing economies amidst the global economic crisis.

The average occupancy rate was 49.2 percent in 2009, decreasing from 56.2 percent in 2008. The average occupancy rate in the first half of the year was lower than that of the pre-crisis level in 2007 (60.8 percent), but improved in the latter half of the year in line with an increase in the number of foreign tourists. The low occupancy

rate was partly due to an expansion in the number of hotel rooms, especially in the central part of Thailand, to support the tourism demand after experiencing a surge in foreign tourists in 2007. The average room rate in 2009 contracted by 6.5 percent from the previous year in line with price cuts to attract tourists during the economic crisis.

Although the tourism and hotel industry started to pick up towards the end of the year in tandem with an increase in the number of tourists from Asia, tourism revenue did not rise significantly since the average expenditure per tourist of this group was lower than that from other regions. Moreover, tourists from Asia were more sensitive to domestic political instability. Thus, recovery in tourism industry was still quite fragile and needed the cooperation between the government and related private sectors in promoting the Thai tourism going forward.

#### **Tourism Indicators**

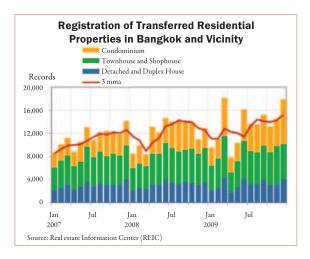
	2008	2009 <sup>P/</sup>		2009 <sup>P/</sup>					
	2008	2009	Q1	Q2	Q3	Q4			
1. Number of foreign tourist (million persons)	14.6	14.1	3.6	3.0	3.3	4.3			
$\Delta\%$	0.8	-3.0	-15.7	-16.5	-2.8	27.9			
2. Income from tourism (billion baht)	603.2	543.8	152.8	96.7	119.3	175.1			
3. Occupancy rate (percent)	56.2	49.2	53.4	42.1	47.2	54.1			
4. Room rates (baht)	1,516	1,418	1,629	1,343	1,298	1,401			

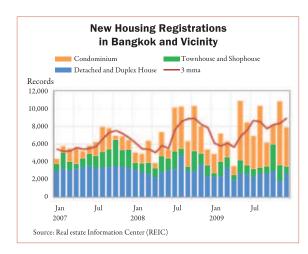
Note: Preliminary Data

 $\Delta\%$  represents percentage change from the same period last year

Sources: Tourism Authority of Thailand, Office of Tourism Development, and Bank of Thailand

#### **Real Estate**







In 2009, overall real estate market expanded from 2008. Although it was adversely affected by the global economic crisis and domestic political instability during the first half of the year, real estate market was able to gradually recover since the second half of the year. There was a number of supporting factors, such as gradual economic recovery, improving consumer and business confidence, and the government's stimulus packages, in particular income-tax deductible for new residential property purchases which was expired at the end of 2009, low interest rate and higher competition in credit lending from financial institutions.

Overall real estate demand in 2009 expanded from last year, as reflected in a 9.6 percent growth in the registration number of transferred residential properties in Bangkok and vicinity. In the first quarter of the year, demand for real estate considerably expanded as consumer intended to obtain benefits granted from the property stimulus measures, which should have been terminated at the end of March 2009. In the second quarter, real estate demand contracted, following the economic slowdown and domestic political instability. However, it gradually picked up in the second half of the year.

Registration of transferred residential properties in Bangkok and vicinity was concentrated in condominium, townhouse and detached house, accounting for 34.9, 32.1 and 20.6 percent of total registration, respectively. The average prices in 2009 for registered and transferred townhouse and condominium valued

between 1.8–1.9 million baht, while that of detached house was at 3.4 million baht. The average sales rate<sup>7/</sup> of condominium stood at 68.2 percent, higher than those of townhouse and detached house by 34.6 and 27.8 percent, respectively. This was partially due to an increase in investment demand for condominium which yielded relatively higher return.<sup>8/</sup>





As for 2010, real estate demand is expected to rise at almost the same rate as in 2009, driven by housing demand for lower-ended townhouse which was supported by the government's investment promotion, as well as for middle- and lower-ended condominium in accordance with excess demand in the market, and investment demand for condominium of both Thai and foreigners as the price of Thai condominium was relatively lower than that of other foreign markets.

Overall real estate supply in 2009 expanded from last year by 9.5 percent, as reflected in a growth in the number of new housing registrations in Bangkok and vicinity (excluding Baan Eua Athorn (BEA) condominium<sup>9/</sup>, overall real estate supply slightly expanded by 1.6 percent). Condominium, accounting for 51.1 percent of total registration, expanded by 47.3 percent. This was the highest level since the 1997 financial crisis, following the completion of real estate projects launched in the past few years. Therefore, the concentration of supply structure changed from detached house and townhouse to condominium.

The overall new supply of real estate contracted from last year, as shown by a 15.0 percent decrease in newly launched real estate projects in Bangkok and vicinity<sup>10/</sup>. In the first half of the year, real estate supply fell substantially by 40.0 percent, but recorded a moderate contraction of 4.9 percent in the third quarter,

<sup>7/</sup> Calculated by using 3-month moving average

The real housing demand for condominium registered at approximately 60 percent, whereas the demand for investment purpose and speculation purpose accounted for 20 percent each. Generally, return on investment of condominium yielded approximately 5-7 percent (according to the Bank of Thailand's Economic/Business Information Exchange Program during the fourth quarter of 2009).

The number of new housing registrations in Bangkok and vicinity in 2008 and 2009 totaled 83,065 and 90,971 units, respectively. Apart from the supply of Baan Eua Athorn condominium at 7,720 units in 2008 and 14,432 units in 2009, the number of new housing registrations in Bangkok and vicinity registered at 75,345 and 76,539 units, respectively.

<sup>&</sup>lt;sup>0/</sup> Survey of Agency for Real Estate Affair (AREA), covering Bangkok and vicinity, accounted for 70 percent of overall country

following weakened consumer demand, domestic political instability, and tightened credit standards of financial institutions. However, supply of real estate expanded by 44.9 percent in the fourth quarter of 2009 in accordance with demand recovery. This was in line with the resumption of housing developer sentiment index to its confidence level since the third quarter, and reached its all-time high at 57.8<sup>117</sup> in the fourth quarter of 2009.

The recovery of supply in the second half of the year was mainly from an increase in newly launched real estate projects, mostly located in the proximity of mass transit systems such as sky train and express way.





In 2010, real estate supply is expected to slightly decline, as reflected in a decrease of 15.4 percent in permitted residential construction areas in Bangkok and vicinity in 2009, compared to a 6.8 percent contraction in 2008. However, the condominium projects are expected to continuously grow, following such changes in consumer lifestyle as possession of second house to facilitate and save costs of transportation.

At the end of 2009, unsold units of existing housing stock recorded relatively high at 97,442 units, or 82.0 percent from an all-time peak of 118,979 units during the 1997 financial crisis. Notably, if these units were added up with the number of sales of newly launched and completed real estate projects, and ongoing projects under investment promotion in 2010, it could possibly lead to an oversupply in real estate market in the forthcoming period.

As for housing finance in 2009, the outstanding real estate credit valued at 1,342 billion baht, accounting for 17.6 percent of total financial institutions' credit, or expanding by 4.0 percent from last year. Mortgage credit registered at 961.8 billion baht, increasing by 10.2 percent. Meanwhile, real estate developer credit recorded at 380.2 billion baht, contracting by 8.8 percent. Notably, the ratio of outstanding real estate credit to GDP in the fourth quarter of 2009 stood at 14.8 percent, approaching its highest level of 20.0 percent during the 1997 crisis.

In 2009, loan to value (LTV)<sup>12/</sup> ratio for mortgage lending was at 81.3 percent, slightly down from 83.9 percent in 2008. This partly reflected greater risk aversion of financial institutions. Meanwhile, the overall rate on new

 $<sup>^{11/}</sup>$  Real Estate Information Center (REIC)

 $<sup>^{12/}</sup>$  Calculated from individual mortgage lending of 17 commercial banks from the second quarter of 2008 to the fourth quarter of 2009

mortgage for borrowers in 2009 stood at 6.2 percent, declining from 6.7 percent in 2008.

In 2009, the average prices<sup>13/</sup> of middleand high-ended newly launched detached house and townhouse in Bangkok and vicinity, increased by 15.0 and 10.3 percent, respectively, whereas that of condominium rose considerably by 49.5 percent, following rising land prices in metropolitan areas.

Looking forward, although land prices are expected to rise, property prices in 2010 may slightly increase as prices of interior decoration materials declined from low-cost imported products from China. Furthermore, there was still plenty of existing supply of condominium and

townhouse which valued less than 1 million baht in the market, both from housing projects under investment promotion program and Baan Eua Athorn projects.

Meanwhile, the prices of middle- and low-ended houses<sup>147</sup> with lands declined from 2008.<sup>157</sup> As for the assessment on asset-price bubbles, Thailand's property prices appeared to align with the fundamentals. Since financial institutions were more cautious in lending, this contributed to lower risk in asset-price bubbles caused by credit expansion. However, the prolonged easing financial conditions, coupled with the economic recovery, may increase the possibility of asset-price bubbles in the forthcoming period.

<sup>&</sup>lt;sup>13/</sup> Survey of Agency for Real Estate Affair (AREA) in Bangkok and vicinity, accounted for 70 percent of overall country

Detached house price index and townhouse price index were calculated from Government Housing Bank's new mortgage loans, employing Hedonic methodology, which explained the relationship between standard house price and additional characteristics, such as the number of floors, area utilization, building age and related infrastructures. Meanwhile, land price index was calculated from median price, weighted by land area. For housing price with land, it was calculated by using a fixed weight proportion between house and land prices. The weight proportion between detached house and land was 40:60, whereas that of townhouse and land was 45:55.

<sup>&</sup>lt;sup>15/</sup>In 2009, the quality-adjusted housing price index, excluding land, declined from the previous year, due to decreasing cost of materials from China, following an improvement in more efficient technology.

## Real Estate Indicators (Cont.)

	2000	2000	2009						
	2008	2009	H1	H2	Q1	Q2	Q3	Q4	
3. Financial Indicators									
3.1 Real Estate Personal Credit Outstanding <sup>3/</sup>	873,012	961,796	904,323	961,796	887,722	904,323	927,648	961,796	
(Million Baht, BOT)	(12.3)	(10.2)	(10.6)	(10.2)	(13.5)	(10.6)	(9.3)	(10.2)	
3.2 Real Estate Developer Credit Outstanding <sup>3/</sup>	416,977	380,161	417,238	380,161	407,441	417,238	395,014	380,161	
(Million Baht, BOT)	(22.1)	(-8.8)	(7.3)	(-8.8)	(20.9)	(7.3)	(0.3)	(-8.8)	
3.3 Real Estate Credit Outstanding <sup>3/</sup>	1,289,989	1,341,956	1,321,561	1,341,956	1,295,163	1,321,561	1,322,661	1,341,956	
(Million Baht, BOT)	(15.3)	(4.0)	(9.5)	(4.0)	(15.7)	(9.5)	(6.4)	(4.0)	
3.4 Real Estate Credit Outstanding per Total	17.6	17.6	18.1	17.6	17.5	18.1	17.9	17.6	
Credit Outstanding (Percent, BOT)									
3.5 Real Estate Credit Outstanding per GDP	14.2	14.8	14.6	14.8	14.3	14.6	14.6	14.8	
(Percent, BOT)									
3.6 Average MLR of 4 Largest Banks at the	6.8	5.9	5.9	5.9	6.1	5.9	5.9	5.9	
End Period (Percent/year, BOT)									
3.7 Non-Performing Loans Outstanding (NPLs)									
(Million Baht, BOT)									
- Real Estate Business NPLs	50,158	45,424 <sup>P/</sup>	51,968	45,424 <sup>P/</sup>	51,846	51,968	49,621	45,424 <sup>P/</sup>	
- % per NPLs	12.5	12.0 <sup>P/</sup>	12.8	12.0 <sup>P/</sup>	12.3	12.8	12.2	12.0 <sup>P/</sup>	
- Real Estate Personal NPLs	31,853	34,057 <sup>P/</sup>	35,422	34,057 <sup>P/</sup>	35,162	35,422	36,059	34,057 <sup>P/</sup>	
- % per NPLs	7.9	9.0 <sup>P/</sup>	8.7	9.0 <sup>P/</sup>	8.4	8.7	8.9	9.0 <sup>P/</sup>	
3.8 Real Estate Stock Price Index	33.3	63.6	45.1	63.6	30.7	45.1	62.2	63.6	
(2004 = 100, SETSMART)									
4. Price Indicators									
4.1 Construction Material Price Index	158.4	137.7	136.0	139.5	137.3	134.7	139.5	139.4	
(2000 = 100, MOC)	(17.1)	(-13.0)	(-14.8)	(-11.2)	(-9.1)	(-20.0)	(-18.0)	(-3.1)	
4.2 Detached House (w Land) Price Index <sup>4/</sup>	122.0	120.1	123.9	116.2	125.8	122.1	114.4	118.0	
(2000=100, REIC)	(-1.1)	(-1.6)	(2.3)	(-5.4)	(4.6)	(-0.1)	(-6.9)	(-4.0)	
4.3 Townhouse (w Land) Price Index <sup>4/</sup>	121.3	120.3	122.2	118.4	124.4	120.0	117.2	119.5	
(2000=100, REIC)	(1.5)	(-0.8)	(1.2)	(-2.8)	(3.5)	(-1.2)	(-3.0)	(-2.6)	
4.4 Land Price Index <sup>4/</sup>	124.4	126.9	128.4	125.5	129.5	127.3	123.5	127.5	
(2000=100, REIC)	(6.5)	(2.1)	(4.5)	(-0.3)	(7.5)	(1.7)	(-1.3)	(0.6)	
4.5 Average Price of Newly Launched Real Esta	ite								
Project in Bangkok and Vicinity – 12 mma									
(Million Baht/Unit, AREA)									
- Detached House	3.9	4.5	4.3	4.7	4.2	4.3	4.6	4.9	
- Townhouse	1.8	2.0	2.0	2.0	2.0	2.1	2.0	1.9	
- Condominium	2.5	3.8	3.3	4.3	3.1	3.6	3.9	4.6	

Note: 1/ Derived from the amount of the Juristic Act and Right Registration Fee, separately classified into 2 percent and 0.01 percent categories 2/ Calculated from sold units divided by newly launched units in each month

Sources: Department of Land, Bank of Thailand (BOT), Real Estate Information Center (REIC), Agency for Real Estate Affairs (AREA), Ministry of Commerce (MOC) and SET Market Analysis and Reporting Tool (SETSMART)

Calculated from sold units divided by newly admicred units in each mode.

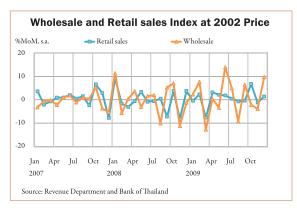
Outstanding credit extended by commercial banks (excluding foreign branches of Thai commercial banks) at end-period

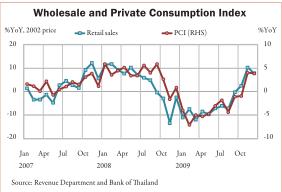
Rebased REIC's construction material price index, using base year = 2000

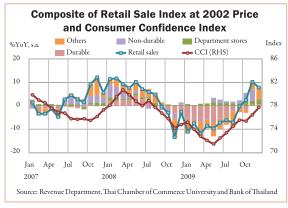
Numbers in ( ) are year on year growth rate

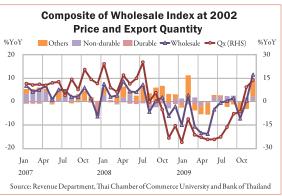
Preliminary Data, R/ Revised data, E/ Estimated data

#### **Trade**









#### Overall trading activities in 2009

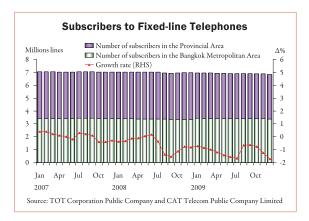
decreased from the previous year. Both wholesale and retail trade declined markedly during the first half of the year. This was due partly to domestic political instability and the global economic downturn, causing consumers to be cautious with their spending. However, in the second half of the year, wholesale and retail trade steadily rebounded and exhibited a growth in the fourth quarter owing to the government's stimulus measures and the global economic recovery that shored up consumer confidence.

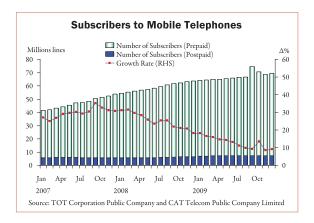
Wholesale trade declined by 3. 4 percent from last year due to significant drops in sales of construction materials and durable goods. This was in line with a contraction in household spending and a slowdown in production sectors such as household and intermediate goods. However, necessary goods such as food, beverage and tobacco, registered an impressive growth. As a result, wholesale trade began to rebound in the third quarter.

Retail trade decreased by 4.3 percent from the previous year mainly from durable goods such as electrical appliances, household goods, and clothes. However, sales of indispensible products such as fresh food, vegetable, and fruit recorded a remarkable growth. Moreover, sales of supermarkets and department stores also expanded satisfactorily. As a result, overall retail trade grew remarkably in the fourth quarter.

The outlook of trading sector in 2010 is expected to grow due to the global economic recovery and the government's stimulus measures that will help boost producer and consumer confidence.

#### **Telecommunication**





Telecommunication Services<sup>1/</sup>

(ACII) A. A	2000	2009	2009					
(Million Lines)	2008	2009	Q1	Q2	Q3	Q4		
Fixed-line Telephones Bangkok Metropolitan Area	3.34	3.38	3.40	3.40	3.39	3.38		
Fixed-line Telephones Provincial Area	3.63	3.46	3.54	3.52	3.50	3.46		
Total Fixed-line Telephones	6.97	6.85	6.96	6.92	6.90	6.85		
$\Delta$ %	-0.8	-1.7	-1.0	-1.6	-0.6	-1.7		
Mobile Phones Postpaid	6.54	7.42	7.10	7.31	7.35	7.42		
Mobile Phones Prepaid	57.15	62.08	57.80	58.56	59.92	62.08		
Mobile Phones Δ%	63.69 18.2	69.50 9.1	64.89 15.9	65.87 13.2	67.27 9.3	69.50 9.1		

Note:  $^{1/}$  Data as of end-period  $_{\Delta}$ % represents percentage change from the same period last year Source: TOT Corporation Public Company and CAT Telecom Public Company Limited

In 2009, overall telecommunication sector moderated from the previous year, following declines in fixed-line and mobile telephone services. The number of fixed-line telephones decreased by 1.7 percent from last year, mainly due to a drop in provincial area subscribers. It was noted that the number of

fixed-line telephones declined only marginally as a result of The National Telecommunications Commission's policy to expand coverage of fixedline telephone services throughout provincial areas, and service providers expedited the expansion of Broad Band Internet services.

Meanwhile, the number of mobile phone services fell from 18.2 percent in the previous year to 9.1 percent this year. The services declined notably in the first half of the year from the economic slowdown. Nevertheless, it increased in the second half of the year due to higher consumer confidence in the economic recovery. In addition, service providers introduced many value-added services (VAS) such as information, news and global positioning system (GPS). The development of higher content applications also enabled mobile phones to support various purposes.

Overall, the revenue of mobile phone service providers moderated, due to the economic slowdown.

Minutes of Use (MOU) decreased by 4.4 percent from the previous year, averaged at 261.1 baht per number per month, while the average revenue per unit (ARPU) declined by 8.6 percent to an average of 226.6 baht per number per month. Nonetheless, revenues from non-voice services continued to increase from the previous year due to consumers' favor of SMS and international roaming (IR), which picked up following tourism recovery in the second half of the year.

The telecommunication sector is expected to recover in 2010 in tandem with the economic recovery. Meanwhile, the number of fixed-line telephones is expected to stabilise and the number of mobile phones is projected to increase due to demand for mobile internet which obtained the highest growth in this industry.

# **Labor Market Conditions**

Employment

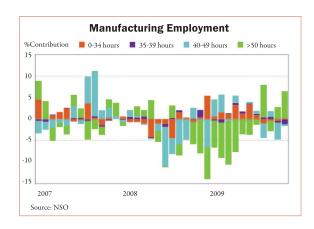
		2009	2009							
Δ%	2008		H1	H2	Q1	Q2	Q3	Q4		
Employed persons	2.1	1.9	2.1	1.6	1.9	2.3	1.4	1.9		
Agriculture	2.7	0.0	1.7	-1.5	0.8	2.5	-0.8	-2.3		
Non-agriculture	1.7	3.1	2.3	4.0	2.5	2.1	3.1	4.9		
Manufacturing	-3.0	-1.5	-3.5	0.7	-3.7	-3.2	1.3	0.2		
Construction	3.0	4.0	4.5	3.4	3.4	5.6	1.6	5.3		
Trade	3.2	5.1	5.4	4.8	5.5	5.3	4.2	5.4		
Service	3.8	4.7	3.8	5.6	4.7	2.9	4.0	7.2		

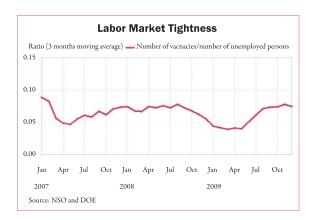
Note: \( \Delta \% \) represents percentage change from the same period last year

Unemployment

			2009							
	2008	2009	H1	H2	Q1	Q2	Q3	Q4		
					-	-	-	-		
Unemployed person (Thousand persons)	522.0	572.3	726.2	418.5	779.4	673.0	456.1	380.9		
Unemployment rate (%)	1.4	1.5	1.9	1.1	2.1	1.7	1.2	1.0		
Underemployed persons (Thousand persons)	507.8	604.9	634.6	575.2	698.8	570.5	524.5	626.0		
Underemployment rate (%)	1.3	1.6	1.7	1.5	1.9	1.5	1.3	1.6		

Source: NSO

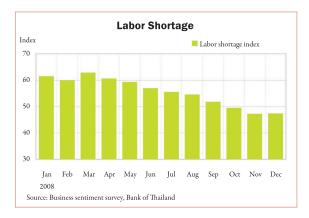




Although being affected by the global economic crisis, labor market in 2009 adjusted satisfactorily. In the first half of the year, unemployment rate stood at 1.9 percent. The most vulnerable sector was the manufacturing sector where employment, particularly in electronics, vehicles, textiles and furniture contracted by 3.5 percent from the previous year. Meanwhile, employment in trade, services and construction sectors still expanded at a satisfactory level, reflecting high flexibility of the Thai labor market during the crisis. However, in the second half of the year, labor market conditions improved in line with the economic recovery as unemployment rate was reduced to 1.1 percent and employment in the manufacturing sector turned to a year-on-year growth of 0.7 percent.

Although the economic crisis affected production in the manufacturing sector, unemployment rate was not very high in relation to other countries in the region. Unemployment rate reached its highest level of 2.1 percent or 779.4 thousand persons in the first quarter. This was partly due to firms' atttempt to keep their high-skilled workers to resume their production during the recovery period. Therefore, they cut labor cost by reducing working hours. As a result, the number of labors who worked more than 50 hours per week fell substantially in the first half of the year. In the second half of the year, labor market improved following the economic recovery. New orders continued to rise in electronics, electrical appliances and vehicles sectors. This resulted in an increase in production as well as demand for labor which in turn led to

the tightening of labor market, reflecting from a rise in the ratio of vacancies to unemployed persons.





Meanwhile, there were some signs of labor shortage, especially for vocational and skilled labors in the manufacturing sector.

In accordance with the business sentiment survey of the BOT, the respondents reported that they experienced more difficulty in labor recruitment. Labor shortage index dropped from the benchmark level of 50 in the fourth quarter of 2009. This scarcity of labors in the manufacturing sectors was attributable to the government policies to help retrenched labors during the hard time such as extending a duration for receiving unemployment benefits and "Tonkla-archeep" project which supported those labors to work in their hometown.

Considering the average wage of employees in 2009, there was still not much pressure on the cost of production. The average wage stood at 8,694.2 baht per person per month, reducing by 2.5 percent from the previous year. The agricultural sector experienced wage reduction due to a substantial drop in crop prices, compared to that of the previous year. In addition, trade, transportation as well as hotel and restaurant sectors also confronted with a huge reduction in wage following a downturn of manufacturing and tourism sectors.

# **Price Level**

In 2009, headline consumer price index (CPI) decreased by 0.9 percent, compared to a rise of 5.5 percent in 2008. The decline was due to a drop of 4.8 percent in prices of non-food items. Meanwhile, prices of food and beverages edged up by 4.4 percent. Core CPI (excluding raw food and energy prices) rose slightly by 0.3 percent, decelerating from the previous year's growth of 2.4 percent. Core inflation from the second to the fourth quarters of 2009 was kept in check, below the lower bound of the 2009 policy target range of 0.5-3.0 percent.

Nevertheless, negative headline and core inflation rates below the target range in 2009 by no means indicated deflation. Prices of goods and services did not subside from lower demand which forced manufacturers to cut down prices. Rather, this was mainly due to a decline in oil prices and the government measures to alleviate the cost of living. More specific details included:

(1) average domestic retail oil prices dropped by about 13 percent from the prices in 2008, following global oil prices.

- (2) the government measures to alleviate the cost of living, as follows:
- "6 measures in 6 months" came into effect in August 2008, then extended twice in 2009. The extensions allowed the measures to have impacts on inflation throughout the year 2009, by reducing cost burdens on many items including electricity and water charges, as well as public transportation costs (third class train and bus fares).
- 15-year free education program was effective in May 2009, significantly absorbing expenses on education-related items, namely, school uniforms, tuition fees, and school books and supplies.

Without incorporating the effects of the aforementioned government measures, headline and core inflation in 2009 would rise by 0.4 and 1.5 percent, respectively. This was in line with prices of processed food, personal expenses, and tobaccos and alcohols which edged up from the previous year.

Consumer Price Index (Percentage change from the same period last year)

	Weight	eight		2009				
	(Percent)	2008	008 2009 -	Q1	Q2	Q3	Q4	
Headline Consumer Price Index	100.0	5.5	-0.9	-0.3	-2.8	-2.2	1.9	
Food and beverages	36.1	11.6	4.4	10.0	4.9	1.8	1.5	
Non-food and beverages	63.9	1.7	-4.8	-6.9	-8.2	-5.2	1.9	
Energy	9.1	8.0	-13.1	-25.8	-24.4	-13.2	20.1	
Raw food	15.0	15.3	5.6	11.4	6.3	2.8	2.6	
Core Consumer Price Index	75.9	2.4	0.3	1.7	-0.1	-0.5	0.1	

Source: Bureau of Trade and Economic Indices, Ministry of Commerce

Producer price index (PPI) dropped by 3.8 percent in 2009, after rising by 12.4 percent in 2008. The decline was attributable to manufactured products, whose prices subsided by 5.6 percent, compared to a growth of 11.2 percent in 2008. In addition, prices of mining products continued to fall by 10.9 percent from a contraction of merely 2.3 percent in 2008. Although prices of agricultural products rose by 5.8 percent, the rate substantially decelerated from the previous year's growth of 20.7 percent.

The decline in prices of manufactured and mining products followed the downward trend of global commodity prices, including crude oil, natural gas, metallic minerals, petroleum products, chemicals, chemical products, base metals, and metal products, as well as rubber and plastic products. This resulted from a significant external demand contraction following the global recession.

Prices of agricultural products, particularly agricultural and livestock products, continued to rise from the previous year, notwithstanding the sluggish global demand and damages in supply due to unfavorable climate conditions especially during the first half of 2009.

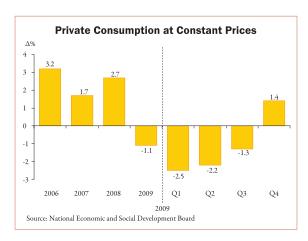
On average, manufactured product prices in the global market plummeted in 2009. Nevertheless, the last quarter of the year witnessed a rebound in prices of manufactured products due to increasing consumer demand as several economies, particularly in Asia, started to recover. The price levels, however, still remained below those of the pre-crisis levels in 2008.

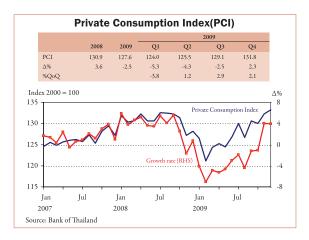
Producer Price Index
(Percentage change from the same period last year)

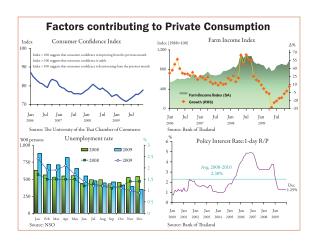
	_			_	-		
	Weight	2000	2000		20	09	
	(Percent)	2008	2009 -	Q1	Q2	Q3	Q4
Producer Price Index	100.0	12.4	-3.8	-3.5	-7.0	-10.2	6.7
Agricultural Products	9.5	20.7	5.8	8.5	9.1	-10.8	18.1
Mining Products	2.4	-2.3	-10.9	-18.4	-16.4	-12.4	6.4
Manufactured Products	88.1	11.2	-5.6	-5.5	-10.2	-10.0	4.1

Source: Bureau of Trade and Economic Indices, Ministry of Commerce

# **Private Consumption**







Private consumption expenditure in 2009, according to the NESDB report, contracted by 1.1 percent compared to an expansion of 2.7 percent in 2008. In the first quarter of 2009, private consumption expenditure declined as a result of the economic recession and falling consumer confidence. However, it ameliorated during the rest of the year in line with the global economic recovery, the government's fiscal stimulus measures as well as favorable farm income and improving consumer confidence. However, consumers were still concerned over political and economic uncertainties going forward.

The BOT's Private Consumption Index (PCI) in 2009 also declined by 2.5 percent compared to a 3.6 percent growth last year. In the first quarter of this year, PCI fell markedly by 5.3 percent.

Nevertheless, private consumption had begun to improve since the second quarter onwards. It resumed growth and stayed close to the pre-crisis level in the last quarter, supporting by favorable farm and tourism incomes, together with rebounding employment, accommodative monetary and fiscal policies as well as consumer confidence which bounced back in the second quarter.

From the second quarter of 2009 onwards, private consumption gained a broad-based expansion, especially durable-goods consumption indicators which solidly improved and resumed growth in the last quarter. The number of vehicles sold, particularly passenger cars, continued to rise favorably. Besides, imports of consumer goods increased further, especially electrical appliances and household equipments which grew considerably.

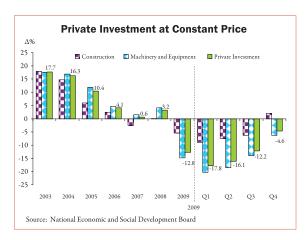
In addition, non-durable goods consumption indicators gradually improved during the same period, reflecting in value-added tax (VAT) at constant prices which resumed expansion in late 2009 as well as household electricity usage and fuel consumption which continued to rise.

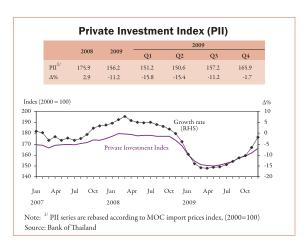
Private Consumption Indicators

0/37.37	****	2000 2000 -		2009				
%YoY	2008	2009	Q1	Q2	Q3	Q4		
Car Index	15.4	-4.5	-21.6	-16.7	-2.3	21.6		
- Passenger car	33.1	4.2	-16.2	-8.6	4.8	33.3		
- Motorcycle	12.1	-13.0	-17.1	-23.9	-13.0	3.0		
- Commercial car	-15.9	-19.2	-41.1	-30.2	-8.9	8.8		
Fuel Index	-0.7	6.3	3.7	6.8	9.9	5.0		
- Benzene & Gasohol	-2.9	5.7	7.3	8.8	7.7	-0.7		
- Diesel	-5.7	4.7	-1.3	4.1	12.1	5.3		
- LPG	18.0	-0.1	5.2	-0.2	-6.0	1.6		
- NGV	215.2	81.2	154.8	111.0	61.6	48.0		
Household Electricity	2.6	5.5	2.7	5.4	6.4	7.5		
Imports of Consumer Goods (at 2000 prices )	21.7	-6.2	-15.2	-17.2	-3.3	11.7		
VAT (at 2000 prices)	9.0	-10.2	-16.9	-13.9	-12.3	2.9		

Source: Bank of Thailand

#### **Private Investment**





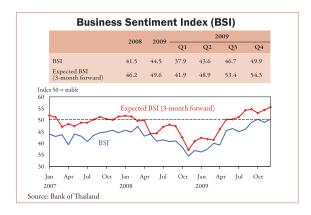
#### Private Investment Indicators

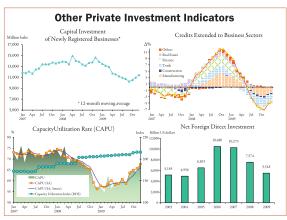
				2009					
	2008	2009	Q1	Q2	Q3	Q4			
Construction Area Permitted in Municipal Zo	one								
(a 12-month backward moving average)	17,389	16,342	4,204	4,063	4,052	4,023			
	(-2.4%)	(-6.0%)	(-4.5%)	(-1.9%)	(-0.8%)	(-1.3%)			
(Unit: 1,000 square meters)									
Domestic Cement Sales	24,834	24,227	6,264	5,859	6,045	6,059			
(Unit: 1,000 tons)	(-10.3%)	(-2.4%)	(-0.2%)	(1.7%)	(3.5%)	(2.3%)			
Imports of Capital Goods at 2000 Prices	1,393.6	1,172.0	272.9	270.4	303.6	325.1			
(Unit: Billion Baht)	(14.2%)	(-15.9%)	(-14.9%)	(-7.7%)	(4.0%)	(9.3%)			
Domestic Machinery Sales	603.0	489.7	109.8	116.3	124.5	139.0			
at 2000 Prices (Unit: Billion Baht)	(-0.9%)	(-18.8%)	(-19.5%)	(-1.4%)	(4.1%)	(10.1%)			
Domestic Commercial Car Sales	388.3	313.7	63.8	71.6	76.4	101.9			
(Unit: 1,000 units)	(-15.9%)	(-19.2%)	(-16.2%)	(-0.2%)	(11.3%)	(6.4%)			

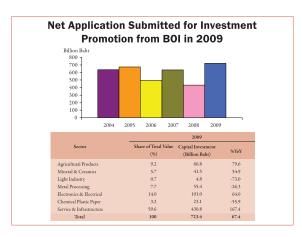
Note: number in parenthesis is percentage change from the same period last year Source: Bank of Thailand

According to the NESDB report, private investment in 2009 contracted by 12.8 percent from the previous year. In the first quarter of the year, private investment continued to decline from the end of 2008 following the global and domestic political economic crisis uncertainties. During the rest of the year, private investment, although contracting from last year and remaining lower than the pre-crisis level, trended upwards and began to recover in the third quarter mainly from investments in machineries and equipments. Meanwhile, investment in construction remained at a low level throughout the first three quarters of the year, but improving signs were observed in the last quarter as investment in construction rose by 2.0 percent from that of the same period last year.

A drop in private investment was in line with an 11.2 percent decline in the BOT's Private Investment Index (PII) in 2009, owing to contractions in all private investment indicators. In the first half of 2009, these indicators continued to shrink from last year, but began to recover during the rest of the year as a result of improvements in imports of capital goods, especially industrial machines used in electronics, vehicle and electrical appliances industries. In addition, the number of domestic commercial cars sold also increased. Meanwhile, investment in construction, though remaining at low level throughout the year, registered an upward trend going forward, following the government's huge investment projects and private residential projects along the Skytrain routes.







Private investment began to pick up in the third quarter of 2009, corresponding to both current and expected business sentiment indices (BSI) which had constantly rebounded since the first quarter of the year. The current BSI rose from an average level of 41.5 point in 2008 to an approximate level of 50 point benchmark in the last quarter of 2009. Similarly, the 3-month expected

BSI also soared above 50 point benchmark, reflecting continual investor confidence.

With regard to other private investment indicators, capital investment of newly-registered businesses began to ameliorate in the last quarter of 2009. Nonetheless, foreign direct investment (FDI) contracted in tandem with the global economic crisis as well as political problems. Moreover, commercial banks' credits to business sectors slowed down during the first half 2009, and registered a contraction in the latter half of the year. However, improving signs were observed in the last quarter of 2009, partly due to improving confidences and banks' less stringent credit extension standards compared to that of the beginning of the year.

In addition, the investment values of projects submitting application forms for investment promotion from the Board of Investment (BOI) in 2009 increased from the previous year, especially services and infrastructure sectors such as alternative energy projects. Similarly, the investment values of submitted applications in agricultural products as well as electronics and electrical sectors grew satisfactorily, partly due to accelerated submission of application forms in December as these special investment promotion measures to facilitate investment in Thailand Investment Year 2008-2009 would end in 2009.

Private investment outlook is expected to improve gradually due to economic and political uncertainties, as well as the Map Ta Phut problems. As a result, investors postponed their investment projects, waiting for more certainty although capacity utilization rates were high in some industries.

### **External Sector**

#### The Global Economy

In the first half of 2009, the global economy continued to contract due to the global economic crisis albeit at a slower pace than in the fourth quarter of 2008. As a result of the massive fiscal stimulus packages and extraordinary monetary policy easing, the global economy rebounded in the second half of 2009. While the G3 economies experienced gradual and fragile recoveries, the Asian economies especially China and India witnessed faster recoveries than other regions. Meanwhile, global inflation increased but remained at a low level around the end of 2009.

Going forward, in 2010, the global economy is expected to recover gradually. The main risks to growth include high unemployment rates in G3 economies, public debt and fiscal deficit problems especially in some Euro area members coupled with fiscal stimulus fading.

#### The US economy

In 2009, the US economy shrank by 2.4 percent yoy with the continued contraction in the first half of the year at a slower pace compared to the last quarter of 2008. The economic contraction was a result of declining household spending, increasing unemployment, ebbing household wealth as well as destocking and reduction in business investment. However, with the fiscal stimulus package and extraordinary monetary policy easing, the US economy recovered in the second half of 2009. Money market conditions improved significantly while activities in housing market started to recover. Likewise, household spending began to expand in the fourth quarter of 2009.

#### The Euro area economy

In the first half of 2009, the Euro area's economy contracted continually from the forth quarter of 2008. Many economic indicators, including industrial production as well as consumer and producer confidence, continued to deteriorate while the scope and synchronization of fiscal stimulus measures across member countries were still quite ambiguous. As a result of the rebound in exports and clearer fiscal stimulus package, industrial production as well as both consumer and producer confidence improved significantly in the second half of 2009. However, the Dubai World debt crisis in late 2009 led to sharp rising sovereign default risks of some Euro area's members with high levels of public debt as well as increasing risks to growth of the Euro area.

#### The Japanese economy

In the first quarter of 2009, the Japanese economy experienced the sharpest contraction after 1955, owing to contractions of exports and investment. With the rebound of exports and industrial production as well as the fiscal stimuli, the Japanese economy started to recover in the second quarter of 2009. However, in the last quarter of the year, deteriorating consumer and investor confidence led to deflation which brought about a slowdown in domestic demand.

#### Asian economies

During the first half of 2009, economic activities in Asian economies deteriorated sharply

with contractions in Singapore, Taiwan, South Korea, Hong Kong, and Malaysia due to the global financial crisis. The collapse of external demand from G3 as well as higher unemployment resulted in weakening domestic consumption and investment. Nevertheless, Asian economies recovered relatively faster and stronger than other regions in the second half of 2009, owing to fiscal measures and easing monetary policy as well as improvements in exports and domestic demand. Going forward, a resurgence of capital inflows into the region, on account of improving growth prospects and the return of risk appetite, could lead to volatilities in exchange rate and stock market as well as acceleration in asset prices.

#### Inflationary pressure

In the first half of 2009, inflationary pressure eased significantly due mainly to the global economic contraction and decreases in commodities and oil prices. Inflation in some countries such as US, Japan and China turned negative. Owing to the global economic recovery and increases in commodities and oil prices in the second half of the year, inflation started to rise during the end of 2009.

Inflation in the US remained negative in the second and third quarters before rising in the fourth quarter. As a result, inflation in the US in 2009 fell by 0.4 percent yoy. Likewise, the average inflation in the Euro area in 2009 remained subdued, rising by 0.3 percent yoy. Meanwhile, inflation in Japan continued to be in the negative territory, falling by 1.4 percent yoy in 2009.

In the Asian region, inflationary pressures in most economies remained low, compared to those of the previous year. In particular, inflation in China and Taiwan turned negative in 2009. While inflationary pressures in Indonesia and the Philippines declined slightly, their inflation rates still rose faster than other countries in the region.

#### **Monetary policy**

During 2009, the Federal Reserves (Fed) maintained the Fed Funds rate at 0-0.25 percent and purchased debt securities, especially agency debt securities through Open Market Operations of 1.25 trillion US dollars, to support economic recovery as well as enhance liquidity in the financial system. The US economy recovered in the second half of 2009 as evidenced by improvements in housing market conditions and household consumption indicators. However, the Fed still maintained the same policy rate as the recovery remained fragile due to high unemployment, low household wealth and declining credit growth.

In Europe, the European Central Bank (ECB) reduced the policy rate from 2.0 to 1.0 percent during the first half of 2009 to support the economic recovery. The ECB maintained the policy rate at 1.0 percent during the second half of the year as the recovery continued to be fragile. However, as financial condition improved, it began to gradually withdraw financial support measures in late 2009 to maintain medium-term price stability. The Bank of Japan (BoJ) also maintained low level of policy rate on account of fragile economic recovery as well as a deflationary threat in the last quarter of 2009.

Towards the end of 2009, some central banks began to increase their policy rates. The Reserve Bank of Australia (RBA) raised the cash rate, owing to clearer signs of economic recovery, declining unemployment level and expected higher inflationary pressures. Norges Bank (Central Bank of Norway) also raised policy rate in light of inflationary pressures.

Monetary policy in most Asian central banks was eased during the first half of 2009. Central banks in Asian economies reduced policy rates to support economic activities. The policy rates were kept on hold in the second half of the year in light of low inflationary risk and a need to support economic recovery.

#### International Trade and the Balance of Payments

In 2009, export value decreased by 13.9 percent from the previous year. This was due to a decline in export volume which was in line with sluggish trading partners' economic conditions while export prices remained stable. Import value dropped by 24.9 percent from 2008, arising from both volume and price due to a slowdown in domestic and external demand. Import prices decreased in tandem with a substantial drop in crude oil price during the first half of the year. The sharp fall in imports in relation to exports resulted in a hefty surplus in the trade balance. Together with a surplus in the services, income and transfers account although smaller than that of the previous year due to a decline in tourism revenue, the current account registered a large surplus. However, the capital account turned from a substantial surplus to a small deficit in 2009, causing the overall balance of payments to record a smaller surplus, compared to that of the previous year.

Export value totaled 150.9 billion US dollars, contracting by 13.9 percent from last year (11.5 percent in baht term). The reduction in exports was mainly attributable to a 14.2 percent decline in export volume while export prices remained relatively stable. Although exports shrank in every category, especially agricultural and high-technology manufactured products due to contractions in trading partners' economies, Thai exports continued to recover since the second quarter of the year. Excluding gold, export value in 2009 fell by 15.5 percent.

Details of Thailand's major export items were as follows:

Agricultural products. Export value of agricultural products declined by 21.4 percent from contractions in both volume and price. The shrink in price was due to high base effect in the previous year following a drop in agricultural supply in competing countriesen countering withbad weather conditions,

and rising world demand. Meanwhile, export volume of agricultural products dropped in line with rice exports, owing to lower rice price in Vietnam as well as the government's policy which reduced the supply of Thai rice in the market. However, export volume of tapioca products rose due to higher demand from China while export volume of fresh and frozen fowl increased because the EU canceled its orders from China.

Fishery products. Export value of fishery products deteriorated by 5.0 percent from the previous year, mostly due to a contraction in volume, especially frozen fish and cuttlefish. However, export value of frozen shrimp expanded due to both price and volume as competing countries confronted pandemic problems.

Manufactured products. Export value of manufactured products shrank by 13.3 percent from the previous year, mainly from a decline in exports of high-technology products. Details of manufactured product exports classified by sector were as follows:

Labor-intensive products. Export value in 2009 remained relatively stable. Export value of garments, footwear, toys and games, ceramic products, and leather products declined. However, export value of precious stones, jewelry and gold accelerated by 18.0 percent due to unwrought gold exports of 5.7 billion US dollars, compared to 3.4 billion US dollars in the previous year. Excluding gold, export value in this category fell by 18.1 percent.

High-technology products. Export value of high-technology products dropped by 17.1 percent from the previous year. The decline was experienced in almost all products in line with contractions in trading partners' economies. Export value of electronic products, electrical appliances and vehicles recorded a substantial fall, especially in the first half of the year. Chemical products, however, grew from

rising demand of China. Nonetheless, in the fourth quarter of the year, export values of electronic products, electrical appliances, chemical products and plastic products almost returned to their pre-crisis levels. Other products also showed signs of recovery, but still below their pre-crisis levels.

Resource-based products. Export value of resource-based products curtailed by 3.7 percent from last year. The contraction was observed in almost all products, especially canned fish, canned pineapple, and furniture. However, export value of sugar expanded well from last year due to a decline in sugar supply in the world market. Moreover, exports of prepared food to the US increased, given it being necessity goods and was not much affected by the crisis. In addition, the US reduced its imports of prepared food from China due to sanitary issues.

Import value totaled 131.5 billion US dollars, ebbing from last year by 24.9 percent (23.0 percent in baht term), attributable to contractions in price and volume of 2.5 and 23.0 percent, respectively. Nonetheless, imports had continued to recover since the second quarter of the year in tandem with recoveries in domestic demand and exports. Details of Thailand's major import items were as follows:

Consumer goods. Import value of consumer products contracted by 7.0 percent from the past year, both in durable and non-durable goods. Mainly from China, imports of electrical appliances and parts expanded from the previous year.

Raw materials and intermediate goods. Import value of raw materials and intermediate goods declined by 29.7 percent from last year, mainly due to a contraction in volume. Import of all products in this category declined, especially iron and steel which was partly affected by lower domestic demand and declining prices following a drop in the world commodity prices. Imports of electronic parts fell in tandem with exports.

**Capital goods.** Import value of capital goods contracted by 15.9 percent from 2008, mainly due to

declines in imports of electrical machinery and parts and industrial machinery tools and parts.

Vehicles and parts. Import value of vehicles and parts deteriorated by 16.3 percent from the previous year, especially during the first half of 2009. However, import value recovered in the latter half of the year in line with improving production in the automobile industry following a pick up in domestic and external demand.

Crude oil and petroleum products. Import value of crude oil and petroleum products shrank by 33.2 percent from a deterioration in both price and volume. The contraction in price was mainly due to a significant drop in crude oil price. According to the Customs Department, the average price of crude oil was at 62.8 US dollars per barrel in 2009, decreasing from 102.6 US dollars per barrel in the previous year, leading to a 37.6 percent contraction in import value of crude oil. Meanwhile, import volume of this category fell in line with a moderation in natural gas imports. Import volume of liquid petroleum gas, however, increased due to a continued increase in demand which was not met by domestic production.

# Trade, Services, and Current Account Balances

Trade balance recorded a surplus of 19.4 billion US dollars, primarily attributable to trade surpluses with major trading partners, including the US, the EU, ASEAN, Hong Kong and Australia. Nevertheless, Thailand still experienced trade deficits with Japan, China, South Korea, Taiwan, Myanmar and the Middle East countries.

Services, Income, and Transfers Account registered a surplus of 0.9 billion US dollars this year, declining from a surplus of 1.5 billion US dollars in the previous year. This was mainly due to a larger contraction in receipts than in payments. Compared with last year, receipts fell by 13.1 percent mainly from a 12.5 percent contraction in tourism revenue which was in line with a drop in the number of foreign

tourists, especially during the first half of the year as a result of the economic slowdown in major markets of Thai tourism, and negative domestic factors such as the political unrest in April and the 2009 H1N1 flu during the mid year. Moreover, investment income shrank by 35.1 percent, owing to low rates of return in the world market. Meanwhile, payments contracted by 11.3 percent, with investment payment falling by 6.9 percent mainly from remittances of profits and dividends by the private sector. A large surplus in the trade balance, coupled with a small surplus in the services, income and transfers account resulted in the pronounced current account surplus of 20.3 billion US dollars, compared to a surplus of 1.6 billion US dollars in the previous year.

#### **Net Capital Movement**

In 2009, net capital movement recorded a deficit of 1.2 billion US dollars, compared to a surplus of 14.6 billion US dollars in the previous year. This deficit was mainly due to capital outflows from Thai portfolio investments abroad and a decline in foreign direct investments.

Details of Thailand's capital movement are as follows:

Direct investments recorded a surplus of 2.1 billion US dollars, declining from last year's surplus of 6.0 billion US dollars. This was mainly attributable to a decline in foreign direct investment, especially from the US, Singapore and Japan, which were mostly in the non-banking sector. Most foreign direct investments were directed at sectors such as electrical appliances as well as machinery and transport equipment. Meanwhile, Thai direct investments abroad increased, where most of the investments were directed at the machinery and transport equipment and the food and beverage sectors. This was in line with the government's policy to encourage Thai investments abroad as well as supporting factors in invested countries such as cost of production and resources.

Portfolio investments registered a deficit of 9.2 billion US dollars, higher than those of the previous year. This was due to the outflow of Thai portfolio investments abroad of 12.2 billion US dollars, compared to a net inflow of 0.4 billion US dollars last year. Most of the Thai investors were from the non-banking sector which invested in Korean Meanwhile, foreign portfolio government bonds. investments recorded a net inflow of 3.0 billion US dollars, compared to a net outflow of 2.5 billion US dollars in the previous year. Foreign portfolio investments were mainly in bank and non-bank equity securities, in line with an increase in foreign investors' confidence following the recovery of world economic conditions from the global financial crisis, especially in Asia.

Loans recorded a surplus of 0.5 billion US dollars. This was mostly attributed to an increase in short-term loans undertaken by banks to meet increases in foreign exchange hedging transactions due to a rise in Thai portfolio investments abroad and Thai exports which increased in line with the global economic recovery. Meanwhile, the non-banking sector repaid loans this year, as opposed to an increase in loans in the previous year, especially for non-bank financial institutions as well as petroleum and transport sectors.

Other capital recorded a surplus of 5.4 billion US dollars due to a reduction in net foreign asset holdings by commercial banks to meet foreign exchange hedging purposes, mainly in foreign debt securities of Thai exporters and Thai investors.

#### **Balance of Payments**

Although the capital account posted a deficit of 1.2 billion US dollars, a significant current account surplus of 20.3 billion US dollars resulted in a balance of payments surplus of 24.1 billion US dollars, slightly declining from last year. In 2009, international reserves rose from 111.0 billion US dollars at the end of 2008 to 138.4 billion US dollars, with net outstanding forward obligations of the BOT totaling 15.7 billion US dollars.

Balance of Payments

(Unit: Million of US dollars)

		2008			20091/	
	H1	H2	Year	H1	H2	Year
Exports, f.o.b.	87,668	87,565	175,233	67,299	83,584	150,883
(% change)	26.2	7.0	15.9	-23.2	-4.5	-13.9
Imports, c.i.f.	85,860	89,265	175,125	55,674	75,793	131,467
(% change)	31.6	21.9	26.5	-35.2	-15.1	-24.9
Trade balance	1,808	-1,700	108	11,625	7,791	19,416
Net services income & transfers	2,327	-802	1,525	679	196	874
Current account balance	4,135	-2,502	1,633	12,304	7,987	20,291
Capital movements (net)	8,931	5,673	14,604	-6,664	5,465	-1,199
Direct Investments	2,994	3,008	6,002	1,200	918	2,118
- Foreign Direct Investment	4,616	3,954	8,570	2,843	3,111	5,954
of which: Non-bank	4,072	3,502	7,574	2,358	2,967	5,325
- Thai Direct Investment	-1,622	-946	-2,568	-1,643	-2,193	-3,836
Portfolio Investments	-1,990	-90	-2,080	-4,179	-5,032	-9,212
- Foreign	1,596	-4,116	-2,520	1,129	1,886	3,015
Equity securities	-355	-3,436	-3,792	1,385	490	1,875
Debt securities	1,951	-679	1,272	-256	1,396	1,140
- Thai	-3,586	4,025	440	-5,308	-6,918	-12,226
Loans	-458	453	-5	-1,664	2,127	464
- Foreign	-562	850	287	-1,051	2,366	1,315
of which: Bank	1,134	-415	719	-699	3,615	2,916
of which: Non-bank	-834	1,610	776	-186	-1,223	-1,408
- Thai	104	-396	-292	-613	-239	-852
Others	8,385	2,302	10,687	-2,021	7,452	5,430
of which: Currency and Deposits	6,511	4,374	10,885	-2,645	4,821	2,175
of which: Trade Credits	1,967	-1,272	695	-666	1,272	606
Errors and omissions	2,927	5,530	8,457	3,062	1,973	5,035
Overall balance <sup>2/</sup>	15,993	8,701	24,693	8,702	15,425	24,127

Note: 1/ Preliminary data 2/ Actual data

Source: Customs Department

Bank of Thailand

#### **External Debt**

External debt outstanding at the end of 2009 stood at 70.0 billion US dollars, increasing by 4.8 billion US dollars from the end of 2008. The rise in external debt was due to an increase in borrowings totaling 4.0 billion US dollars by the banking sector and the BOT, as well as valuation change of 0.8 billion US dollars, given the appreciations of Thai baht, Japanese yen and the euro against the US dollar. Details were summarized as follows:

External Debt Outstanding\*

	(Unit: Millio	ii O3 donais)		
				Dec-09 compared to
	2007	2008	2009	Dec-08
1. Public Sector	2,271	2,872	3,915	1,043
Short-term	4	4	364	360
Long-term	2,267	2,868	3,551	683
2. BOT	528	543	2,048	1,505
Short-term	17	322	419	97
Long-term	511	221	1,629	1,408
3. Banks	6,362	7,194	10,344	3,150
Short-term	3,961	4,462	8,541	4,079
Long-term	2,401	2,732	1,803	-929
4. Other sectors	52,712	54,615	53,708	-907
Short-term	17,660	19,420	18,550	-870
Long-term	35,052	35,195	35,158	-37
4.1 State Enterprises	9,379	9,681	9,319	-362
Short-term	23	38	29	-9
Long-term	9,356	9,643	9,290	-353
4.2 Non-Banks	43,333	44,934	44,389	-545
Short-term	17,637	19,382	18,521	-861
Long-term	25,696	25,552	25,868	316
Total Debt (1+2+3+4)	61,873	65,224	70,015	4,791
External Debt / GDP (%)	29.4	26.9	26.8	
Short-term	21,642	24,208	27,874	3,666
Long-term	40,231	41,016	42,141	1,125
Share (%)	100.0	100.0	100.0	
Short-term	35.0	37.1	39.8	
Long-term	65.0	62.9	60.2	

Note: \* Including valuation change Source: Bank of Thailand

Government sector. External debt of the general government sector recorded at 3.9 billion US dollars, up by 1.0 billion US dollars from 2008. The increase in government external debt

was due to the purchases of baht-denominated government bonds by non-residents in the secondary market.

Bank of Thailand. External debt of the BOT registered at 2.0 billion US dollars, increasing by 1.5 billion US dollars from the previous year, mainly due to the International Monetary Fund's allocation of special drawing rights (SDRs) totaling 1.4 billion US dollars to the BOT, and foreign investors' purchases of baht-denominated BOT bonds in the secondary market.

Banking sector. External debt of the banking sector stood at 10.3 billion US dollars, growing by 3.2 billion US dollars from the end of 2008. The rise was attributable to short-term borrowings by foreign bank branches in Thailand, and liquidity cushion to prepare for the expiration of foreign exchange forward transactions.

Other sectors. External debt of other sectors was at 53.7 billion US dollars, decreasing by 0.9 billion US dollars from the end of last year as a result of debt repayment, as well as the revaluation in US dollar term. Net external debt of the state-enterprise sector stood at 9.3 billion US dollars, down by 0.4 billion US dollars from the redemption of due debt. As for the nonbanking sector, net external debt registered at 44.4 billion US dollars, declining by 0.5 billion US dollars in tandem with a decrease in shortterm debt from loan repayment and the revaluation of external debt outstanding in US dollars even though short-term trade credits, especially in the form of open account increased. Long-term debt slightly increased, owing to increases in loans and foreign investors' purchases of non-banking sectors' securities.

#### External debt structure

Short-term debt at the end of 2009 accounted for 39.8 percent of total external debt, increasing from 37.1 percent in 2008. This was due mainly to surges in short-term external debt of the banking sector, and trade credits of the non-banking sector.

#### External debt and vulnerability indicators

All vulnerability indicators in 2009 showed that the Thai economy remained resilient. Regarding liquidity indicators, the ratio of gross reserves to short-term external debt was

5.0 times, while the proportion of gross reserves to the value of import stood at 12.6 times.

Although the ratio of short-term debt to total external debt increased from 2008, Thailand's debt service ability as reflected by the ratio of external debt to revenue from goods and services exports, and the external debt to GDP ratio remained close to that of the previous year. In addition, the ratio of current account to GDP rose to 7.7 percent and the debt service ratio slightly improved from the previous year.

#### External Vulnerability Indicators

	2007	2007 2008			20	08			20	09	
	2007	2008	2009	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Solvency Indicators											
Current Account 1//GDP (%)	6.3	0.5	7.7	5.7	0.3	-1.4	-2.4	15.4	4.3	5.6	5.9
Debt / GDP* (%)	29.4	26.9	26.8	30.6	29.0	27.6	26.9	25.3	25.1	26.3	26.8
Debt / XGS*1/ (%)	39.8	35.8	36.5	41.2	38.9	36.7	35.8	33.8	34.0	35.9	36.5
Debt Service Ratio (%)	11.7	7.0	6.7	8.7	6.1	5.6	7.9	7.2	7.8	5.9	6.1
Liquidity Indicators											
Gross Reserves / ST Debt	4.0	4.6	5.0	4.3	4.1	4.1	4.6	5.4	5.6	5.5	5.0
Gross Reserves / Import	7.6	7.6	12.6	8.9	8.0	7.1	7.6	8.7	10.0	12.1	12.6
ST Debt / Total Debt (%)	35.0	37.1	39.8	38.0	38.6	38.6	37.1	34.8	34.4	35.8	39.8

Note: \* The new series of the external debt to GDP was revised by adopting the World Bank's approach: using the averaged quarterly GDP for the last 3 years starting from the GDP of the quarter in question (while the previous approach was calculated by dividing the external debt outstanding of the quarter in question by the average GDP of the same year and the prevoius 2 years).

Source: Bank of Thailand

<sup>&</sup>lt;sup>1/</sup> Since October 2006 reinvested earnings has been recorded as part of direct investment in financial account, and its contra entry recorded as "investment income" in current account. The series have been revised back to 2001.

#### **Fiscal Conditions**

In fiscal year 2009, the government continued to conduct a deficit budget at a larger size than that of the previous fiscal year, totaling 347.1 billion baht or 3.9 percent of GDP. Meanwhile, the budget expenditure for fiscal year 2009 was set at 1,835.0 billion baht, including supplementary budget of 116.7 billion baht, to stimulate domestic economy during the period that private sector was adversely affected by the global economic crisis. Example of government stimulus measures included measures to alleviate costs of living, 15-year free education scheme, as well as allowance for the old.

Nevertheless, the fiscal conditions of fiscal year 2009 were in greater deficit than previously estimated due to below-the-target revenue collection according to the budget document in light of the economic contraction. This adversely affected firms' performance, employment, and consumption. Coupled with tax exemption measures, the government therefore ran a cash deficit of 420.3 billion baht equivalent to 4.8 percent of GDP, and financed such deficit through net domestic borrowing of 496.9 billion baht. Meanwhile, net external loan repayment registered at 11.9 billion baht, resulting in an increase in treasury reserves from 229.9 billion baht at the end of fiscal year 2008 to 294.6 billion baht at the end of fiscal year 2009.

For fiscal year 2010, the government continued to set a deficit budget. The government set the budget expenditure at 1,700.0 billion baht, and the estimated net revenue at 1,350.0 billion baht, resulting in a budget deficit of 350.0 billion baht or 3.8 percent of GDP. Moreover, the government has incurred additional non-budgetary borrowing through the enactment of the Emergency Decree Empowering the Ministry of Finance to Borrow for Economic Restructuring and Strengthening B.E. 2552 (2009) amounted to 350.0 billion baht (of which 14.9 billion baht was already disbursed in fiscal year 2009) or 3.8 percent of GDP which was the same level of this fiscal year's deficit. This aimed to revive the economy and invest in infrastructure programs under the "Strong Thailand 2012 Project" as well as to support the recovery of private sector going forward.

In the first quarter of fiscal year 2010, fiscal position recorded a cash deficit of 128.8 billion baht. Together with domestic borrowing of 5.5 billion baht and external loan repayment of 0.7 billion baht, as well as the use of treasury reserves of 123.9 billion baht, the treasury reserves at the end of first quarter of fiscal year 2010 decreased from 294.6 billion baht at the end of the previous fiscal year, to 170.7 billion baht.

Treasury Cash Balance<sup>1/</sup>

(Unit: Billion baht) Fiscal Year

	2008	2009	2009		2010 <sup>P/</sup>			
	2008	2009	H1	H2	Q1	Oct 09	Nov 09	Dec 09
Revenue	1,545.8	1,409.7	551.5	858.2	353.1	115.9	118.1	119.1
$(\Delta\%)$	(7.9)	(-8.8)	(-12.6)	(-6.2)	(26.8)	(24.6)	(30.6)	(25.3)
Expenditure <sup>2/</sup>	1,582.6	1,803.0	921.0	882.0	449.8	95.4	182.2	172.2
$(\Delta\%)$	(4.1)	(13.9)	(16.5)	(11.3)	(11.3)	(-1.8)	(12.9)	(18.4)
: Disbursement rate (%)	91.1	92.9	46.5	46.5	23.2	4.9	9.2	9.1
Budget deficit (-) or Surplus ( +)	-36.7	-393.3	-369.5	-23.9	-96.7	20.5	-64.1	-53.1
Non-Budgetary Deficit (-) or Surplus (+)	12.7	-27.0	-18.3	-8.6	-32.0	-13.7	-15.0	-3.4
: Strong Thailand Project 2012				-14.9	-20.2	-1.4	-3.9	-14.9
Cash Deficit (-) or Surplus (+)	-24.0	-420.3	-387.8	-32.5	-128.8	6.8	-79.1	-56.5
: (% of GDP)	(-0.3)	(-4.8)	(-4.4)	(-0.4)	(-1.3)	(0.1)	(-0.8)	(-0.6)
Financing								
Net Domestic Borrowing	145.5	496.9	218.0	278.9	5.5	-17.7	8.1	15.2
Net Foreign Borrowing	-34.3	-11.9	-9.1	-2.8	-0.7	-0.5	-0.1	-0.1
Use of Treasury Cash Balance	-87.1	-64.7	178.9	-243.6	123.9	11.4	71.1	41.4
Treasury Cash Balance (end-period)	229.9	294.6	51.0	294.6	170.7	283.2	212.1	170.7

Note:  $\Delta\%$  represents percentage change from the same period last year

#### **Government Revenues**

In fiscal year 2009, the government's revenue collection totaled 1,684.3 billion baht, contracting by 8.3 percent from the same period of last fiscal year. After excluding tax deducted items and VAT allocation to local governments, the government net revenue amounted to 1,410.9 billion baht, down by 8.7 percent and less than the specification in the budget document (1,604.6 billion baht) by 193.7 billion baht. This was due to contractions in both tax and non-tax revenues in accordance with (1) economic conditions, and (2) effects of additional fiscal

measures, including an increase in tax exemption on personal income tax up to 150,000 baht, allowances on life insurance premium and investment in long- term equity fund (LTF) and retirement mutual fund (RMF), and a decrease in specific tax rate on real estate. Compared with that of the previous fiscal year, declining in tax income resulted from reductions in VAT by 14.2 percent in line with softened consumption and imports, and corporate income tax by 14.9 percent according to worsened business performance.

Non-tax income recorded at 174.2 billion baht, contracting by 5.1 percent from lower

<sup>1/</sup> Data on revenue remitted to the Treasuary and expenditure are from Fiscal Policy Office, adjusted to cash basis

<sup>&</sup>lt;sup>2/</sup> Expenditure and disbursement rate excluded both of loan principle repayment and use of treasuary cash balance

P/ Preliminary data

revenue remittances of state-owned enterprises following their deteriorated performances.

In the first quarter of fiscal year 2010, the government's revenue collection registered at 400.7 billion baht, expanding from the same period of last fiscal year by 16.4 percent and 64.5 billion baht above the target. Tax revenue

increased by 15.5 percent, owing to improved economic conditions and increases in excise tax rates on fuel, liquors and tobacco. Meanwhile, non-tax income grew by 24.0 percent due to an increase in revenue remittances of some public enterprises.

#### Government Revenue\*

(Unit: Billion baht) Fiscal year

	2008	2009 <sup>P/</sup>		201	10 <sup>P/</sup>	
	2008	2009	Q1	Oct 09	Nov 09	Dec 09
Total Revenue	1,837.6	1,684.3	400.7	130.7	145.5	124.5
$(\Delta\%)$	(7.9)	(-8.3)	(16.4)	(14.9)	(14.4)	(20.6)
Taxes	1,654.0	1,510.1	356.5	111.4	127.9	117.2
$(\Delta\%)$	(10.5)	(-8.7)	(15.5)	(5.6)	(17.0)	(25.1)
- Income base	739.5	681.0	102.9	30.7	42.8	29.3
$(\Delta\%)$	(15.0)	(-7.9)	(-1.8)	(-7.6)	(-3.6)	(8.4)
Personal income tax	204.8	198.1	43.1	14.7	13.3	15.1
$(\Delta\%)$	(6.3)	(-3.3)	(2.2)	(-3.7)	(-1.6)	(12.7)
Corporate income tax	460.7	392.2	59.0	16.0	28.9	14.1
$(\Delta\%)$	(19.8)	(-14.9)	(0.3)	(-1.3)	(-2.3)	(8.0)
- Consumption base	806.9	741.1	226.0	72.1	75.4	78.5
$(\Delta\%)$	(6.7)	(-8.2)	(27.2)	(14.7)	(33.0)	(35.0)
Value added tax	503.4	431.8	121.2	39.4	40.5	41.3
$(\Delta\%)$	(15.9)	(-14.2)	(4.5)	(-7.0)	(10.4)	(12.0)
Excise tax	278.3	291.2	100.8	31.3	33.6	35.9
$(\Delta\%)$	(-3.1)	(4.6)	(76.1)	(66.8)	(81.8)	(79.5)
- International trade base	97.4	77.6	24.4	7.6	8.5	8.3
$(\Delta\%)$	(10.1)	(-20.4)	(2.8)	(-11.4)	(13.2)	(8.7)
Other incomes	183.7	174.2	44.2	19.3	17.6	7.3
$(\Delta\%)$	(-11.2)	(-5.1)	(24.0)	(135.5)	(-1.5)	(-23.9)

Note:  $\Delta$ % represents percentage change from the same period last year

Source: Fiscal Policy Office, Ministry of Finance

Data Management Department, Bank of Thailand

<sup>\*</sup>Revenue on a collection basis is defined differently from revenue on a cash basis shown in the treasuary account position

Difference are from time-overlapping and the deduction from the collection basis set aside for tax rebates and export duties compensation.

#### **Expenditures**

The fiscal year 2009 budget expenditure (including principal loan repayment and current year expenditure plus carry-over expenditure) totaled 1,917.1 billion baht, up by 17.4 percent from the previous fiscal year. This consisted of current expenditure of 1,569.2 billion baht and capital expenditure of 345.5 billion baht, expanding by 20.3 percent and 5.9 percent, respectively.

The budget disbursement started to expedite in the second quarter of fiscal year 2009 due to an acceleration of supplementary budget disbursement to boost softened private consumption which was affected by the global crisis, including measures to reduce costs of living, 15-year free education scheme. Nevertheless, the budget disbursement in the second half of the fiscal year slightly slowed down from such factors as revision of construction plan and design whose financing needed more time to get re-approval. For the whole fiscal year, the government's disbursement rate stood at 91.8 percent of total budget, lower than 92.3 percent in the previous fiscal year. Major expenditures were for

education, economic policy implementation, and universal healthcare. In addition, during the end of fiscal year 2009, the government launched the "Strong Thailand 2012 Project" whose disbursement totaled 14.9 billion baht, of which 14.5 billion baht was for recapitalization of some specialized financial institutions.

For the first quarter of fiscal year 2010, the government's budget disbursement recorded at 452.5 billion baht (including principal loan repayment and current year expenditure plus carry-over expenditure), comprising current year expenditure of 396.9 billion baht or 23.3 percent of total budget, higher than that of the prior fiscal year and targeted disbursement rate of the period by 18.6 percent and 20.0 percent, respectively. This was due to measures to expedite the disbursement, and the amount of budget expenditure for fiscal year 2010 was less than that of the previous fiscal year by 251.7 billion baht. Moreover, the government dispatched loan totaling 20.2 billion baht, mainly for village funds and road improvement under the "Strong Thailand 2012 Project."

**Budget Expenditure Structure** 

	Disbursement	according to GFM	MIS classification*	Disbur	Disbursement Rate (Percent)			
Unit: Billion baht	2008	2009	2010 Q1	2008	2009	2010 Q1		
1. Current Year	1,532.4	1,790.9	396.9	92.3%	91.8%	23.3%		
$(\Delta\%)$	(4.2)	(16.9)	(9.1)	(-1.7)	(-0.6)	(25.3)		
Current Expenditure	1,264.9	1,507.9	353.3	97.7%	97.9%	24.4%		
$(\Delta\%)$	(4.7)	(19.2)	(5.3)	(-1.8)	(0.2)	(11.8)		
Capital Expenditure	267.5	283.0	43.6	73.3%	68.8%	17.5%		
$(\Delta\%)$	(1.8)	(5.8)	(54.4)	(-0.0)	(-0.1)	(154.7)		
Miscelleneous items	-	-	-	-	-	-		
$(\Delta\%)$	-	-	-	-	-	-		
2. Carry over	100.9	126.3	<b>55.</b> 7	66.4%	65.9%	23.0%		
$(\Delta\%)$	(-3.1)	(25.1)	(31.0)	(-0.0)	(-0.0)	(3.8)		
Current Expenditure	40.0	61.4	25.4	71.1%	73.1%	24.5%		
$(\Delta\%)$	(25.2)	(53.4)	(22.7)	(3.8)	(2.8)	(-0.9)		
Capital Expenditure	58.8	62.5	30.1	63.5%	60.0%	21.9%		
$(\Delta\%)$	(-17.8)	(6.4)	(39.0)	(-3.9)	(-5.4)	(5.6)		
Miscelleneous items	2.2	2.4	0.2	66.0%	68.2%	19.8%		
$(\Delta\%)$	(224.2)	(10.8)	(37.6)	(26.0)	(3.2)	(435.1)		
3. Total Expenditures	1,633.3	1,917.1	452.5	90.1%	89.4%	23.3%		
$(\Delta\%)$	(3.7)	(17.4)	(11.4)	(-1.4)	(-0.8)	(23.0)		
Current Expenditure	1,304.9	1,569.2	378.7	96.6%	96.6%	24.4%		
$(\Delta\%)$	(5.2)	(20.3)	(6.3)	(-1.8)	(0.1)	(11.1)		
Capital Expenditure	326.3	345.5	73.7	71.3%	67.0%	19.1%		
$(\Delta\%)$	(-2.4)	(5.9)	(47.7)	(-1.8)	(-6.0)	(97.1)		
Miscelleneous items	2.2	2.4	0.2	66.0%	68.2%	19.8%		
$(\Delta\%)$	(201.5)	(10.8)	(37.6)	(17.1)	(3.2)	(435.1)		

Note: \* Government Fiscal Management Information System  $\Delta\%$  represents percentage change from the same period last year Source: The comptroller's General Department, Ministry of Finance

#### **State Enterprises**

In fiscal year 2009, state enterprises<sup>16/</sup> registered the retained income at 176.8 billion baht, expanding by 4.4 percent from the same period of last fiscal year. Compared with that of the previous fiscal year, capital expenditure of state enterprises recorded at 187.5 billion baht, decreasing by 14.9 percent. This was partly due to delay in project implementation, including problems on compensation for people affected by sound pollution from the operation of Suvarnabhumi

International Airport, construction compensation (K factor) for Bangpli-Suksawasdi express way project that has not been finalized, and delayed investment plans of the red, purple, and blue mass transit railway lines.

Although the capital expenditure of state enterprises decreased, it was still higher than the retained income. Therefore, the state enterprises' balance recorded a continued deficit of 10.7 billion baht or 0.1 percent of GDP.

#### State Enterprises' Balances

(Unit : Billion baht) Fiscal Year

	2007	2008 <sup>P/</sup>	2009 <sup>P/</sup>
Retained Income	168.9	169.3	176.8
$(\Delta\%)$	(8.2)	(0.2)	(4.4)
Capital Expenditure	222.2	220.4	187.5
$(\Delta\%)$	(26.5)	(-0.8)	(-14.9)
State Enterprises' Balances	-53.3	-51.1	-10.7
(% of GDP)	(-0.6)	(-0.6)	(-0.1)

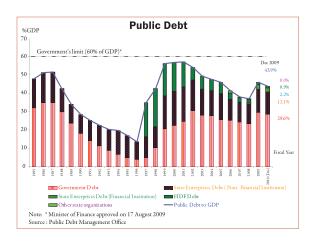
Note:  $\Delta \%$  represents percentage change from the same period last year  $^{P/}$  Preliminary data

Source: National Economic and Social Development Board (NESDB)

#### **Public Debt**

At the end of fiscal year 2009, total public debt registered at 4,002.0 billion baht or 45.2 percent of GDP, growing from 37.3 percent of GDP at the end of last fiscal year, comprising increases in debt levels of direct government borrowing, and financial and non-financial public enterprises. The rise in public debt for this fiscal year was partly due to revenue contraction, and economic stimulus measures such as supplementary budget to reduce costs of living, and farmers' income guarantee project.

At the end of December 2009, public debt to GDP stood at 43.9 percent or 3,967.5 billion baht.



 $<sup>^{16/}</sup>$  Data on state enterprises were from the NESDB's survey (excluding some state enterprises such as PTT)

Public Debt

(Unit : Billion baht) Fiscal Year

	2008	2009 <sup>P/</sup>	2010 <sup>P/</sup>
			Dec
1. Debt incurred from direct borrowing	2,162.1	2,586.5	2,588.1
(% of GDP)	(23.7)	(29.2)	(28.6)
1.1 foreign debt	67.0	63.0	57.7
1.2 domestic debt	2,095.1	2,523.5	2,530.4
2. Debt of non-financial state enterprises	988.5	1,108.7	1,098.3
(% of GDP)	(10.8)	(12.5)	(12.1)
2.1 government - guaranteed debt	572.6	559.6	542.1
foreign debt	174.9	175.5	170.1
domestic debt	397.7	384.0	372.0
2.2 non-government-guaranteed debt	415.9	549.1	556.2
foreign debt	136.5	137.4	141.6
domestic debt	279.4	411.7	414.6
3. Debt of financial state enterprises	102.3	208.7	198.4
(% of GDP)	(1.1)	(2.4)	(2.2)
3.1 foreign debt	9.0	8.5	8.2
3.2 domestic debt	93.3	200.2	190.3
4. Financial Institution Development Fund (FIDF)	138.2	98.1	82.6
(% of GDP)	(1.5)	(1.1)	(0.9)
4.1 government -guaranteed debt	73.8	73.8	30.4
4.2 non-government-guaranteed debt	64.4	24.4	52.2
5. Other sate organizations*	17.1	0.0	0.0
(% of GDP)	(0.2)	(0.0)	(0.0)
5.1 government- guaranteed debt	8.3	0.0	0.0
5.2 non-government - guaranteed debt	8.8	0.0	0.0
Total (1+2+3+4+5)	3,408.2	4,002.1	3,967.2
(% of GDP)	(37.3)	(45.2)	(43.9)

Note: \* Public Debt Management Office has updated debt report since July 2006

P/ Preliminary data

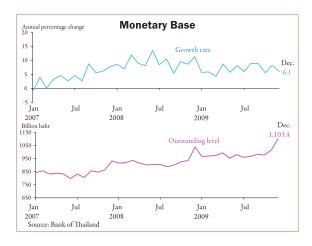
Source: Public Debt Management Office, Ministry of Finance

# **Monetary Conditions**

#### Monetary Base and Money Supply

At the end of 2009, **monetary base** stood at 1,103.4 billion baht, expanding by 6.1 percent from the previous year. This corresponded to an accelerating growth of currency in circulation, especially at the end of the year as demand for cash increased.

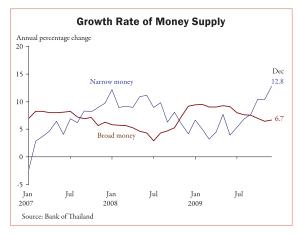
In 2009, important developments regarding the supply of the monetary base were: (1) a continued increase in net foreign assets held by BOT, (2) a decline in the BOT's net claims on government from higher government deposits at the BOT together with a slight increase in government bonds holding, and (3) a decline in the BOT's net claims on financial institutions as these financial institutions increased investment volume in the repurchase market as well as their holdings of the BOT bonds.



Broad money, at the end of 2009, totaled 10,610.1 billion baht or an expansion of 6.7 percent, decelerating from 9.2 percent in 2008. During the first half of 2009, broad money rose at a high rate, close to the growth rate in the last

quarter of 2008. This was due to higher economic uncertainty which prompted investors to shift their investments away from risky assets to safer assets such as deposits. Increase in deposits also resulted from the return of investments in foreign securities that reached maturity into the domestic banking system. During the second half of the year, broad money expanded at a decelerating rate, owing partly to a high base effect in the previous year where risk aversion was observed. In addition, with better sentiment, depositors shifted to higher-yielding assets such as equities, commercial papers and government saving bonds. Nevertheless, the broad money outstanding continued to increase, particularly deposits at specialized financial institutions (SFIs) which rose from the mobilization of deposits in accordance with the government's policy to accommodate more credit expansion in the period ahead.

Narrow money expanded at an accelerating rate especially in the second half of 2009, reflecting higher transaction demand for money and the recovering economic activities.



#### Exchange Rate, Interest Rates, and Government Bond Yields

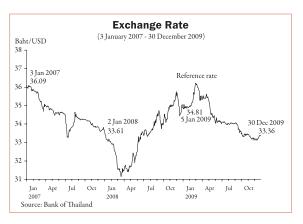
#### Exchange rate

The average exchange rate of baht against US dollar in 2009 was at 34.32 baht, depreciating from 33.38 baht per US dollar in 2008. The baht depreciation against the US dollar in the first quarter of the year was due to the concern of global investors over the trouble in the US and the European financial systems. This led investors to shift investments away from stocks and assets of emerging markets towards gold and dollar denominated assets. Nevertheless, the baht continued to strengthen against the US dollar during the rest of the year. This was due to weaker dollar index and investors' risk appetite that gradually recovered in the second quarter and continued to improve in the second half of the year. This corresponded with improvements in economic data of many countries such as the US, Japan, and the Euro area, as well as the profitability of financial institutions in the US. As a consequence, global investors increased holdings of assets denominated in emerging market currencies. The continued current account surplus also contributed to the baht appreciation against the US dollar. Moreover, the speculation about central banks' further diversification of international reserves had also added pressure on the US dollar.

Nevertheless, the baht weakened once again towards the end of the year, owing to the year-end demand for US dollar by foreign investors and domestic financial institutions in preparation for the long holiday. Moreover, the recent better-than-expected US economic data also led the market to price in an earlier Fed funds

rate hike. In addition, the downgrades of sovereign ratings of Greece and Mexico also contributed to a temporary risk aversion.

However, concerns over the possible default of Dubai World around the end of November only led to a temporary depreciation of the baht and other regional currencies since investors had limited exposures to Dubai World.



On average, the baht against the US dollar in 2009 weakened by 2.7 percent from the previous year, corresponding with a 0.98 percent depreciation in the Nominal Effective Exchange Rate (NEER), a weighted average of bilateral exchange rates between the baht and major trading partners' currencies. The NEER averaged at 77.13, slightly lower than the average of 77.90 in 2008, reflecting the weakening of baht against the trading partners' currencies.

The Real Effective Exchange Rate (REER), which takes into account the effect of inflation to reflect the country's price competitiveness, depreciated from an average of 91.24 in 2008 to 89.22 in 2009, equivalent to a 2.22 percent appreciation, in line with a decline in NEER.

Exchange	Rates	in	the	Region
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As of Dec 2009	% ch	ange from Dec 2	2008	Annualized Volatility compared with US dollar <sup>2/</sup>
	NEER <sup>1/</sup>	REER <sup>1/</sup>	per USD <sup>2/</sup>	Jan – Dec 2009
IDR	13.5	15.5	18.8	12.1
KRW	12.4	14.4	17.0	15.7
SGD	0.2	-1.2	5.7	6.4
THB	0.2	2.8	5.4	3.5
PHP	-1.1	2.3	3.1	6.6
MYR	-1.2	-2.4	3.8	6.9
INR	-1.5	4.1	3.9	9.1
TWD	-1.9	-3.1	2.7	5.1
JPY	-3.9	-7.3	1.7	13.7
CNY	-5.4	-6.1	0.4	0.6

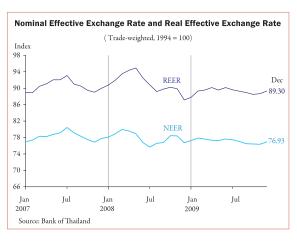
Source:  $^{1/}$  BIS calculation  $^{2/}$  BOT calculation

In December 2009, the baht against US dollar appreciated by 5.4 percent from the same period last year, while the NEER and REER strengthened by 0.2 and 2.8 percent on average, respectively. In addition, the volatility of the baht in 2009 averaged at 3.5 percent which was considered lower than the majority of neighbouring countries.

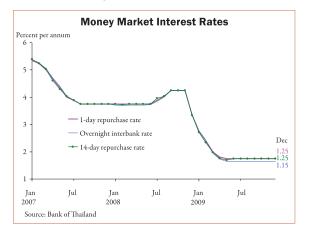
#### Money market interest rates

In 2009, short-term money market interest rates comprising the 1-day repurchase rate and interbank rate averaged at 1.42 and 1.34 percent per annum, lower than the previous year's averages of 3.38 and 3.35 percent per annum, respectively. This was in tandem with the 3 times policy rate cuts, totaling 1.50 percent per annum, and the policy rate was kept constant at 1.25 percent per annum during the past 5 Monetary Policy Committee (MPC) meetings.

During early 2009, risks to economic growth remained high, while inflationary pressure continued to be subdued. Thus, the monetary policy could continue to be eased from 2008 in order to support the economic recovery which was negatively affected by both internal and external factors. In addition, the impacts of the fiscal policy measures to stimulate the economy



would take some time to come into full effect. The MPC therefore decided to lower the policy interest rate in the first 3 consecutive meetings of the year, totaling 1.50 percent per annum.



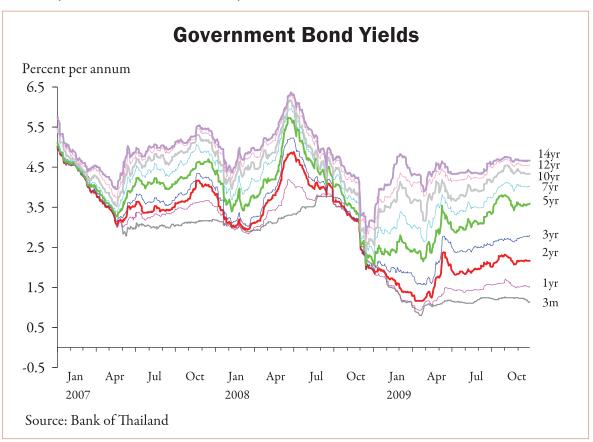
In the second half of the year, the Thai economy began to improve, following the continued global economic recovery in tandem with the support from both monetary and fiscal policy measures. The recovery was thus more broad-based. Nevertheless, the overall economic recovery remained fragile. The MPC therefore decided to maintain the accommodative policy interest rate in the last 5 meetings of the year to support the economic recovery in the currently subdued inflation environment.

#### Government bond yields

In early 2009, short- and medium- term government bond yields continued to decline from the last quarter of 2008, in tandem with investors' expectation on further policy interest rate cuts to shore up economic growth while the inflation remained low. Yields on long-term government bonds adjusted upwards due to an increase in supply of long-term government bonds, resulting from higher fiscal deficit. In addition, concern over the possibility of government bond supply increase, totaling 800 billion baht to invest in the "Strong Thailand 2012 Project," induced investors to adjust the

duration of their investment portfolios towards shorter-term government bonds, following an expected decline in the price of long-term government bonds which was in line with the increased supply.

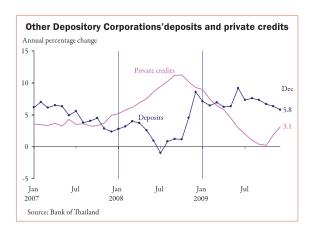
In the second half of the year, the government bond yields increased continually, partly from a more buoyant confidence given positive developments of the global and Thai economies, with the Stock Exchange of Thailand (SET) index also making a new high for the year. In addition, some central banks such as Reserve Bank of Australia and Norges Bank adjusted their policy interest rates upwards sooner than the market had previously anticipated. Moreover, the Public Debt Management Office announced a plan to mobilize additional funds worth 120 billion baht via the bond market in the fiscal year 2010. Nevertheless, towards the end of the year, the government bond yields declined slightly since investor confidence was dented by concerns over the sustainability of global and Thai economic recoveries as well as ongoing domestic political uncertainty. This resulted in a pick up in demand for government bonds.



#### Other Depository Corporation<sup>17/</sup> Deposits and Claims

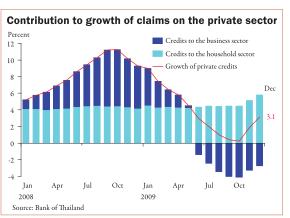
#### Other Depository Corporations' deposits

During the first half of 2009, deposits of other depository corporations (ODCs) continued to expand from the previous year since investors shifted their investments from risky assets to deposits. Nevertheless, the growth of deposits including commercial banks' bill-of-exchange (B/E) declined somewhat during the second half of the year. This was partly due to a decline in investors' risk aversion causing investors to shift to higher-yielding assets, such as equity, foreign investment funds (FIFs), as well as government saving bonds and the BOT bonds that were issued in July and September, respectively. In 2009, deposits including commercial banks' B/E expanded by 8.1 percent, accelerating from an average of 5.2 percent in 2008.



#### Other Depository Corporations' credits

The private credit of ODCs in 2009 grew at an average of 3.7 percent, declining from 8.5 percent in the previous year. From January to October 2009, credit growth continued to decelerate following the economic slowdown. This resulted in lower demand for corporate loans, while financial institutions became more cautious in their lending activities. Nevertheless, household credits, especially for housing, continued to expand. Private credit growth began to accelerate around the end of the year, owing to government's "Fast track" loan project where the SFIs were encouraged to expand private credits. In addition, there was rising demand for credits in view of the ongoing economic recovery, along with a continued easing in credit standards of commercial banks.

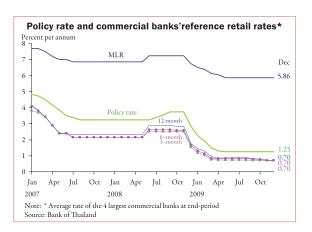


<sup>&</sup>lt;sup>17/</sup> Other Depository Corporations comprise of domestically registered commercial banks, branches of foreign banks, international banking facilities, finance companies, specialised financial institutions (including Government Saving Bank, Government Housing Banks, Bank for Agricultural Cooperatives, Export-Import BOT, Small and Medium Enterprise Development BOT, Islamic BOT), saving cooperatives, and money market mutual funds.

#### Commercial bank interest rates

At the beginning of 2009, commercial banks' reference interest rates<sup>18/</sup>, both deposits and loans, were adjusted downwards after the MPC decided to lower the policy interest rate 3 times in January, March, and April to 1.25 percent per annum. Later, the MPC decided to hold the policy rate unchanged throughout the year, causing most commercial banks to maintain their loan rates since May. At the end of 2009, the minimum loan rate (MLR) of four largest commercial banks averaged at 5.86 percent per annum, compared with 6.75 percent per annum at the same period last year. The time deposit rates of commercial banks were also gradually adjusted downwards alongside policy rate cuts earlier. Around the middle of the year, commercial banks raised their time deposit rates, particularly for the deposit amount of less than 3

million baht in order to relieve the impact on interest income of retail depositors. Nevertheless, the deposit rates for such special products were lowered at the end of the year. Thus, the average 3-, 6- and 12- month time deposit rates of four largest commercial banks at the end of 2009 stood equivalently at 0.70 percent per annum, compared with the last year's average of 2.28, 2.34 and 2.54 percent per annum, respectively.



#### Performance of Commercial Banks

In 2009, the Thai banking system counted 32 commercial banks<sup>19/</sup>, comprising 17 Thai registered commercial banks and 15 foreign bank branches.

The banking system performance in 2009 declined from the previous year with operating profits of 185.2 billion baht, reducing by 5.5 percent from the previous year. This was mainly due to a reduction in net interest margin (NIM) from 3.4 percent in 2008 to 3.0 percent in 2009. After deducting taxes and provision expenses, commercial banks' net profit amounted to 92.2 billion baht or a decline of 6.6 percent from 2008. This resulted in a reduction of return on asset (ROA) from 1.0 percent to 0.9 percent.

The drop in commercial banks' profit was

primarily due to lower interest income from loans owing to a moderation in credit growth, especially the shrink in corporate credit albeit the private consumption credit still expanded. The average effective lending rate also declined from 6.00 percent per annum last year to 5.24 percent per annum in 2009. There was also a reduction in interest expenses on deposits due to a shift from deposits towards assets with higher returns. As a result, the effective deposit rate declined from from 1.94 percent per annum in 2008 to 1.15 percent per annum this year.

The commercial banks' non-interest income increased by 7.2 percent from the previous year, owing to the profits from investments in securities that turned to be positive in 2009,

Average interest rates of four largest commercial banks
 Excluding Societe Generale bank and AIG retail bank co. ltd., which were shut down on 20 February 2009 and 25 September 2009, respectively.

coupled with higher income from fees. Meanwhile, **non-interest expenses** rose by 2.5 percent in 2009 compared to that of the previous year, partly due to higher personnel expenses.

Although the net profit of commercial banks reduced in 2009, continual caution in operation and risk management when the economy bottomed out from the impact of global financial crisis helped the banking system maintain their positive profit. The ratio of gross non-performing loans (Gross NPL) to total loans declined to 4.8 percent at the end of the year with the outstanding amount of 376.1 billion baht,

dropping from the previous year by 21.0 billion baht. This was attributable to a reduction in NPL ratios of both corporate and household loans, coupled with a drop in the special-mentioned loans (with one to three month past due, or delinquent loans).

Moreover, the overall positions of the commercial banking system in 2009 remained satisfactory, with higher capital positions from both profit and recapitalization. As a result, the BIS ratio increased to 16.1 percent while the ratio of regulatory tier-1 capital to total assets rose to 12.6 percent.

#### Performance of the Banking System

Billion baht	2008	2009 <sup>P/</sup>	$\Delta\%({ m YoY})$
1. Interest income	478.7	404.3	-15.5
1.1 Credit	358.5	311.1	-13.2
1.2 Inter bank and money market items	35.6	20.8	-41.6
1.3 Leasing and financial rent contract	24.4	26.7	9.2
1.4 Financial investments	60.2	45.7	-24.0
2. Interest expenses	174.8	114.2	-34.6
2.1 Deposits	131.4	78.2	-40.5
2.2 Inter bank and money market items	10.5	7.9	-24.9
2.3 Borrowings	32.9	28.2	-14.3
2.4 Fees and charges	0.0	0.0	-94.1
3. Net interest income	303.9	290.1	-4.5
(3) = (1) - (2)			
4. Non-interest income	126.0	135.0	7.2
5. Operating expense	234.0	239.9	2.5
6. Operating profits	196.0	185.2	-5.5
(6) = (3) + (4) - (5)			
7. Loan loss provision and debt	59.2	56.2	-5.1
8. Taxes and special items	37.9	36.8	-3.0
9. Net profits	98.8	92.2	-6.6
(9) = (6) - (7) - (8)			

Note: P/ Preliminary data

## **Capital Market**

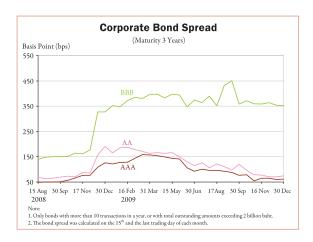
In 2009, the Thai capital market suffered from domestic economic recession, particularly during the first half of the year, due to lower capital raising activities of the corporate sector. However, in the second half of the year, the capital market improved in line with domestic and global economic recoveries.

The equity market was rather bearish during the first half of 2009, but rebounded during the rest of the year in tandem with improving economic conditions. At the end of 2009, the Stock Exchange of Thailand (SET) Index rose by 63.2 percent from 449.96 points at the end of 2008 to 734.54 points. Market capitalization also surged by 64.6 percent from 3.57 trillion baht to 5.87 trillion baht. Meanwhile, market dividend yield of the SET dropped from 6.57 to 3.65 percent. At the end of 2009, market P/E ratio was at 25.56, accelerating from 7.01 at the end of last year, due to a slowdown in business performance. Throughout the year, new equity securities issued by nonfinancial corporate sector aggregated 21.9 billion baht, dropping from of 34.0 billion baht in the earlier year. Corporate sector' issuance of equity securities were mainly from transportation, manufacturing, and real estate industries.

Overall, the bond market in 2009 witnessed improvements. The outstanding of public securities at the end of 2009 stood at 4.8 trillion baht, an increase of 820.3 billion baht

**SET Index and Market Capitalization** Billion baht Point 2,000 → SFT Index Market Capitalization (RHS) 1.800 1,600 1,400 1,200 1,000 800 600 400 200 Oct Jan Jan Jan Apr Apr 2007 2008 2009 Source: Stock Exchange of Thailand (SET)

from the end of previous year. This was mainly attributable to an expansion of government bonds due to the issuance of (1) government bonds to cover revenue short falls and support economic stimulus measures (Strong Thailand 2012 Project), and (2) BOT bonds to facilitate liquidity management of the Thai economy. With regard to private debt securities, the outstanding amount totaled 1.2 trillion baht, increasing by 188.3 billion baht from the past year, especially through more issuance of debt securities with maturity above one year. Two factors contributing to this included: (1) low interest rate from accommodative monetary policy which helped lower the costs of issuing debt securities, and (2) commercial banks' tightened credit standards, encouraging corporate sector to raise their capitals through bond market. Particularly, corporate sector issuing more debt securities were largely from mining, manufacturing, and construction industries. Debt securities issuance by financial intermediaries, however, reduced dramatically. In addition, the spread between corporate and government bonds (Corporate Bond Spread) for highly-rated bonds slightly adjusted downwards, close to the precrisis level during the second half of the year as the economy started to recover. But for lowergraded bonds, the spread remained high, reflecting uncertainties surrounding the businesses of these bond issuers.



# IMPORTANT MONETARY POLICIES AND MEASURES

# **Monetary Policies and Measures**

Measures	Parties Involved	Main Points	Effective Date	Sources
Interest Rate Policy 1. Policy rate MPC decisions on the following dates • 14 January 2009 • 25 February 2009 • 8 April 2009  • 20 May 2009 • 15 July 2009 • 26 August 2009 • 21 October 2009 • 2 December 2009		The MPC decided to lower the policy interest rate by 1.50 percent per annum, from 2.75 to 1.25 percent per annum, over three consecutive meetings since the last meeting on 14 January 2009. The MPC assessed that, going forward, risks to growth remained due to uncertainty in the global economy. Headline and core inflation continued to decline, allowing monetary policy to be eased further to support the economy and stimulate the recovery in the future.  The MPC decided to maintain the policy interest rate at 1.25 percent per annum for five consecutive meetings. The MPC viewed that the level of policy interest rate was appropriate and supportive of the economic recovery. In line with the global economic and financial rebound, the Thai economy continued to recover, with headline inflation turning positive for the first time since early 2009.	14 January 2009 25 February 2009 8 April 2009  20 May 2009 15 July 2009 26 August 2009 21 October 2009 2 December 2009	BOT News No. 1/2009, 6/2009, 12/2009  BOT News No. 20/2009, 28/2009, 38/2009, 48/2009, 58/2009
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Measures	Parties Involved	Main Points	Effective Date	Sources
Money Market Measures  1. Repurchase market  1.1 BOT's regulations on money market services in bond borrowing	- Financial institutions established under specific laws prescribed by the BOT - Other juristic persons prescribed by the BOT	The BOT issued regulations on money market services in bond borrowing (bond borrowing services) by prescribing rules, practices, and regulations regarding bond borrowing transactions, with the aim of enhancing efficiency of monetary policy instruments and supporting developments in money and bond markets.	1 October 2009	BOT Regulation No. FOG 90/2009, dated 17 September 2009
2. Foreign exchange controls 2.1 Notice of the Competent Officer	- All commercial banks (except retail commercial banks) - Specialized financial institutions	The BOT revised its regulations on investments in securities abroad and derivatives, together with rules and practices regarding currency exchange and other amendments, as follows:  (1) juristic persons possessing balance-sheet assets of 5,000 million baht or more were allowed to invest in securities abroad;  (2) the definition of foreign securities was revised to cover securities under the Securities and Exchange Act;  (3) institutional investors were further allowed to	4 August 2009	BOT circular No. ECD (23) Wor. 22/2009, dated 4 August 2009

Measures	Parties Involved	Main Points	Effective Date	Sources
		engage in derivatives transactions referencing foreign variables, securities borrowing and lending, and repo transactions with domestic and non-resident counterparties;  (4) authorized juristic persons were allowed to demand invoices from customers, in the case of customers requesting to buy money for payment of goods;  (5) persons borrowing from authorized juristic persons were allowed to sell foreign currencies against baht to commercial banks other than the lenders;  (6) authorized juristic persons were allowed to engage in futures contracts on gold-related variables with institutional investors in all cases; but with individuals, only plain vanilla swaps were allowed.		
Credit Measures 1. Policy statement on granting credits to certain types of business sectors	- Financial institutions under the Financial Institutions Businesses Act.	The BOT raised the ceiling of Loan to Value ratio (LTV) for housing loans worth 10 million baht or more, from the prescribed ratio of not exceeding 70 percent to not exceeding 80 percent.	4 March 2009	BOT circular No. BOT.PPD (21) Wor. 481/2009, dated 4 March 2009

Measures	Parties Involved	Main Points	Effective Date	Sources
2. Supervisory guideline for credits guaranteed by the Small Industry Credit Guarantee Corporation under the Portfolio Guarantee Scheme	- Locally incorporated commercial banks	Financial institutions were required to maintain capital to accommodate risks from their credit-granting transactions, as prescribed in the BOT's notification regarding the regulation on calculation of credit-risk-weighted assets for financial institutions under the Standardized Approach (SA) or the Internal Rating-Based Approach (IRB).  The BOT issued regulations as guideline for locally incorporated commercial banks on the calculation of credit-risk-weighted assets, classification and provisioning of guaranteed credits extended by the Small Industry Credit Guarantee Corporation under the Portfolio Guarantee Scheme.  This aimed to improve guarantee procedures, and compensation for damages incurred to financial institutions, as well as to prompt financial institutions to accelerate their lending to SMEs.	10 April 2009	BOT circular No. PPD (21) Wor. 72/2009, dated 22 April 2009

Measures	Parties Involved	Main Points	Effective Date	Sources
3. Modification of regulations of credit card business	- Commercial banks - Non-bank credit card companies	The BOT amended rules, procedures, and conditions of credit card business as follows:  (1) the definition of "Corporate Card" as "Business Card/Corporate Card", in order to cover card issuance to partnerships;  (2) rules on the consideration of cardholders' qualifications to include deposits at other depository corporations besides commercial banks;  (3) operators of credit card business were required to disclose more clearly and comprehensively information on interest rates, service charges, and penalties following the form set forth by the BOT.  In addition, non-bank credit card companies could consider approving an emergency credit line exceeding 10 percent of deposit and investment balances.	31 July 2009	BOT.FPG 16/2009, 17/2009, and 18/2009, dated 9 July 2009
Financial Institutions Supervision and Development Measures 1. Permission for commercial banks to engage in escrow business	-Commercial banks	The BOT permitted commercial banks to engage in escrow business under	1 May 2009	BOT.FPG 6/2009, dated 3 April 2009

the prescribed rules.  Commercial banks with low, moderately low, or moderate operational risk were allowed to undertake the escrow business in accordance with the Escrow Account Act B.E.  2551. In this regard commercial banks were required to ensure that the contractual parties were committed to their obligations according to the terms and conditions prescribed in the escrow contract.  2. Permission to offer depository services with customer-specified banks  - Finance companies to offer depository services with customer-specified withdrawal conditions under the prescribed rules, as follows:  (1) in opening accounts for such services, customers were to be notified that funds in the opened account would not be protected by the Escrow Account Act B.E. 2551.  Rather, they would have	Measures	Parties Involved	Main Points	Effective Date	Sources
similar protection like	2. Permission to offer depository services with customer-specified	- Commercial banks - Finance	the prescribed rules. Commercial banks with low, moderately low, or moderate operational risk were allowed to undertake the escrow business in accordance with the Escrow Account Act B.E. 2551. In this regard commercial banks were required to ensure that the contractual parties were committed to their obligations according to the terms and conditions prescribed in the escrow contract.  The BOT allowed commercial banks and finance companies to offer depository services with customer-specified withdrawal conditions under the prescribed rules, as follows:  (1) in opening accounts for such services, customers were to be notified that funds in the opened accounts would not be protected by the Escrow Account Act B.E. 2551. Rather, they would have		BOT.FPG 7/2009,

Measures	Parties Involved	Main Points	Effective Date	Sources
		(2) This notification did not cover the usual deposits and withdrawal businesses of commercial banks and finance companies, etc.		
3. Permission to provide supporting services to other parties (Insourcing) and other services	- Commercial banks	The BOT extended the coverage of commercial banks' supporting services to other parties (Insourcing) and other services, as follows:  (1) commercial banks were allowed to extend insourcing services to "government agencies" besides previously stipulated to "only other financial institutions."  (2) commercial banks were allowed to provide additional types of services whose scopes and practices were prescribed, for instance, back-office fund administration.	1 May 2009	BOT.FPG 8/2009, dated 3 April 2009
4. Components of capital of locally incorporated commercial banks (No.2)	- Locally incorporated commercial banks	The BOT permitted locally incorporated commercial banks to repurchase hybrid capital instruments, namely, hybrid Tier 1 instruments, hybrid debt capital instruments, and subordinated debts from holders. The repurchase could be done when prices	28 May 2009	BOT circular No. PPD (21) Wor. 92/2009, dated 29 May 2009

Measures	Parties Involved	Main Points	Effective Date	Sources
		of debt instruments fell substantially below the face values. In addition, the repurchase needed to get approval from the BOT. This permission aimed at improving flexibility of commercial banks in managing their funds.		
5. Power and duties of financial institutions' board of directors deemed by BOT as the most important	- Locally incorporated commercial banks - Foreign-incorporated commercial banks - Credit foncier companies - Finance companies	The BOT prescribed the power and duties of the board of directors of financial institutions deemed by BOT as the most important. This focused on four following aspects:  (1) risk management (2) capital adequacy (3) compliance roles (4) good corporate governance.  The prescription aimed to provide guideline on supervising financial institutions according to laws and the BOT's policies.	23 July 2009	BOT.FPG 15/2009, dated 9 July 2009
6. Regulation on the calculation of creditrisk-weighted assets for commercial banks under the Internal Rating-Based Approach (IRB) (No. 2)	- All commercial banks	The BOT extended the regulation to allow commercial banks to choose their methods on reducing credit risks in case of having guarantees or credit derivatives, by	31 December 2009	FPG 21/2009, dated 1 December 2009

Measures	Parties Involved	Main Points	Effective Date	Sources
		considering the situation in which both obligors and guarantors failed to meet their obligations (Double Default Approach). Moreover, the BOT also revised the wordings of the regulation for greater completeness and clarity.		

 $Note: Specialized\ financial\ institutions\ include\ Export-Import\ Bank\ of\ Thailand\ (EXIM)\ and\ Islamic\ Bank\ of\ Thailand.$ 



### **Banknote Issuance and Management**

#### 1. Cash Management

#### 1.1 Cash received and paid out

In 2009, the Bank of Thailand by the Banknote Operation - Bangkok Office and Banknote Operation - Regional Office received cash from commercial banks, financial institutions,

government agencies and others totaling 1,961,008.0 million bath, an increase of 11.6 percent compared to the previous year's end. Cash paid out totaled 2,042,925.4 million bath, an increase of 11.1 percent. In sum, cash was paid out (net amount) 81,917.4 million baht in 2009.

Unit: Million baht

Cash received and paid out	2008	2009	Increase (Decrease)	$\Delta\%$
Cash received	1,756,817.0	1,961,008.0	204,191.0	11.6
Cash paid out	1,838,160.3	2,042,925.4	204,765.1	11.1
Net cash received (paid out)	(81,343.3)	(81,917.4)		

### 1.2 Assets transferred to and withdrawn from the currency reserve account

In 2009, assets transferred to the currency reserve account (to increase note in circulation) were, in net amount, 100,000.0

million baht higher than assets withdrawn from the currency reserve account (to reduce note in circulation) resulting in an increase of currency reserve assets to 1,054,484.7 million baht in 2009, 10.5 percent higher than previous year.

Unit: Million baht

Currency Reserve	2008	2009	Increase (Decrease)	$\Delta\%$
Year-end currency reserve	954,484.7	1,054,484.7	100,000.0	10.5
- Assets transferred to currency	170,000.0	190,000.0	20,000.0	11.8
reserve account				
- Assets withdrawn from currency	70,000.0	90,000.0	20,000.0	28.6
reserve account				
- Net assets transferred (withdrawn)	100,000.0	100,000.0		

### 2. Note Printing Works (NPW)

#### 2.1 Banknote

The total number of banknotes produced was 2,757.2 million notes, an increase of 0.44% compared to the previous year. The production volume was categorized according to denomination as follows:

1000-Baht	574.1 million notes
500-Baht	193.7 million notes
100-Baht	833.5 million notes
50-Baht	161.5 million notes
20-Baht	994.4 million notes

#### 2.2 Non-banknote Security Products

The total number of revenue stamps produced and delivered to the Revenue Department was 107.2 million pieces.

#### 2.3 Security Ink and Chemical

#### **Products**

298.2 tons of security ink and 151.6 tons of chemical products were produced, totaling 449.8 tons, an increase of 17.7% compared to the previous year

### 3. Banknote Issue and Currency Reserves

At the end of 2009, the number of banknotes issued was 3,978.2 million notes, an increase of 6.9% compared to the same period last year. The value of banknotes issued was 1,054,484.7 million baht, an increase of 10.5%

#### 2.4 Research and Development

In 2009, NPW carried out a total of 20 R&D projects covering the development of security features, inks and printing materials, production machinery along with the technical study into state-of-the-art technologies that helped prolong the lifespan of banknotes as well as satisfied quality control and environmental requirements. 11 projects were successfully completed.

compared to 2008. This was partly due to an acceleration of government spending under the Thai Khem Khaeng scheme (Stimulus Package Project). The volume of banknotes issued, by denomination, is shown below:

#### Banknotes in Circulation

Denomination (Baht)	500000	1000	500	100	60	50	20	10	5	1	0.50	BOT Note 60 Baht
Volume (million notes)	0.000234	774.1	281.9	986.1	11.3	261.2	1,141.7	334.6	39.1	121.2	18.9	8.1

In the year 2009, a total of 12,162 counterfeit banknotes, equivalent to 4 ppm, were detected and seized, marking a sharp decrease by 42.9% from 7 ppm of the previous year.

At the end of 2009, the Currency Reserves were valued at 1,054,484.7 million baht, equal to the value of issued banknotes at the time. The assets in Currency Reserves are described below:

#### Assets in Currency Reserves as of 31 December 2009

Description	Value (million baht)	Share (%)
Foreign currencies	179,853.9	17.1
Foreign securities	874,630.8	82.9
Total	1,054,484.7	100.0

### **Reserve Management and Operations**

BOT's objective in managing reserve is to preserve country's wealth in foreign currency. During the year 2009, the BOT managed the country's international reserves based on the principle of risk-awareness, safety and sound rationality, as well as liquidity, in order to achieve a desirable return within the investment guidelines and risk profiles set by the Top Management Committee and closely monitored by the Investment Sub-Committee.

To optimize investment returns within acceptable risk and appropriate liquidity, the bank had to closely monitor economic and financial market developments including policy administration to resolve the economic and

financial crises by the governments of the countries where the Bank invests in, that can affect asset price movements in order to assess both short and long-term exchange rates and interest rates trend of major currencies and debt markets that may lead to return enhancing opportunity or reduce financial exposure.

In 2009, major portfolios under the management of the BOT include Liquidity Portfolio, Asian Fund Portfolio and Investment Portfolios. In addition, derivative instruments such as bond futures and short-term interest rate futures were utilized to maximize the reserves management efficiency.

### **Monetary Policy Implementation**

Monetary policy implementation of the Bank of Thailand (BOT) aims at maintaining the policy rate at the level set by the Monetary Policy Committee (MPC), and ensure that other short-term money market rates move in line with the policy rate. In addition, the Bank of Thailand encourages financial Institution to conduct liquidity adjustment among financial institutions themselves, in order to reduce market reliance on central bank liquidity window, which should further enhance the efficiency of policy transmission.

The Bank of Thailand employs four types of instruments in its liquidity management: the issuance of central bank bonds and bills, bilateral repurchase transactions, the sale of BOT debt securities, and foreign exchange swap transactions. During this year, efforts have been

directed towards adjusting the profile of these instruments to meet the aforementioned objectives. The developments of each instrument are provided below.

### 1. Bank of Thailand Bonds and Bills

The issuance of central bank bonds remains the principal absorption instrument while there continues to be a substantial amount of excess liquidity in the financial system and, at the same time, there has been a high demand for low-risk investment with exceptional credit risk concerns during the recent financial crisis. This year, the Bank of Thailand has lengthened the maturity of its absorption tools by issuing 4-year and 7-year saving bonds to retail investors with

the total amount of 130,685 million baht. For the 7-year bonds, step-up coupons were introduced for the first time and were very well received by retail investors.

The Bank of Thailand holds regular discussions with market participants as well as cooperates with the Public Debt Management Office (PDMO) to ensure steady bond auctions. Such arrangement helps to avoid issuance bunching that could have an adverse impact on the yield curve.

# 2. Bilateral Repurchase (BRP) Transactions with Primary Dealers (PDs)

The Bank of Thailand uses repurchase and reverse repurchase transactions as the primary channel to manage daily liquidity, which could fluctuate due to seasonal patterns and government cash flows. To enhance the signaling effect of the policy rate, the 1-day tenor is conducted as a fixed rate tender at the policy rate, while the 7-day, 14day and 1-month tenors are conducted at variable rates to provide financial institutions with longerterm liquidity management options. Normally, the BRP transactions are carried out every morning<sup>1/</sup> with primary dealers, which effectively act as liquidity adjustment intermediaries between the Bank of Thailand and other financial institutions. This setup has fostered financial market development by stimulating interbank liquidity adjustment activities, via both the private repurchase market and the uncollateralized interbank market, and by encouraging financial institutions to implement best market practices.

In order to help enhance the absorption capacity at longer maturities<sup>2/</sup> which match the needs of financial institutions, the Bank of Thailand in October 2009 initiated securities borrowing transactions with a specialized financial

institution, with a plan to expand the number of interested counterparties in due course.

#### 3. BOT Debt Security Window

The Bank of Thailand debt security window is used as a supplementary tool for liquidity absorption. It is a channel through which member financial institutions with excess liquidity can submit, on a daily basis, their bids for short-term central bank debt securities towards the end of market hours. Generally, the Bank of Thailand discourages overutilization of this facility because it dissuades financial institutions from carrying out liquidity adjustment transactions among themselves. In 2009, the Bank of Thailand thus began to accept bids at rates below the policy rate. As a result, the outstanding size of financial institutions' investment through this window fell dramatically while at the same time activities in the uncollateralized interbank market and the private repurchase market increased from the previous year by two and ten times, respectively.

### 4. Foreign Exchange Swap

At end-2009, the outstanding net forward position of the Bank of Thailand stood at approximately 15.1 billion US dollars, reflecting the role of FX swap transactions as an additional tool for liquidity absorption. The Bank of Thailand has used this instrument in a fairly flexible manner, depending broadly on market conditions and needs.

Apart from the open market operation (OMO) instruments mentioned above, the Bank of Thailand also provides a collateralized overnight standing facility called the "End-of-Day Liquidity Adjustment Window". It serves as a corridor to limit the volatility of short-term money market rates as the Bank of Thailand stands ready to conduct overnight lending to and borrowing from financial institutions at the policy rate plus or minus 50 basis points.

 $<sup>^{1/}</sup>$  On days where there is an MPC meeting, the repurchase window is open in the afternoon instead.

<sup>&</sup>lt;sup>2/</sup> For the 14-day and 1-month reverse repurchase transactions, government bonds are used as collateral, whereas central bank debt securities are used for the 1-day and 7-day tenors.

### **Financial Market Development**

In the area of financial market development, the Bank of Thailand has emphasized the promotion of financial instruments and market liquidity in order to broaden as well as deepen market activities. In particular, financial institutions have been encouraged to actively adjust their liquidity positions via market transactions. The Bank of Thailand's financial market development activities in 2009 can be summarized as follows.

### 1. Development of the Capital Market

The Bank of Thailand takes part in various committees, subcommittees and working groups on capital market development, including the revision of the Thai Capital Market Development Plan to ensure its comprehensiveness and effectiveness in strengthening capital market stability and enhancing the market's capacity as an alternative source of funding for both the public and private sectors during periods of economic turbulence, be it domestically or internationally. The latest Thai Capital Market Development Plan was endorsed by the cabinet and has been in effect since November 2009.

### 2. Development of the Private Repurchase Market

The Bank of Thailand has long promoted the development of the private repurchase market and thus has proposed to include the development of this market as an objective of the Thai Capital Market Development Plan. In particular, the Bank of Thailand aims to expand the number of players in the private repurchase market and, since October 2009, to conduct securities borrowing transactions to obtain public

sector bonds from specialized financial institutions before re-lending them through longer-term bilateral repurchase operations with primary dealers.

### 3. Promotion of the Bangkok Interbank Offered Rate (BIBOR)

The Bank of Thailand continues to encourage the use of Bangkok interbank offered rate (BIBOR) as a reference for both interbank and customer transactions. This objective is motivated in part by the reliability of the interest rates implied from the foreign exchange swap market (THBFIX), which were heavily distorted by temporary USD liquidity shortage during the global financial crisis witnessed in late 2008 and Dubai crisis in late 2009.

To achieve the aforementioned objective, the Bank of Thailand encourages financial institutions to lend and borrow using BIBOR as a reference rate. In addition, the Bank of Thailand regularly issues floating rate bonds based on BIBOR in order to promote greater familiarity and wider use of this reference rate.

### 4. Promotion of Inflation-linked Bonds

To help increase product diversification in Thai bond market, the Bank of Thailand in 2009 coordinated with the Ministry of Finance to carry out study for the introduction of the government issuance of inflation-linked bonds. In particular, rules and regulations regarding financial institutions' securities investment have been reviewed to stimulate demand for inflation-linked bonds.

# Role as the government's banker and the registrar for the government securities

## 1. Repository of Government's and government agencies' funds

At the end of 2009, balance in the treasury reserve account held with the Bank of Thailand increased by 201.6 percent compared to the previous year's end, while balance in the public organizations' accounts held with the Bank of Thailand decreased by 49.3 percent compared to the previous year's end.

Unit: Million baht

Account Balance	2008	2009	Increase (Decrease)	Δ%
Treasury Reserve	52,878.3	159,476.0	106,597.7	201.6
Public organizations	12,511.6	6,337.6	(6,174.0)	- 49.3

### 2. Registrar for the government securities

#### 2.1 Outstanding, issuance and redemption

Types of Securities	Outstanding (as of 31-Dec -08)		Issuance		Redemption		Outstanding (as of 31-Dec-09)	
Types of Securities	No. of issue	Value	No. of issue	Value	No. of issue	Value	No. of issue	Value
Government Bonds <sup>1/</sup>	106	1,850,562.0	45 <sup>2/</sup>	501,841.2	22	196,844.0 <sup>4/</sup>	97	2,155,562.4
State Owned Enterprise Bonds	339	379,107.3	52	51,459.7	50	58,384.1	341	372,182.9
Bank of Thailand Bonds	42	1,391,665.0	271 <sup>3/</sup>	8,419,335.5	221	8,021,788.0	83	1,789,212.5
Financial Institution Development Fund Bonds	5	166,794.6	1	31,000.0	1	43,349.4	5	154,445.2
Treasury Bills	29	81,000.0	159	885,850.0	145	760,310.0	43	206,540.0
IFCT Bonds	1	650.0	-	-	1	650.0	-	-
Total	522	3,869,778.9	528	9,889,486.4	440	9,081,325.5	569	4,677,943.0

<sup>1/</sup> including 3 issues of government bonds issued in foreign currency converted into Thai baht by using adjusted rate every year, the outstanding as of 31 december 2009 increased by 3.216 million baht.

<sup>2/</sup> In 2009, there were 45 issues of government bonds distributed as follows:

<sup>- 13</sup> new issues including 1 issue of savings bonds (Strong Thailand savings bonds for the fiscal year of 2009)

<sup>- 32</sup> issues of reopened bonds including 1 issue of bond registered in 2009 which 4 gradual auctions were set. (2 auctions were held in 2009.)

 $<sup>^{3/}\,</sup>$  In 2009, there were 271 issues of BOT bonds distributed as follows:

<sup>- 262</sup> new issues including 2 issues of BOT savings bonds with tenor of 4 and 7 years.

<sup>- 9</sup> issues of reopened bonds sold through auction

<sup>4/</sup> principal payment totaling 15.26 million baht for 3 issues of specific-purposed government loan bonds, comprised of:

<sup>-</sup> Government Bond in Fiscal Year B.E.2511/2

<sup>-</sup> Government Bond for educational provision of private nonformal education schools

<sup>-</sup> Government Bond for vocational education development

### 2.2 Outstanding value classified by holders as of 31 December 2009

Unit: Million baht

Type of Holder	Value
Bank of Thailand	21,590.3
Financial Institution - repository	1,677,846.3
Financial Institution - others	868,406.6
Non-Bank Financial Companies	75,899.2
Central Banks	360,021.0
Municipal Government	505.5
State-owned Enterprises – Non-Bank	1,252.0
Household and Not-for-profit institution	646,518.7
Non-resident (NR)	13,725.0
Sub-accounts under TSD	1,012,178.4
Total	4,677,943.0

### 2.3 Coupon Payment

In 2009, the number of coupon payment equaled 709,770 , an increase of 3.9 percent compared to previous year. In term of value, the payment increased by 2.4 percent to equal 150,934.2 million baht.

T	Coup	on payment	in 2008	Coupon payment in 2009			
Types of Securities	No. of issue	No. of payment	Value	No. of issue	No. of payment	Value	
Government Bonds	174	502,787	97,773.6	190	522,005	103,492.5	
State Owned Enterprise Bonds	616	8,753	18,083.7	682	7,311	18,697.8	
Bank of Thailand Bonds	32	106,155	23,710.4	46	116,225	20,969.1	
Financial Institution Development Fund Bonds	10	65,290	7,761.8	10	64,208	7,749.5	
IFCT Bonds	2	40	50.7	1	21	25.3	
Total	834	683,025	147,380.2	929	709,770	150,934.2	

#### 2.4 Onwership Transfer

In 2009, in term of quantity, the ownership transfer transactions in registry system decreased by 7.4 percent to equal 5,153 while the amount transfer equaled 42,066.6 million baht, an

increase of 26.0 percent compared to previous year.

Other transfer increased by 4.4 percent to equal 3,137 in term of quantity while transfer amount increased by 54.4 percent to reach 61,465.3 million baht.

Unit: Million baht

m cm c	200	08	2009		
Types of Transfer -	No. of transaction	Value	No. of transaction	Value	
Ownership transfer - RG	5,564	33,380.1	5,153	42,066.6	
Ownership transfer - others	3,004	39,800.3	3,137	61,465.3	
Total	8,568	73,180.4	8,290	103,531.9	

### 2.5 Collecting fee for debt securities management

In 2009, collecting fee for debt securities

management increased both in terms of quantity and value by 6.7 percent and 60.8 percent, respectively, compared to previous year.

Unit: Million baht

TT 60 11	2008	3	2009		
Types of Securities —	No. of issue	Value	No. of issue	Value	
Government Bonds	106	310.1	131	474.1	
State Owned Enterprise Bonds	342	12.4	340	12.0	
FIDF Bonds (Savings)	2	7.4	2	23.6	
Treasury Bills	133	42.1	149	88.6	
Total	583	372.0	622	598.3	

#### 2.6 Tax withheld from interest payment

In 2009, tax withheld from interest payment and submitted to the Revenue Department (Head Office only) valued 4,185.6 million baht, decreased by 0.9 percent compared to previous year. The number of transactions increased by 4.2 percent to equal 547,648.

T CT	200	08	2009		
Types of Taxes	No. of transaction	Value	No. of transaction	Value	
Corporate Income Tax	12,804	916.0	14,498	797.7	
Personal Income Tax	538,723	3,309.1	560,150	3,387.9	
Total	551,527	4,225.1	574,648	4185.6	

### 2.7 Deposit and withdrawal of debt securities

In 2009, securities deposited and withdrawn transactions decreased by 45.2 percent

compared to previous year to equal 8,309. Deposit transactions increased by 20.4 percent while withdrawal transactions decreased by 50.4 percent.

Unit: Million baht

	2	2008	2	2009		
Account deposited	No. of Value		No. of transaction	Value		
Account deposited						
Account at TSD	1,105	281,342.6	1,331	407,327.7		
RP Account	5	3,361.0	4	185.0		
ILF Account	7	11,565.0	10	5,724.0		
Total	1,117	296,268.6	1,345	413,236.7		
Account withdrawn						
Account at TSD	13,958	1,872,639.3	6,867	1,696,055.5		
RP Account	60	69,626.4	33	13,942.0		
ILF Account	33	22,066.6	64	32,298.3		
Total	14,051	1,964,332.3	6,964	1,742,295.8		
Grand Total	15,168	2,260,600.9	8,309	2,155,532.5		

### Role as the financial institutions' banker

### 1. Repository of banks' and financial institutions' funds

Balance in banks' and financial

institutions' accounts held with the Bank of Thailand at the end of 2009 decreased by 12.8 and 43.6 percent, respectively, compared to the previous year's end.

Unit: Million baht

Account Balance	2008	2009	Increase (Decrease)	$\Delta\%$
Banks	62,905.2	54,839.1	(8,066.1)	-12.8
Financial Institutions	192.5	108.5	(84.0)	-43.6

### 2. Role as the Banker to Financial Institutions

In addition to the implementation of monetary policy during normal times, the Bank of Thailand has the responsibility of providing financial assistance to financial institutions which undergo a liquidity problem during unusual circumstances. In such situations, the Bank of Following the financial crisis which started in the United States in 2008, the Bank of Thailand has put in place a contingency plan to expand the list of eligible collateral and prepare to specify the terms and conditions of lending under liquidity stress. The preparation for such financial

assistance has been communicated with financial institutions to coordinate complementary arrangements on their part and thus ensure that sufficient liquidity can be provided in a timely manner.

Notwithstanding, all financial institutions in Thailand have not experienced serious repercussions from the recent global financial crisis.

### Financial Institution Regulation and Supervisory Policy

#### 1. Financial Institution Policy

Although the Thai economy in 2009 was affected by the global crisis, economic conditions started to pick up in the latter half of the year. The overall condition of the banking system remained stable and resilient. The Bank of Thailand (BOT) continues to place emphasis on promoting the financial institution system resiliency and supporting the economic recovery.

In 2009, the BOT has revised key prudential measures to promote the financial institution system resiliency, namely, measures on capital requirement for consolidated financial group under the Basel II guideline, calculation of risk-weighted assets under the Internal-Rating Based Approach (IRB), good governance with respect to structure of board of directors and subcommittees, fit and proper test and the role and responsibility of the board and top management.

The BOT also reviewed prudential measures to facilitate an economic recovery, namely, measures on underwriting of housing loans, holding of non-performing assets (NPA) and expansion of business scope to be more diversified as well as to support future business opportunities, for example, allowing banks to act

as an agent for export credit insurance and to provide supporting services to others (insourcing). Moreover, the BOT has implemented measures via financial institutions in order to stimulate the economy and help small-and-medium enterprises by specifying supervision guidelines for credits under the Government SMEs loan guarantee scheme.

The Financial Sector Master Plan phase II (FSMP II), developed by the BOT and the Finance Ministry, was aimed at developing the efficiency and stability of the financial institution system. The FSMP II policy framework will ensure that financial institutions, as financial intermediaries, function efficiently, provide better financial access to their clients and bring about a strong and stable financial structure. Therefore, the FSMP II envisioned a financial institution system that is strong and resilient, able to withstand volatility in the global financial environment. Main policies and measures of the FSMP II can be grouped into three key pillars: (1) reduce system-wide operating cost (2) promote competition and financial access (3) improve and develop financial infrastructure conducive to the financial system. Further consultation with the Ministry of Finance during August - October 2009 focused on the following areas: (1) the expected benefits of FSMP II in enhancing value-added economy (2) microfinance implementation plan (3) the creation of Committee and subcommittee to oversee the implementation of the Action Plan (4) the implementation timetable of the FSMP II over 2010-2014 timeframe in accordance with the Capital Market Development Plan. The Cabinet gave approval to the FSMP II on 10 November 2009. In this regard, the BOT has engaged in a programme of public communication to introduce the FSMP II to the public and financial institutions since late 2009. The BOT has also coordinated with the Finance Ministry and relevant agencies on implementation of the plan, including appointing FSMP II Implementation Committee to handle the issue and setting key performance indicators.

With regard to the implementation of financial institution policy at the international level, the BOT continues to participate in the formulation of financial sector liberalization policies and negotiation strategies of the banking sector with the Working Group on Financial Services Liberalization, consistent with the Framework for Negotiation approved by the Cabinet. The BOT participated in various trade negotiation for such as multilateral negotiation at the WTO, regional negotiations of ASEAN and negotiations of ASEAN with dialogue partners, and bilateral negotiations between Thailand and its dialogue partners.

On the performance of the Thai banking system in 2009, the banking system remained stable with net profit of Bt 92 billion. Banks' capital position strengthened with the BIS ratio of 16.1 percent, increased from 14.2 percent in

the previous year due to continued profits and capital increase. Credit contracted at 1.8 percent in tandem with economic contraction, but started to pick up in the last quarter of 2009. Gross NPL, as a ratio to total loan, fell to 4.8 percent and Net NPL to 2.7 percent in 2009 as a result of vigilant risk management of banks. Nonetheless, going forward, there are still risks to the global economic recovery as well as domestic risk factors such as political uncertainty, warranting continued vigilant on credit risk and market risk management.

## 2. Financial Institutions Supervisory Policy

The BOT has the responsibility to supervise financial institutions (FIs) in order to promote safety and soundness of FIs as well as to sustain economic growth. The supervisory policy is based on the principle of consolidated supervision and risk-based supervision.

The frequency to conduct on-site examination depends on previous financial performance and composite rating of a FI. The BOT will closely and continuously monitors FIs' financial performance in order to ensure that proper actions and prompt preventive actions as well as prompt corrective actions, should be taken in a proper timing so that financial crisis of a FI shall not create a domino effect on the entire financial system.

In 2009, the BOT's supervisory policy focused on four important areas such as FIs' capital assessment and capital plan, liquidity, foreign securities investment and foreign deposit risk management and the NPL's trend. In addition, the BOT also conducted special examination focusing on the impact of the world economic on FIs' performance and capital.

# 3. Financial Institutions On-site Examination

The BOT conducts on-site examination once a year for the FIs<sup>3/</sup>, once every other year for the foreign banks' branches which have the satisfactory rating and once every three years period for the private assets management companies, credit card companies and personal loan companies. The BOT emphasizes assessment on FIs' existing capital adequacy and future capital requirements as well as the efficiency of risk management in the areas of strategic risk, credit risk, market risk, liquidity risk, and operational risk.

# 3.1 The examination of FIs Financial Conditions, Performance and Risk Management

The BOT usually examines FIs under Basel II by assessing FIs' financial performances and capital adequacy under current situation, their potential and business expansions. According to the principle of risk-based supervision, the BOT will prioritise the examining issues based on the aggregated risk rating considered by FIs' business structures, the efficiency of five-key risk management areas, corporate governance of board and senior management, capacity of competitiveness, compliances with law, regulations, and also the BOT's orders. Moreover, the BOT has focused

on capital adequacy assessment under normal and stressed situations covering credit risk, market risk and liquidity risk. Furthermore, FIs have to develop practical capital planning in accordance with their capital adequacy assessment results.

In examining the Specialized Financial Institutions<sup>4/</sup>, the similar process of riskbased examination was performed. However, the results of examination and recommended remedial measures were proposed to the Ministry of Finance for consideration and also for taking appropriate actions. In examining the Asset Management Companies, the focus would be on the quality of those companies in managing the purchased or transferred assets whereas the examinations of Non-banks with legal licenses to operate credit card business and personal loans would focus on their compliance with the BOT's regulations on consumer's protection and on unfair practices of service providers, including examination of the National Credit Bureau Company Limited pursuant to Credit Information Business Act (B.E. 2545).

Moreover, the BOT also closely monitored companies performed as Non-banks by granting personal loans, however, without legal licenses through conducting field trip surveys and coordinating with police officers for taking legal actions against those illegal businesses.

<sup>3/</sup> The Financial Institutions which have been examined by BOT are Thai Commercial banks, Retail banks, Foreign banks branches, Subsidiary of Foreign Banks, Finance companies, Credit Fonciers Companies, Specialized Financial Institutions, Thai Asset Management Corporations, Other State Own Asset Management Companies, National Credit Bureau Company and Credit card and Personal Loan Companies

<sup>&</sup>lt;sup>4/</sup> The Specialized Financial Institutions are Bank for Agricultre and Agricultural Cooperatives, Export-Import Bank of Thailand, The Government Savings Bank, The Government Housing Bank, Small and Medium Enterpirise Development Bank of Thailand, Islamic Bank of Thailand, Secondary Mortgage Corporation, Small Business Credit Guarantee Corporation.

### 3.2 Assessment of FIs' Readiness on New Basel Capital Accord (Basel II) Implementation

(1) Examination on Capital Calculation for Credit Risk by Internal Ratings Based Approach (IRBA) Method

The BOT had examined five FIs based on the minimum standard that stated in the notification of the BOT no. Sor Nor Sor 91/2551 subject "Guideline for Calculation of Credit Risk by Internal Ratings Based Approach (IRBA) Method" dated 27 November, 2008 whose five components are 1) The IRBA framework for capital calculation on credit risk 2) Model development, model validation, internal risk rating system and components of risk factors

- 3) Corporate governance and credit risk management
- 4) Reporting and related system and 5) Data dissemination.

Consequently, the BOT allowed three FIs to use the IRBA for capital calculation at the end of December 2009 while one FI in January 2010 stipulated that the FI should amend its issues and extend using IRBA method covering at least 85% of the credit portfolio within three years from the approved date. Lastly, one FI could not disclose information to the public under Pillar III therefore it decided to use the Standardized Approach (SA) instead.

(2) Examination on the capital calculation for Market Risk by using Contingent Loss Method

The BOT had examined one FI and gave approval to use the Contingent Loss method for capital calculation on option transaction. In addition, the BOT had monitored two foreign bank branches that were allowed to use the VaR model for capital calculation and the result showed none significant issues.

### 3.3 Validation on the FIs Stress Test Scenarios

In 2009, The BOT required the foreign bank branches developing their own scenarios liquidity stress test based on the BOT's assumptions that depositors, debtors and other counterparties lost confidence in the banks' parent financial condition and performance, accordingly, the BOT required FIs to prepare a liquidity contingency plan supporting the stress test results. In conclusion, the results indicated that the liquidity of most foreign bank branches were sufficient to support the situation. For the bank that the stress test result showed some issues regarding to liquidity, the BOT had closely monitored and proceeded the agreement to their parents' bank in supporting the liquidity to the branches, moreover the BOT had required the foreign bank branches to maintain their branches operation profit of the year 2008 in Thailand.

In addition, the BOT had continuously assessed three Thai commercial banks for the readiness in developing stress testing according to the Pillar II which will be effective at the end of 2010. The challenged issues of most Thai commercial banks are the linkage between Macroeconomic factors and the quality of loan portfolios (Macro-Micro linkage), which need robust data, also the usage of the stress test results in risk management and capital planning.

## 3.4 Examination on the Information Technology

In 2009, the BOT examined eleven FIs, which were seven Thai commercial banks and retail banks, two foreign bank branches, and one specialized financial institution regarding normal Information Technology (IT) examination and special IT examination for one specialized financial institution. As a result, IT risk

In conclusion, the BOT had examined 56 FIs in total during this year. The examination results indicated that most FIs' composite ratings were satisfactory, the regulatory capitals were more robust, the operating performance were profitable where the results of each key risk area were as following; for strategic risk, credit risk and liquidity risk areas were improved, market risk was not changed, but operational risk was unsatisfactory. However, there were some improvements needed in strategic risk concerning to the compatible of the business plan and FIs' internal factors as well as the corporate governance. For credit risk, FIs should improve loan approval processes especially in credit risk rating and scorings, in conjunction with the analysis of debtors' cash flow in debt restructuring processes. For market risk area, FIs continuously developed market risk management systems and tools but

still in developing process and the misunderstanding of the BOT's related guidelines. For liquidity risk area, FIs' liquidity gap was not included the off-balance sheet items, and the issues regarding deposit concentration and the trigger point in liquidity contingency plan. For operational risk area, the compliance unit needed further improvement especially in credit reviewing process, the Anti Money Laundering and Combating the Financing of Terrorism processes and Basel II reporting.

FIs with the composition ratings were lower than satisfactory, the BOT has ordered them to improve their financial conditions, performances, and risk management systems within limited time frames; to increase their capital to cover risk exposures; and to set up corrective actions for mitigating their losses. The BOT also required those FIs to submit reports indicating the results of the improvement to the BOT. Under the framework of consolidated supervision, the BOT had examined banks' subsidiary and ordered them to correct their weaknesses to ensure the stability of Thai financial system.

The numbers of FIs examined by the BOT in 2009

Financial Institutions	Numbers of total FIs	Numbers of FIs Examinations
Thai Commercial Banks / Retail Banks	16	14
Foreign Bank Branches / Subsidiary	16	14
Finance and Credit Foncier Companies	6	4
Specialized Financial Institutions	8	8
Thai Asset Management Company	1	1
Other Asset Management Companies	9	4
Non-Banks	28	10
National Credit Bureau Co., Ltd	1	1
Total	85	56

## 4. Financial Institutions Monitoring and Analysis

Like on-site examination, the off-site monitoring and analysis focuses on financial conditions, performance, capital adequacy, and quality of risk management on the Supervisory Review Process basis combine with the Regulatory Review Process both the solo basis as well as the consolidated basis. In 2009, the BOT had performed off-site monitoring and analysis in total of 46 FIs . The analytical reports were

created quarterly for Thai commercial banks, retail banks, finance companies and credit foncier companies and semi-annually for foreign bank branches and specialized financial institutions.

In addition, during the high economic volatility i.e. the international financial turmoil, some risk factors may have significantly impacted on FIs' risk positions. Thus, the BOT had created specialized analysis and closely monitored along with the early warning systems for each institution and the entire system.

	The	numbers	and	frequency	that	the	BOT	created	analysis
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Financial Institutions	Frequency	Numbers of FIs
Thai Commercial Banks / Retail Banks	Quarterly	16
Foreign Bank Branches / Subsidiary	Semi-annually	16
Finance and Credit Foncier Companies	Quarterly	6
Non-Banks	Semi-annually	8
		46

## 5. Financial Institution Applications

The BOT has granted approvals or waivers to financial institutions and supervises the operations of financial institutions to ensure their compliance with relevant to Financial Institutions Business Act., regulations and conditions imposed on them. In 2009, there were 2,488 cases submitted to the BOT for approvals or waivers, the BOT consideration usually focus on FIs risk, corporate governance, financial status and their performance. The main cases included the following issues:

(1) Permission to set up and restructure 16 financial groups under consolidated supervision scheme.

- (2) Approval to fit and proper of financial institutions' board members and senior management for 378 cases.
- (3) Undertaking 125 derivatives transactions.
- (4) Granting 49 single lending limit and related lending relaxations.
- (5) Establishing 109 new branches of 12 banks, closing 86 branches of 8 banks, approval 2 banks to be qualified bank.
- (6) Capital calculation under Basel II Principle for 24 cases.
- (7) Recognizing Non-cumulative debt instruments as hybrid tier I and s u b o r d i n a t e d debt as tier II capital for 12 cases.
  - (8) Proposing penalty or fine FIs that

failed to comply with Financial Institutions Business Act. for 3 cases.

- (9) Closure of financial institutions and withdrawal of license for 3 institutions i.e. the AIG Retail Bank Public Company Limited, the Societe General Bank, Bangkok Branch and the Finansa Finance Company.
- (10) To examine and follow up FIs' compliance with conditions of BOT's approvals or waivers for 565 cases.

Furthermore, the BOT has also developed the consideration criteria to be in tune with the Financial Institutions Business Act B.E. 2551.

### 6. The Establishment of Credit Coordination Centre

In 2009, FIs took more carefulness in granting loans to the customers due to the slow down in economic, therefore, the BOT had established the Credit Coordination Center since 18 May 2009 to set up new customers' complaint channel regarding banking services especially in loan businesses. The purpose of this center is to coordinate with FIs to solve customers' problems. Moreover, this center had helped the business sector that lack of short term liquidity to run on. Therefore, in October 2009, this center expanded its work scopes to be the intermediary of loan rescheduling for the Small and Medium Enterprises which cooperation with the BOT regional offices.

Total numbers of customers' complaints within this year were 2,901 complaints; the Credit Coordination Centre could solve 2,724 complaints or about 94 percent of the total and 54 percent of the complaints relating to loans.

### 7. Supervision Efficiency Enhancement

In 2009, the key developments of FIs examination and FIs monitoring and analysis were as follows:

#### 7.1 Examiners Developments

The BOT had continuously developed its examiners through the School of Examiners that provides training for examiners in the areas of FIs examination and FIs monitoring and analysis from the beginning level to advanced level with a total of 6 curriculums including imperative special areas, such as derivatives, experienced examiners' seminar and workshop and Information Technology examination, etc.

Moreover, many examiners and managements participated in training courses or seminars, which were organized either in Thailand or overseas, to broaden the examiners' skills and knowledge. In addition, many guest speakers, both domestic professionals and international technical assistants from other countries' regulatory agencies, for example Switzerland, USA, Hong Kong and Malaysia, were invited to those training programs.

## 7.2 Supervision Development regarding International Standard

In 2009, the BOT had focused on enhancing financial institution supervision skills by developing financial examination manuals in line with international standards and new financial institution circumstances for examiners to have sufficient knowledge and perform supervisory tasks in the standardized practices. The manuals which have been developing are financial position and operating capability examination manual, consolidated supervision manual and the revisions of five-key risk

management examination manuals to be in line with new BOT's regulations and notifications especially those related to the new Financial Institution Act (B.E.2551). Those 5 key manuals are strategic risk management examination manual, credit risk management examination manual, market risk management examination manual, liquidity risk management examination manual and operational risk management examination manual. In addition, the recent development manual was mobile-banking examination.

# 7.3 Development of the Supervision and Examination Management System

The BOT had continuously developed examination management system by incorporating information technology with the purpose to enhance the efficiency of examination process and to ensure the achievement of targeted objectives as well as gained benefit from data development and data storage systems. These examination management systems covered pre-examination, on-site examination and report preparation in order to enhance FIs supervisory processes.

## 8. Promoting SMEs financing from Commercial banks

In 2009, due to economic slowdown from global financial crisis, most FIs had encouraged more prudent lending which affected business sector financing especially SMEs. Therefore, the BOT had helped SMEs sector by promoting the Small Business Credit Guarantee Corporation's (SBCG) Portfolio Guarantee Scheme amounting at 30,000 million baht in

several activities as follows:

8.1 Meeting with SMEs sector in order to acknowledge their government helping needs.

8.2 Meeting with commercial banks to recognize the banks' problems related to SMEs sector's lending as well as to reduce FIs' credit risks related to the guaranteed amount and compensation ratios.

8.3 Cooperating with the Ministry of Finance and the SBCG in promoting Portfolio Guarantee Scheme to help SMEs sector according to the Cabinet's Resolution on 17 February 2009 which approved the SBCG to conduct Portfolio Guarantee Scheme amounting at 30,000 million baht for 5 years including raising its capital amount of 2,000 million baht and compensation scheme not more than 2,000 million baht. On 31 December 2009, this scheme was resulted in 21,390 million baht SMEs lending outstanding.

8.4 Cooperating with the SBCG and the National Credit Bureau Company Limited to educate SMEs business owners regarding how to get credit approval totally in 48 provinces throughout the country.

8.5 Meeting with senior commercial bank managements to promote continuous SMEs financial support.

### 9. Training and Seminar

9.1 Training financial institution staff pertaining to examination and supervision approach and derivatives in order to disseminate the policies and notifications including risk based supervision approach and information technology risk management was set up to improve their understanding of derivatives notifications and information technology supervision regulations, and IT examination manual.

#### 10. Clarification Meeting

10.1 Meeting with the National Telecommunications Commission (NTC) to obtain mobile banking service controlling and monitoring aspects, and meeting with external auditors to acknowledge their problems and limitations in auditing internet network securities. Moreover, the BOT conducted the

meeting with Commercial banks and Processing Center Company Limited (PCC) pertaining to IT outsourcing regulations and notifications related to Imaged Cheque Clearing and Archive System (ICAS) also the securities system of ATM depositing and withdrawing.

Association and external auditors to acknowledge their views relating to supervisory policy and to clarify Basel II Pillar II supervisory policy as well as strengthen the relationships amongst the BOT, FIs and External auditors for efficiency cooperation in future. In addition, the BOT's conducted good corporate governance meeting with banks' compliance unit staff for accurate understanding of compliance notifications and finally, conducted meeting with banks' senior management to conclude the overall banking industry examination results in 2009.

### **Operation of Payment Systems**

#### 1. Interbank Cheque Clearing

In the year 2009, the total volume of cheques cleared in Bangkok and the Metropolitan areas together with the Inter Provincial Cheque Clearing (B/C-3D) in Bangkok and Intra Provincial Cheque Clearing was 74,892,340 items, amounted to 33,593.1 billion Baht. The volume and value of cheques cleared decreased by 5.5% and 9.4% respectively from the previous year, where the average value of cheque items also decreased from 470,000 Baht to 450,000 Baht.

The volume of returned cheques in the year 2009 was 1.45 million items, valued at 188.3 billion Baht. The value and volume of returned

cheques decreased from the previous year by 14.8% and 14.0% respectively. The proportion of returned cheques to total cheques cleared decreased to 1.9% in volume while the value remained at 0.6% compared to the previous year.

Returned cheques due to insufficient funds were totalled at 0.98 million items and 97.8 billion Baht in the year 2009. The volume and value of returned cheques due to insufficient funds decreased from the previous year by 14.6% and 15.2% respectively. The proportion of insufficient funds returned cheques to total cleared cheques decreased to 1.3% in volume and remained at 0.3% in value from the previous year.

Volume and Value of Cleared Cheques, Returned Cheques and Returned Cheques with Insufficient Fund Nationwide Interbank Cheque Clearing

#### Year 2009

	V	olume (Iten	ns)	Value (Billion baht)		
	2008	2009	% change	2008	2009	% change
Cleared cheques	79,226,854	74,892,340	-5.5	37,086.2	33,593.1	-9.4
Value of cleared cheques per item				0.00047	0.00045	
Returned cheques	1,698,269	1,447,391	-14.8	219.0	188.3	-14.0
	(2.1)	(1.9)		(0.6)	(0.6)	
Returned cheques with insufficient fund	1,154,010	985,143	-14.6	115.3	97.8	-15.2
	(1.5)	(1.3)		(0.3)	(0.3)	

Note: ( ) represents the proportion to cleared cheques Source: Payment Systems Department, Bank of Thailand

The Bank of Thailand is on the course of developing the Imaged Cheque Clearing and Archive System (ICAS); it is a cheque clearing system driven by the use of cheque images. The objectives are to reduce the duration of cheque clearing process to 1 day nationwide and eliminate the cheque transportation cost. The ICAS is scheduled for deployment in Bangkok and the Metropolitan Areas by May 2010 and will be fully migrated nationwide by the year 2012.

The ICAS consists of 2 sub-systems including the Imaged Cheque Clearing System (ICS) and the Image Archive System (IAS), the progress on the implementations of the two systems is as follows:

(1) The BOT has completed the development of ICAS, in which training courses have been organised for the member banks in November 2009 and the first system test has been conducted in a collaborative effort with the member banks during 2 – 25 December 2009. In addition, the BOT will organise and run the

second system test together with the member banks around February 2010.

- (2) The BOT has announced the Standard for Cheques and Imaged Cheques to facilitate the operation of the ICAS. There are additional details about the prevention techniques for cheque forgery and alteration added to the Standard for Cheques including the specifications on the presence of common watermark and the use of CBS1 paper with Laser Grade as material for every cheque.
- (3) The BOT has arranged meetings with the ICAS Working Group and the member banks in order to clarify and discuss about the approach and details in system development, related regulations and notifications, Mutual Agreement between Member Banks and legal issues related to the ICAS.
- (4) The BOT has provided ICAS-related documents for the member banks to prepare for their system development and specify the internal practices in order to facilitate the ICAS. These documents include the Interface Specification,

the Illustration Paper, and the ICAS User Manual.

(5) The BOT has broadcasted and publicised the ICAS to the business sector and the general public by various channels including press conference, broadcasts on the BOT website, articles in financial magazines, and exhibition in the Money Expo 2009.

#### 2. BAHTNET

At the end of year 2009, there were 65 institutions involved in BAHTNET system including 17 Thai commercial banks, 15 foreign commercial banks, 12 finance companies and securities companies, 13 specialised financial institutions, government agencies and other institutions, and 8 BOT divisions.

The volume of funds transfer through BAHTNET system in 2009 was 2,004,954 transactions, increased from 1,928,920 transactions in 2008 by 3.9 % while the value was 489.62 trillion Baht, increased from 277.47 trillion Baht of the previous year by 76.5 %. The increase in both volume and value of funds transfer transactions was a result of increased investments in bilateral repurchase transactions with the BOT.

#### BAHTNET Projects in 2009 includes:

#### (1) BAHTNET Enhancement

The BOT has enhanced BAHTNET system to facilitate the payment instructions between financial institutions in a cover payment method (MT202COV) of SWIFT Standard Release Guide 2009. The instructions hold detailed information of ordering customer and beneficiary customer, which will assist related financial institutions in preventing anti-money laundering and funding support to terrorists. The

system has been in use since November 2009.

(2) Intraday Liquidity Facilities (ILF) in BAHTNET

In 2009, the BOT has repealed The Bank of Thailand Regulations and Notifications on Intraday Liquidity Facilities B.E. 2549 including its amendments and issued a new regulation by virtue of the Bank of Thailand Act B.E. 2485 which was later amended by the Bank of Thailand Act (No.4) B.E. 2551. The new regulation conforms to the issuance of regulations/ notifications on standing facilities, whereby the criteria and conditions of Intraday Liquidity Facilities remain the same while the haircut rate on purchasing debt instruments has been adjusted in accordance to the new haircut rate of the standing facilities.

In addition, the BOT has also adjusted the custody fee and its computation by calculating the outstanding amount in the safekeeping account for ILF at the end of the day instead of at the end of the month. The change is intended for conformity to the new custody fee structure of Thailand Securities Depository Co., Ltd. and Thailand Clearing House Co., Ltd., which became effective on the 1<sup>st</sup> of January 2010.

#### (3) Risk Management for BAHTNET

BOT has developed a system and prepared a draft of the notification to support the specification of risk management measure for multilateral net settlement in BAHTNET. The main concept of the measure is BAHTNET users who are involved with net settlement transactions must maintain securities as collateral for settlement (Securities Requirement for Settlement: SRS). Moreover, the BOT has specified the rules and practices for BAHTNET users in case of insufficient liquidity and collateral for settlement. The measure will come into effect in April 2010.

### **Exchange Control**

# 1. Issuance of Notifications and Notices, related to exchange control regulations

In 2009, the following Notifications of the Ministry of Finance and Notices of the Competent Officer were issued:

- (1) Notification of the Ministry of Finance on Directions of the Minister to Authorized Money Changer (No.2) dated 7 April 2009 allowing an authorized money changer to seek approval for relocation of its authorized office from the Competent Officer instead of the Ministry of Finance.
- (2) Notice of the Competent Officer on Rules and Practices regarding the Undertaking of Authorized Money Changers (No.3) dated 21 April 2009 allowing an applicant to submit application in conducting money changing business 4 times a year and in the case where an authorized office's address is officially changed by related authority, the Authorized Money Changer shall report such change in writing together with related documents to the Competent Officer within 15 days from the date of change.
- (3) Notice of the Competent Officer on Rules and Practices regarding the Investment in Securities Aboard and Derivatives Transactions dated 4 August 2009 to expand the scope of securities investment to include those specified in Securities and Exchange Act B.E. 2535, to allow juristic persons with assets of at least Baht 5,000

million to invest in securities abroad, and to allow institutional investors to engage in derivatives transactions linked to foreign variables with domestic and foreign counterparties to manage risks and enhance yields on investment.

(4) Notice of the Competent Officer on Rules and Practices regarding Currency Exchange (No.19) dated 4 August 2009 allowing any person borrowing foreign currencies from a commercial bank to sell such foreign currencies to other commercial banks and to relax other regulations such as a requirement on related documents.

## 2. Inspection on proceeds of exports

In 2009, total export value amounted to 150,492.2 million US dollars, decreased by 15.3 percent from last year. The export proceeds totaled 137,372.9 million US dollars, a decrease of 19.5 percent from the previous year. The proceeds were either in Baht from NRBA or in foreign currency which were either deposited in the foreign currency accounts or exchange into Baht. The proceeds are used for loan repayment to authorized financial institutions, or for payment of obligations to nonresidents. Total export proceeds accounted for 91.3 percent of the total export value while the difference resulted from netting transactions and exported goods that are exempt from acquiring foreign currencies.

#### Export Value VS Receipt of Export Proceeds

Unit: Millions of USD

Values	2008	2009 <sup>e/</sup>
1. Exports <sup>1/</sup>	177,777.6	150,492.2
Change (percent)	16.9	-15.3
2. Foreign currency received from exports	170,564.7	137,372.9
Change (percent)	25.5	-19.5

Note: 1/ Total value of export (Source: Customs Department)

e/ Estimated

### 3. Volume of Foreign Exchange Transactions

In 2009, the purchase and sale of foreign currencies from and to customers amounted to 261,351.3 and 247,172.7 million US dollars, a

decrease of 33.4 and 34.6 percent respectively from the previous year. Total purchase volume exceeded sale by 14,178.5 million US dollars, which for export 4,256.7 million dollars and others 9,921.8 million US dollars.

### Purchase and Sale of Foreign Currencies from/to Customers

Unit: Millions of USD

	2008	2009 <sup>e/</sup>	$\Delta\%$
Purchase	392,549.0	261,351.3	-33.4
Export	128,460.0	94,144.4	-26.7
Other	264,089.0	167,206.9	-36.7
Sale	377,975.0	247,172.7	-34.6
Import	134,858.0	89,887.6	-33.3
Other	243,117.0	157,285.1	-35.3
Net Purchase and (Sale)	14,574.0	14,178.5	<b>-2.</b> 7
Foreign Trade	(6,398.0)	4,256.7	N.A.
Other	20,972.0	9,921.8	-52.7

Note: e/Estimated

 $\Delta\%$  represents the percentage change from the same period of the previous year.

Source: Based on Data set received from authorized financial institutions

## 4. Authorized Money Changer, Money Transfer Agent and Authorized Company

Transaction Volume of Foreign Exchange through Authorized Money Changers,

Money Transfer Agents and Authorized Company

at end-December 2009<sup>e/</sup>

Type	Change No from		Purcha Remittance		Sale/ Remittance Volume	
Туре	NO	Previous Year	Million US Dollar	$\Delta\%$	Million US Dollar	$\Delta\%$
Authorized Money Changer	864	114	522.69	-12.08	522.70	-12.01
Money Transfer Agency	1,230	10	186.88	-8.35	28.33	-4.59
Authorized Company	1	0	0	0	1.12	0.10

Note:  $\Delta$ % represents the percentage change from the same period of the previous year.

### Responsibilities under other Laws and Regulations

#### 1. Oversight on E-money

The Bank of Thailand oversees non-bank e-money service providers under the Ministerial Notification by Ministry of Finance: Business for which Permissions must be obtained according to Clause 5 of Announcement No. 58 of the National Executive Council dated October 4, 2004 (Business of Electronic Money), and at current there are 6 issuers who already obtained the license. In 2009, 5 non-bank e-money service providers complied with the prescribed rules and regulation of the business. However, the other licensed non-bank e-money service provider failed to comply with the rules set forth in the BOT Notification on cash received in advance from the customers and had already been taken under legal proceeding

### 2. Oversight on Electronic Payment

According to the Royal Decree Regulating on Electronic Payment Service Business, B.E. 2551 (effective on 14 January 2552), Bank of Thailand oversees and regulates electronic payment service providers which are required to notify, register, or obtain a license prior to the commencement of such business operation.

In 2009, our oversight progress based on the Royal Decree is summarized as follows.

(1) Draft the Notification of the Commission and 3 Notifications of the BOT on requirements, procedures and conditions for undertaking electronic payment service as well as policies and measures on security of information system for business operation of electronic payment services.

- (2) Approve application for the notice for the List A electronic payment service providers and application for registration for the List B electronic payment service providers. In 2009, under BOT considerations, there was no electronic payment service provider under List A applying for the notification. In addition, there were 6 electronic payment service providers under List B received certificate of registration.
- (3) File applications for the license for the List C electronic payment service providers and proposed all applications to the Commission for

- approval. There were 104 approved licenses of 67 providers (32 Commercial Banks and 35 non-financial institutions).
- (4) Monitor all electronic payment service providers to comply with the Royal Decree and Notification of the Commission and Notifications of the BOT, and report any matters to the Commission for their consideration.
- (5) Promote the enactment of the Royal Decree to the public interest and advise electronic payment service providers of their notification, registration or licensing under the Royal Decree.

### Other important activities

#### **BOT's participation in International Organizations**

### 1. Association of Southeast Asian Nations (ASEAN)

In 2009, in accordance with the Single Chairmanship principle under the ASEAN Charter, the Ministry of Finance of Thailand and the Bank of Thailand served as chairs of the 13<sup>th</sup> ASEAN Finance Ministers' Meeting (AFMM), the 5<sup>th</sup> ASEAN Central Bank Governors' Meeting and other related meetings during 5-9 April 2009 in Pattaya, Thailand. The Bank of Thailand's Governor, as member of the troika of ASEAN Central Bank Governors<sup>57</sup>, participated the AFMM to provide views on the issues under the purview of the central banks.

The AFMM highlighted the need to enhance regional economic stability and further integrate financial markets, particularly the implementation of the ASEAN Economic Community (AEC) Blueprint to establish the AEC by 2015. In this regard, the AFMM endorsed 1) the Implementation Plan to Promote the Development of Integrated Capital Market by the ASEAN Capital Market Forum (ACMF) 2) Financial services liberalization, and 3) Capital account liberalization.

The "Combined Studies on Assessing Financial Landscape and Formulating Milestones for Monetary and Financial Integration" was tasked to assess current status of financial integration with an objective to identify gaps of and develop milestones for achieving the financial integration in ASEAN. The "Macroeconomic and Finance Surveillance Office" (MFSO) would also be set up under ASEAN Secretariat to monitor the liberalization progress and assess the impacts from financial integration.

The troika of ASEAN Central Bank Governors in 2009 comprised Governor of the State Bank of Vietnam, Governor of the Bank of Thailand, and Governor of the Ministry of Finance Brunei Darussalam representing past, present, and future chairs of the ASEAN Central Bank Governors' Meeting (ACGM).

As for the financial cooperation among ASEAN central banks, the ASEAN Swap Arrangement (ASA) with the amount of USD 2 billion was renewed for another two years after the expiration in November 2009.

# 2. Association of Southeast Asian Nations plus China, Japan and Korea (ASEAN+3)

The financial cooperation under ASEAN+3 primarily focuses on the Chiang Mai Initiative (CMI), a regional liquidity support mechanism in the form of bilateral currency swaps, and the Asian Bond Markets Initiative (ABMI), focusing on the development of local currency bond market.

In 2009, Thailand was the Co-chair of the ASEAN+3 together with the Republic of Korea. The BOT played an important role on setting up the multilateralization of the Chiang Mai Initiative. The size of CMIM was expanded to USD 120 billion from originally agreed amount of USD 80 billion, effective in March 2010.

As for Thailand, the BOT agreed to contribute USD 4.77 billion to the CMIM and, in the event of experiencing short-term liquidity or balance-of-payments difficulties, will be entitled to draw maximum amount of USD 12 billion.

In addition, the ASEAN+3 also endorsed the initiative to establish an independent surveillance unit to continuously monitor regional economic developments as well as provide balanced views in the assessment of possible risks to regional stability.

## 3. Bank for International Settlements (BIS)

As a BIS member, in 2009, the Bank of Thailand senior officials participated in the BIS Bi-monthly meetings and the BIS Annual General Meeting. These meetings provided a platform for the discussion and exchange of views with senior central bankers from around the globe on current issues relating to the global economy and financial market developments. Bi-monthly discussions focused on recent developments on the global economy and major emerging market economies. In addition, Governors of member central banks exchanged views on a number of special issues throughout the year, including: "Addressing the lessons of the global banking crisis"; "Procyclicality and the macroprudential approach: initiatives underway"; "Systemic risks in OTC derivative markets: analysis and policy options"; "The global downturn and impact on asset quality, profits and credit growth in EME banking systems"; and "Systemic financial risk: drivers, measurement, and policy tools."

In 2009, the BIS also organized 2 meetings of central bank governors from 12 member countries in the Asia Pacific Region under the guise of the Asian Consultative Council (ACC). The ACC serves as a platform for experience-sharing among central banks within the region. It also provides guidance and direction for regional research and cooperation initiatives, including discussions regarding developments in the Asian Bond Funds.

Since the beginning of 2009, the Governor of the Bank of Thailand was invited to participate in the BIS Central Bank Governance Group. This is a selected group comprising 9

members that serves as a venue for the exchange of views on matters of interest relating to the design and operation of central banks, and establishes criteria and sets priorities for the work on central bank governance.

Other meetings organized by the BIS included its Annual Meeting of Deputy Governors. This year's topic focused on "Inflation and monetary policy framework". In addition, the BOT participates in the annual BIS Working Party on Monetary Policy in Asia, as well as various sub-committees under the Basel Committee on Banking Supervision (BCBS), including the Standards Implementation Group (SIG) and the Basel Consultative Group (BCG).

# 4. The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)

On a regular basis, the Governors' meeting is held once a year while the Deputy Governors' meetings including EMEAP Monetary and Financial Stability Committee for Deputies are held twice a year. The working groups under EMEAP cooperation include Working Group on Banking Supervision, Working Group on Financial Markets, Working group on Payment and Settlement Systems and EMEAP Information Technology Directors' Meetings, of which meetings are held regularly.

In 2009, the High-Level EMEAP meetings including those among Governors, Deputy Governors, and Monetary and Financial Stability Committee continued to focus

discussions and activities on the on-going global financial crisis and its impact on the regional stability of monetary and financial economy, as well as the implementation of the Crisis Management/Resolution Framework, with a view to putting in place a coordinated crisis management mechanism among member economies. In this regard, the Bank of Thailand chaired the EMEAP Deputies' Meeting and hosted the Monetary and Financial Stability Committee Meeting in Chiang Mai on 13 – 15 November 2009.

At Working-Level meetings, activities have focused on combating and preventing global financial crisis in accordance with those of High-Level meetings. Notably, the Working Group on Payment and Settlement Systems and the Working Group on Financial Markets jointly set up a taskforce to study the possibility of EMEAP central banks utilizing Cross-border Collateral Arrangements. Meanwhile Working Group on Banking Supervision has undertaken an in-depth study on the Financial Stability Board's Recommendations to Address the Potential Procyclicality of the Regulatory Framework.

## 5. International Monetary Fund (IMF)

BOT represents Thailand in the International Monetary Fund (IMF) where BOT formulates Thailand's stance on related issues through the Southeast Asian Voting Group (SEAVG)<sup>7/</sup>. BOT also sent representatives to the SEAVG Meeting, International Monetary and

<sup>&</sup>lt;sup>6/</sup> Financial Stability Board, evolved from the Financial Stability Forum, aims at promoting financial stability and destabilizing global economy.

<sup>7/</sup> Including Brunei, Cambodia, Fiji, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Nepal, Singapore, Tonga, Vietnam, and The Philippines

Financial Committee (IMFC) Meeting, and the Annual Meeting of the Board of Governors.

At present, Thailand's quota is 1,081.90 million SDR, corresponding to 11,069 votes or equivalent to 0.5% of total votes. The Reform of Quota and Voice in 2008 has granted the increase of Thailand's quota to 1,440.5 million SDR. This increase, however, will only become effective upon the entry into force of the pending Amendment of the Articles of Agreement.

According to the financial crisis in 2009 and to the G-20 framework, the International Monetary and Financial Committee (IMFC) agreed to increase funding resources and to enhance the flexibility of financial facilities so as to effectively assist member countries.

In connection to the increase of funding resources, the IMF allocated Special Drawing Rights (SDR) to all member countries by 161.1 billion SDR (or 250 billion USD). Thailand accepted the new allocation of additional 885.6 million SDR<sup>87</sup>. Therefore, the accumulative Special Drawing Rights allocation as of 31 December 2009 was 970.3 million SDR.

As part of the Article IV Consultation, the IMF annually assessed the Thai economy and financial sector. In 2009, Thailand published the Staff Report for Article IV Consultation for the first time in addition to the Public Information Notice (PIN).

# 6. South-East Asian Central Banks (SEACEN)

The group of South-East Asian Central Banks was founded in 1966 and later became the SEACEN Centre in 1982 with a permanent office located in Malaysia. With 16 member banks<sup>9/</sup>, the SEACEN Centre now operates as the region's training and research centre to promote understanding of the financial, banking, and economic development matters and to strengthen the region's training and research collaboration. In its 4<sup>th</sup> year of the Five-Year Plan, the SEACEN Centre implemented strategic initiatives towards its vision of becoming a premier regional training centre in Asia-Pacific region.

There are 2 main meetings in each year as follows:

1) SEACEN Executive Committee (SEACEN EXCO) Conference and Meeting is held in January for deputy governors from member banks to deliberate and prepare agenda for the SEACEN Board of Governors' Meeting. Apart from the Centre's direction in the next operating year, the SEACEN EXCO also participates in discussion of current important issues. The topic discussed in 2009 was "Global Shocks and Economic Stability".

2) SEACEN Governors' Conference and Meeting is where member banks' governors approve the SEACEN Centre's direction of the

<sup>&</sup>lt;sup>8/</sup> After combining with specific SDR allocation under Fourth Amendment

<sup>9/</sup> The SEACEN 16 member banks include Ministry of Finance of Brunei Darussalam, National Bank of Cambodia, Reserve Bank of Fiji, Bank Indonesia, Bank of Korea, Bank Negara Malaysia, Bank of Mongolia, Central Bank of Myanmar, Nepal Rastra Bank, Bank of Papua New Guinea, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore, Central Bank of Sri Lanka, Central Bank Republic of China (Taiwan), Bank of Thailand, State Bank of Vietnam

next operating year as well as exchange views and experiences on the topical issues. In 2009, the topic discussed was "Preserving Monetary and Financial Stability in the New Global Financial Environment".

### **Information System Activities**

## 1. Information Technology Usage Supporting

In 2009, the Bank of Thailand has 44 IT-related projects under seven different strategic programs. The Computer Steering Sub-Committee (CSSC), appointed by Bank of Thailand's Board of Directors, regulates and supervised each IT-related projects to perform efficiently and align with BOT strategic directions. This year, the overall budget for IT-related projects is approximately 360 million baht. At the end of the year, 15 projects were completed. A brief summary of each strategic program is provided as following.

### Program 1: Data & Statistics Management Excellence

The most significant project in this area is the Analysis Data Usage Process Transformation project. It is a long-term project starting from 2007 and target to complete in 2010. Its objective is to utilize a better usage of the information and effectively accommodate usage for the executives and main users in BOT.

Projects completed in 2009 are the Data Management System (DMS) Enhancement 2008 project, the Data Management System-Central Data Warehouse (DMS-CDW) Enhancement 2009 project, and the Financial Instrument Development project. The DMS-CDW Enhancement 2009 project enhances the efficiency of DMS to serve new requirements.

The Financial Instrument Development project focuses on consolidating all government and private financial Instruments data into one system.

### Program 2: Financial Market Excellence

In 2009, this program remains to focus on developing information system exclusively for analysis and decision-making. Projects that fall under this information system umbrella are "Enhancing Information System for Tracking Offshore Financial Transactions and Measures to Prevent Thai Baht Speculation Project" and "Financial Market Monitoring and Analysis for Monitoring Speculative Pressure against Baht and Monitoring the National

There are also projects that focus on supporting new instrument transactions such as the "Loan for Intra-day Settlement of Financial Institutions (e-Standing Facility) Project", "Security Borrowing and Lending Project" and a project to prepare for upgrading the Dealing Room System in 2010.

Financial Market Stability Project".

#### Program 3: Payment Excellence

The most significant project in this area is the Imaged Cheque Clearing and Archive System (ICAS) project that aims to develop interbank cheque clearing system. This project plans to implement in the second quarter of year 2010.

In 2009, three projects were completed. The Banknote Management Information System (BMIS) project that developed a highly effective banknote management tools for executives. The Banknote Ordering System Enhancement project that focused on security strategy and quality policy supporting banknote deposit and withdrawal service. Finally, the Debt

Instrument System and e-Bidding Enhancement project that support the collateral extension policy for financial transactions after approved by the Bank of Thailand's Board of Directors, and support the conduct of saving bond distribution for the Ministry of Finance and the Financial Institutions Development Fund (FIDF).

### Program 4 and 5: Financial Excellence and Human Resource Excellence

The most significant project in this area is the SAP system-upgrading project. Its objective is to improve the system to be able to facilitate the expanding of digits in numerical information. However, SAP system has many related modules specifically customized for BOT, therefore, the upgrading procedure required special technique and professional consultant. This results the project to extend until 2010.

In 2009, two projects were completed. The ERP System Enhancement project that supports medical treatment and phone bill requests from external organizations. The Acquisition Process Automation project that enables efficiency in purchasing process.

For the IT-related projects in HR area, the HR System Improvement project and the HR Information Management project are making good progress. However, as these projects have inter-dependency with SAP system-upgrading project, they will have to wait until the completion of SAP system upgrading before proceeding.

#### Program 6: IT Services Excellence

In 2009, the Computer Management System Enhancement project has done a study and set an outline for Computer Management System improvement (Network, Server, Database and Desktop). The network management system was completed, whereas the remaining will be carried forward. The Active Directory System Enhancement project focused on improving organizational structure of address book and set standard naming for distribution list.

The BOT-UCC (BOT Unified Communication and Collaboration) project explore communication and collaboration tools, which will increase performance capability of BOT.

### Program 7: Content management excellence

A significant project in Content management excellence program is the BOT Document and Records Management (BOT-DRM) project, which is a long-term project from 2007 to 2011. The application has finished development in 2009 and continuous implementation in each department was carried out and expects to complete in all departments in 2010.

Projects that support content management and completed in 2009 are the BOT-KM (BOT Knowledge Management) Enhancement project and the BOT-Subscription Management project.

Projects that support financial institution supervision such as the Financial Institution Supervision System phase III and the Petition Consideration Process System Phase III are also completed in 2009. The Fine Comparative Management System project will be finished at the beginning of the year 2010.

### 2. Data Management

In 2009, the Bank of Thailand continued to collect, compile and analyze statistical data, in accordance with the standards set out in international statistical guidelines. With these activities, the BOT aims to obtain complete and adequate data for the purposes of monitoring economic conditions, monetary policy formulation, as well as fulfilling other responsibilities of the central bank and to serve the general public for their statistical needs. Activities included are

# (1) Collection and compilation of statistical data in accordance with international standards

1) The balance of payments is the summary of economic transactions between the residents of an economy and nonresidents for a specific time period.

The BOT is in the process of migrating towards the new International Monetary Funds' Balance of Payments and International Investment Position Manual, 6th edition (BPM6) and plans to disseminate the new data series in 2011.

 Monetary and Financial Statistics covers the assets and liabilities of financial corporations' acting as financial intermediaries in the economy.

Statistics are compiled and disseminated in accordance with the IMF's Monetary and Financial Statistics Manual (MFSM2000). During the year, the coverage was extended to include the balance sheets of other financial corporations such as Insurance companies, Mutual Funds and Provident Funds. Moreover, in 2010, the BOT plans to expand the coverage further to include more financial corporations such as the Deposit Protection Agency (DPA), Security companies, Leasing companies and Pawnshops.

3) The International Investment Position is the balance sheet of a country's external financial assets and liabilities and net investment position.

IIP is currently disseminated on an annual basis. However, in an attempt to increase the frequency of data dissemination, quarterly surveys for the IIP along with empirical studies were conducted to assess the possibility of a change in survey frequency for future IIP surveys. The results of both the survey and study are forthcoming.

#### 4) Data on Financial Securities

The BOT introduced an initiative to enhance the collection of transactional data on financial securities. The aim of the program was to develop a central database which accommodates various analytical views including a classification by economic sectors in accordance with international standards. This data is useful for the analysis and compilation of macroeconomic statistics and the monitoring of economic conditions. Furthermore, the centralized system also ensures that other agencies have access to the same information. The system began operation in September 2009.

In 2010, the BOT plans to establish a central registry for all financial securities. This system would bring together standardized information collected by different supervisory agencies, and provide data linkages between them. The purpose of such a system is to support the primary mission of the Thai Capital Market Development Master Plan (2010 – 2014), in providing an efficient infrastructure framework in legal, regulations, accounting, tax, information, technology and enforcement.

### (2) Improvements to the data architecture

Several projects were carried out to improve the IT applications in order to promote accessibility, search functionality and efficiency of processing. These projects include data of several domains such as individual debtors of financial institutions, foreign currency transactions and international trade obtained from Customs Department. Moreover, improvements was also made to support the need for new data requirements such as

- 1) Financial reports based on the new accounting standards. : Amendments were introduced to upgrade the financial statements of financial institutions so as to adhere to the IAS/ IFRS accounting standards.
- 2) Classification of loans extended to SMEs: Functionality was added to allow the monitoring of the quality of loans to SME's made by financial institutions and to supplement supervisory regulations as well as to promote such loans.
- 3) Investment abroad and lending to nonresidents: The architecture was enhanced to allow the analysis and monitoring of foreign currency transactions by Competent Officers with regards to the Exchange Control Act.
- 4) Enhancement of the data collection for Specialized Financial Institutions under the supervision of the Ministry of Finance: This includes data such as financial positions, capital funds, deposits, borrowings, loans etc. These data are used for the analysis and supervision of specialized financial institutions by the BOT as appointed by the Ministry of Finance, and also for the compilation of monetary and financial statistics.

5) Improvements to the data exchange through the internet: Enhancements were made to facilitate and to increase the efficiency of data submission and retrieval by private corporations and government agencies.

#### (3) Public dissemination

New data series which were introduced in 2009 include

- 1) Interest Rates and fees for Foreign Currency Deposits: The purpose of these statistical series is to provide consumers with information on interest rates and fees offered by commercial banks to promote operational transparency, to allow for services comparison and to promote competition among financial institutions, thus preserving most benefit to the consumers.
- 2) Interest Rate Swap: This provides information on interest rate swaps in the Thai market.
- 3) Improvements to data disseminated on the BOT Website
- Key economic graphs presented in an interactive format to better serve the need for analytical views.
- Statistic articles to elaborate the fundamental information of statistical data and their compilation processes that will be of public interest.
- Improvements to the presentation, format and explanatory notes of data sets that financial institutions are required to submit to the BOT.

### The Bank of Thailand's Financial Assistance to Priority Economic Sectors

On June 3, 2008, the Bank of Thailand (BOT) announced the reform of its role in providing financial assistance to priority economic sectors through financial institutions in order to comply with the BOT Act B.E. 2485, as amended by the BOT Act (No.4) B.E. 2551. According to the announcement, the BOT would continue lending to existing borrowers up until the termination date of each lending program.

In 2009, out of the total credit line approved by the BOT to financial institutions of 29,519.5 million Baht, total loans outstanding as at end of 2009 registered 17,744.0 million Baht, a decline of 20.8 percent from the end of 2008. Total loans disbursement in 2009 amounted to 74,411.5 million Baht, a decrease of 58.8 percent from the previous year. Details are as follows:

#### BOT's Financial Assistance to Priority Economic Sectors in 2009

Program	2008		2009		Change (+increase, - decrease)			
	Accumulative Value (1)	Outstanding at year- (2)	Accumulative Value (3)	Outstanding at year- (4)	Accumulative Value		Outstanding at year-end	
					(3) - (1)	%	(4) - (2)	%
1. Regular Lending Program								
- Lending to SMEs	101,606.9	4,500.2	14,697.1	780.2	-86,909.8	-85.5	-3,720.0	-82.7
2. Emergency Lending Programs								
2.1 Lending to Entrepreneurs Affected by	2,336.6	0.0	0.0	0.0	-2,336.6	-100.0	0.0	-
the Outbreak of Avian Flu								
2.2 Lending to Entrepreneurs Affected by the Tsunami	12,832.0	0.0	0.0	0.0	-12,832.0	-100.0	0.0	-
2.3 Lending to Entrepreneurs Affected by Violence	54,707.3	16,133.8	49,343.0	15,316.4	-5,364.3	-9.8	-817.4	-5.1
in the Three Southern Border Provinces								
2.4 Lending to Entrepreneurs in Songkhla and	10,532.4	1,514.1	10,383.7	1,418.9	-148.7	-1.4	-95.2	-6.3
Satoon Provinces Affected by Violence in								
the Three Southern Border Provinces								
2.5 Lending to SMEs Affected by the Appreciation	1,056.0	247.6	987.7	228.5	-68.3	-6.5	-19.1	-7.7
of the Baht								
Total	183,071.2	22,395.7	75,411.5	17,744.0	-107,659.7	-58.8	-4,651.7	-20.8

### **Bank of Thailand Regional Office**

#### Northern Region Office (NRO)

#### 1. Economic Analysis

## 1.1 Analyzing and monitoring economic conditions of the Northern Region

The major responsibilities include studying, analyzing and following up major economic sectors in order to assess the Northern region's economic conditions and support the Monetary Policy Group's monthly meeting on economic and financial assessment. In this process the Office monitors, analyzes and writes monthly commodity reports; assessing the impacts of various economic issues and government measures on the Northern region's economy; as well as develop key economic indicators and exchanging views with the private sector under the Economic/Business Information Exchange Program on a monthly basis. The Office also organizes quarterly meetings with private entrepreneurs from various sectors in order to gain first hand information on the current economic conditions and its outlook. And as part of its communication strategy, the Office puts out regular press releases on economic and financial conditions of the Northern region; disseminates economic condition reports on a regular basis; and organizes a number of seminars on topical economic and financial issues. As part of its cooperation with other government agencies, the NRO participates in provincial treasury office's meeting to provide inputs and comments on the compilation of Gross Provincial Product (GPP) in the 17 provinces of the Northern region.

## 1.2 Analyzing and monitoring border trade and economic conditions of neighboring countries

The NRO conducts studies, surveys, monitor and analyze economic conditions of Myanmar and the Southern China, and Northern Thailand's border trade activities with these countries, as well as follow up on the progress of Greater Mekong Sub-region Economic Cooperation. It also helps promote collaborative efforts on cross-border payment to facilitate border trade between the Northern region and the Southern China.

#### 1.3 Conducting a study/research

In 2009, 6 research projects were conducted by NRO as follows: (1) Current conditions and impacts of migrant labor on the Thai economy (2) Access to Saving bond in the regional areas and its implication (3) Household Indebtedness and its implication for financial stability in Thailand (4) Northern region business adjustment to currency fluctuation: a case study of rice business, agricultural processed industry and electronics industry (5) Survey on tourism conditions after Songkran festival: a case study of hotel and guesthouse operators (6) Survey on the preliminary impacts of Income guarantee scheme: a case study of rice commodity.

### 2. Business and Financial Analysis

#### 2.1 Monitoring financial sector

The NRO is responsible for managing financial complaints in the Northern

region with a view to ensuring proper resolution of disputes/misunderstandings between financial institutions and their clients including facilitating meetings among the stakeholders where possible and necessary; to provide opinions and/or essential information on behalf of, and as the Bank of Thailand's representative upon request; to collect data and information on unlicensed financial services or non-bank operation within the responsible area; to disseminate information and promote understanding of the Non-Bank Business Under Supervision law; to develop a data base on localadministrative-organization fiscal balance; to encourage greater access to finance for SMEs under government-assisted measures, to coorganize seminars and public outreach with related private sectors.

#### 2.2 Foreign Exchange Monitoring

At the end of November 2009, total foreign currencies purchased and sold by 86 authorized money changers amounted to 50.15 million USD and 50.16 million USD, respectively, increasing from the previous year by 16.55 percent and 13.84 percent, respectively.

## 2.3 Analyzing and Monitoring Financial Health

Responsibilities include to monitor and analyze the financial health and business conditions of major commercial bank's debtors, as well as the possible negative effects on their performance or financial status of commercial banks within the responsible area.

#### 2.4 Survey on business liquidity

Responsibilities include surveying and analyzing the liquidity conditions of businesses on a monthly basis as inputs for the monthly assessment of the economic and financial conditions in the Northern Region.

#### 3. Banking Business Facilities

#### 3.1 Funds Deposit and Funds

#### Withdrawal

In 2009, the amount of fund deposited to and withdrawn from current accounts at Headquarter were 7,665.5 million baht and 7,754.2 million baht, decreasing from the previous year by 3.2 percent and 12.7 percent, respectively.

## 3.2 Financial Assistance to Priority Economic Sectors

On the BOT regulations on financial assistance for small and medium entrepreneurs (SMEs) suffered by the baht appreciation, a total of 5,434.0 million baht was provided to 499 businesses in the Northern region. At the end of 2009 the outstanding amount was 145.3 million baht.

#### 3.3 Government Bonds Agent

At the end of 2009, the number of government bondholders totaled 34,013 persons with a total holding of 41,628.10 million baht. Of this, the number of bondholders requiring transaction services totaled 2,762 persons. The value of bond distribution was 13,416.46 million baht, totaling 13,604 persons while the value of bond redemption was 4,623.98 million baht, totaling 3,151 persons.

#### 3.4 Cheque Clearing

In 2009, the volume of provincial processed cheques by clearing houses in the Northern region was 3.1 million issues with a value of 515,316.7 million baht, close to that of last year in term of volume, but increasing by 6.5 percent in terms of value. The value of returned cheques was 6,049.4 million baht. The ratio of returned cheques to processed cheques was 1.5 percent by volume and 1.2 percent by value.

#### Northeastern Region Office (NEO)

#### 1. Economic Analysis:

1.1 To study, monitor, analyze and assess the Northeastern Region's macroeconomic conditions and major commodities in the region namely rice, cassava, sugar cane, bioenergy and rubber tree as well as the economic and financial conditions of neighboring countries i.e., Lao PDR, Cambodia, and Vietnam including Thai-border trades.

Parts of information are gathered under the Business Information Exchange Program (Business Liaison Program) with entrepreneurs in the region and information exchange among public and private sectors in Khon Kaen, e.g. the Provincial Federations of Industries, the Provincial Chambers of Commerce, Northeastern Region's Banker Association, Khon Kaen University, SFIs. Reports on Northeastern regional economic conditions, main commodities conditions and economic and financial conditions in neighboring countries are issued and disseminated monthly, quarterly and annually.

## 1.2 Collaborations with neighboring countries:

The current projects in collaboration with neighboring countries' central banks are as follows:

(1) Providing technical assistance to the Bank of Lao (BOL) and the National Bank of Cambodia (NBC)) in accordance with the MOUs between the BOT and the aforementioned central banks.

In 2005, the Bank of Thailand provided 5 training courses, 4 seminars, and arranged visits to Thailand for BOL's and NBC's staff. We also arranged a staff exchange program between the BOT and the BOL.

- (2) To facilitate the development of border trade (Thai-Lao and Thai-Cambodian borders) currency payment, the NEO has monitored the Kip-Baht and Baht-Real currency exchange progress at the major border trading points. Currently, the discussion on currency exchange between Krungthai Bank and Acleda Bank of Cambodia is underway.
- (3) To strengthen our ties with neighboring countries, the top executives and staffs of both BOT and our neighboring central banks from time to time pay a courtesy call to the Governor of each other as well as to the Ambassador(s) and consular(s) in their respected countries. The NEO also arranged sport activities to strengthen the close-tie between the BOT and the BOL.

#### 1.3 Researches

The NEO conducted 5 research projects in 2009: (1) Behavior and Its Determinants of Hire Purchase, (2) Success Factors of Financial Communities with Financial Support of the SFI under the Government Policy (3) Unregulated Collateralized Real-estate Loan activities (4) Inter-Racial (Caucasian-Thai) Marriage and its Economic Impact in the Northeast, and (5) Access to Savings Bonds in Thai Provincial Areas.

#### 1.4 Seminars and Meetings

- (1) On the occasion of the NEO's 41<sup>st</sup> anniversary, a special Academic seminar was held on 18 September 2009. Besides, in collaboration with the Monetary Policy Group, we also held an annual seminar with entrepreneurs in various fields in the region to gather real economic activities, and prospect, to exchange views and to listen to all the advice and suggestion from the community.
- (2) We also regularly arranged meetings or seminars for private sectors,

professional communities and associations as well as bankers in the region on various topics, e.g. "Preparation for the Economic Challenges in 2010", "Economic Outlook and Exchange Rate Risk Management for Importers and Exporters", "Thai Foreign Asset Investment and Its Risk Management", "Electronic Payment Regulation and Control Act 2008".

(3) In 2009, total number of meetings and seminars with public and private sectors that the NEO participated were 90 as well as 25 lecture-givings.

## 2. Business and Financial Analysis:

2.1 Details of works done in collating information, monitoring and supervising Personal Loan Business in the Northeastern Region are as follows:

(1) A list of unregulated personal loan business operators was constructed. Training courses were provided for police officers to assist them in tackling the illegal personal loan service activities.

(2) In giving consultation to people who filed complaints against financial service providers under the BOT regulation, 31 cases were resolved at NEO in 2009 and 14 cases were passed on to the head office.

(3) Spot radio and various exhibitions were held to alert the public of risks of being tricked by crooks for all sorts of fraudulent transactions related to credit card and ATM, of Microfinance and of the Credit Dispute Resolution Center.

(4) With collaboration from all 3 regional offices, we provided regional data to support the set up of a regional information center responsible by the head office's Data Management Department.

#### 2.2 Currency Exchange Control

The total value of the overall 332 authorized moneychangers in buying and selling foreign currencies amounted to 32.1 million baht in 2009.

#### 3. Banking Business Facilities

3.1 In terms of the Financial Assistance to Priority Economic Sector and the role of the Bank of Thailand, NEO as an agent of the Government Bond registration, as of 31 December 2005, the outstanding loans to the priority sector secured by financial institutions' promissory notes stood at B108.9 million. The total volume of B32,524.7 million of bonds were held by 26,659 bondholders.

#### 3.2 Banking Activities and Cheque

#### Clearing

In 2009, the total 956 current account deposit transactions amounted to B6,967.9 million, and 360 withdrawal transactions amounted to B7,156.6 million. The total volume of taken-in cheques for processing was 3,220.3 thousand with the total value of B670,633.2 million. The total returned cheques was 42.1 thousand with the value of B7,070.1 million.

#### Southern Region Office (SRO)

#### 1. Economic Analysis

## 1.1 Monitoring and Analyzing Economic conditions

SRO has monitored and analyzed economic situations in order to assess the economic condition in the southern region and support the Monetary Policy Group's monthly macroeconomic meeting. For this purpose the division reports the development of major commodities and assesses the effects of events in the region include government measures to the whole economy. Moreover, the division conducted interview surveys on main business conditions in the Southern areas as well as their perception on

BOT's policy according to the Business Information Exchange Program.

The division also held the seminar in economic issues at Songkhla province, a focus group conference at Surathani province and the academic disseminations to the publics and related government agents.

#### 1.2 Conducting studies and

#### researches

In 2009 SRO conducted 6 studies which are the following (1) Shrimp: Market and price mechanism, (2) Thailand Direct investment in IMT-GT: A case study of energy, rubber and fishery sector, (3) Access to Savings Bonds in Provincial Area and Policy Implication, (4) The Credit Situation of the Commercial Bank Branches in Southern Region, (5) The Grass-root Financial Institution under the Islamic Doctrine in Southern Region, (6) Microfinance services by Government Saving Bank and Bank for Agriculture and Agricultural Cooperatives in Southern Region.

#### 1.3 Monitoring and Analyzing the economic conditions of neighbouring countries and border trade

SRO has monitored and analyzed the economic and border trade condition of Malaysia ,especially Klantan and Tranganu, and Indonesia.

#### 2. Business and Financial **Analysis**

#### 2.1 Supervises Personal Loan **Business under Supervision**

Onsite examined personal loan business in Surathani province and publicized regulations, methods and conditions to operate the personal loan business under non bank supervision and also was alerted public on illegal lending firms throughout the southern areas.

#### 2.2 Personal Complain Center

In 2009, the SRO made response to personal complain on financial services totaled 93 cases.

#### 2.3 Exchange Control

Regulated authorized money changer and money transfer agent. At the end of 2009 the number of authorized moneychangers regulated by the SRO totaled 347. The purchase and sale of foreign currencies from and to customers amounted to US\$ 53.4 million and US\$ 53.5 million respectively. The number of authorized money transfer agents amounted to 209. The value of money transferred in and out were US\$ 10.7 million and US\$ 3.1 million respectively.

#### 3. Banking Business Facilities

#### 3.1 Funds Deposit and Funds

#### Withdrawal

In 2009, funds deposited to and withdrew from SRO's current account amounted to 48.9 and 49.7 million baht respectively.

#### 3.2 Cheque Clearing

In 2009, the volume of the provincial processed cheques by 18 clearing houses in southern region was 3.88 million items, 637.4 billion baht. The provincial returned cheques was 75,460 items, 7.5 billion baht which equal to 1.2, 0.6 percent of total cheques respectively.

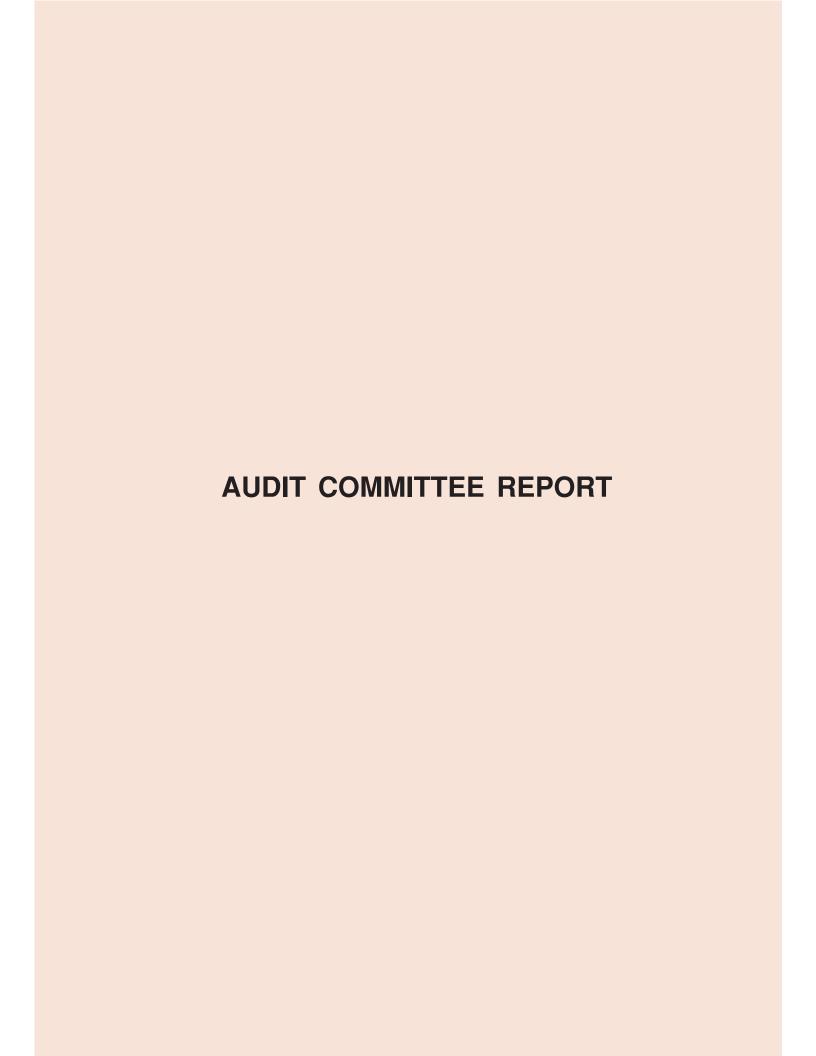
#### 3.3 Financial Assistance to Priority

#### **Economic Sectors**

At the end of 2009, the total loan provided through financial outstanding institutions was 8.5 billion baht.

#### 3.4 Government Bond Agent

At the end of 2009, a total number of government and state enterprises bondholders was 26,927 and the outstanding was 27,361.4 million baht. The interest payment transactions were 33,843 with value 1.047.9 million baht. The bond distributed to 12,580 boundholders with value of B 11,373.5 million baht and the bond redemption were 2,444 items with the amount of 3,826.2 million baht.



### **Audit Committee Report**

The Audit Committee of the Bank of Thailand (the Committee) was appointed by the Bank of Thailand Board on 24 June, 2009. The Committee consists of three independent members. Mr. Nontaphon Nimsomboon, member of the Bank of Thailand Board, is Chairman. The other members are Khun Pornthip Jala, a member of the Bank of Thailand Board, and Mrs. Tanya Sirivedhin, a former Deputy Governor of the Bank of Thailand, with Mr. Phong-adul Kristnaraj, Senior-Director of the Internal Audit Department as Secretary. Before the Committee was appointed (1 January – 23 June 2009), Mrs. Tarisa Watanagase, the Governor, was entrusted by the Bank of Thailand Board to perform the duties of the Audit Committee.

The Committee's objective is to function as an effective mechanism member of the Bank of Thailand Board to ensure good corporate governance, incorporating effective and prudent risk management, internal control, and internal auditing processes, aimed at assisting the management in managing and directing the Bank of Thailand's operations towards achieving its set objectives. During the past year (24 June - 31 December 2009) the Committee convened 7 meetings. The Committee reviewed Bank of Thailand (BOT) financial reports to reasonably assure its fair presentation and reliability, employing appropriate accounting policy and adequate disclosure in accordance with generally accepted accounting standards and related laws. In addition, the Committee held occasional meetings with BOT executives as deemed necessary during the year with good co-operation from the management and related departments. As a result of the meetings, appropriate actions have been taken in order to provide concrete benefits. Moreover, the Committee held a meeting with designated staff of the Office of the Auditor General of Thailand, acting as the external auditor to the BOT. The purpose was to consider significant issues and suggestions regarding accounting, internal control and management of bank operations resulting from audit engagement. The Committee as well worked to enhance the independence of the external auditor and uphold internal auditor's independence and straightforwardness, in line with applicable international standards. It also gave support to appropriate coordination among bank management, external auditor and Internal Audit Department.

The Committee's self assessment process will be conducted and forwarded to the Bank of Thailand Board once it has worked for one full year.

In an effort to fulfill its objectives, the Committee has committed itself to carrying out the duty, through providing independent and impartial suggestions to the Board and BOT management, in order to promote the BOT's objective to be a forward looking organization with competent staff dedicated to ensuring the resilience of the Thai economy against shock and instability. The committee is agreed that in the past year, the BOT upheld a good level of corporate governance. Risk management and internal control reflecting effectiveness of BOT management.

M. Wimsombonn

(Mr. Nontaphon Nimsomboon) Chairman, Audit Committee 22 January 2010

# REPORT OF THE AUDITORS AND BANK OF THAILAND FINANCIAL STATEMENTS



## Report of the Auditors

To the Minister of Finance

We have audited the Balance Sheet as of December 31, 2009 and 2008, the Profit and Loss Account, and the Statements of Changes in Capital and Cash Flows for each year then ended of the Bank of Thailand. These financial statements are the responsibility of the Bank of Thailand's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Bank of Thailand's management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the aforementioned financial statements present fairly, in all material respects, the financial position as of December 31, 2009 and 2008, the results of operations, the changes in equity, and the cash flows for each year then ended of the Bank of Thailand, in accordance with generally accepted accounting principles.

(signed)

(Lakhana Bunyamanonukul) Director Of Audit Office

(signed)

(Klinpaka Susagiem) Auditor In-charge

Office of the Auditor General

March 15, 2010

#### **Balance Sheet**

As of December 31, 2009 and 2008

Unit : Baht

	Notes	2009	2008
ASSETS			
Cash and Deposits	3	571,669,121,206	668,693,548,510
Reserve Tranche and Holdings of Special Drawing Rights	4	62,837,294,715	12,007,211,849
Investments	5	2,441,770,144,318	1,705,087,380,738
Loans	6	17,743,984,500	22,395,686,500
Premises and Equipment, net	7	5,724,219,427	5,940,585,480
Other Assets	8	118,066,558,539	74,083,800,984
Total Assets		3,217,811,322,705	2,488,208,214,061
LIABILITIES AND EQUITY			
Deposits	9	229,985,786,963	135,103,222,145
Allocations of Special Drawing Rights	10	50,741,604,559	4,553,894,128
Securities Sold under Repurchase Agreements	11	380,100,000,000	332,291,497,374
Debt Securities Issued by the Bank of Thailand	12	2,531,360,086,303	1,956,484,137,541
Other Liabilities	13	107,381,947,944	66,697,273,728
Total Liabilities		3,299,569,425,769	2,495,130,024,916
Equity			
Initial Capital		20,000,000	20,000,000
Statutory Appropriation	14	27,307,931,128	27,307,931,128
Reserve for Stabilization of Profit Payable			
to the Government	15	624,075,747	624,075,747
Assets and Liabilities Revaluation Reserve	16	(27,613,881,688)	39,560,898,740
Accumulated Losses	17	(74,434,716,470)	(105,076,704,420)
Net Profit (Loss) for the Year		(7,661,511,781)	30,641,987,950
Total Equity		(81,758,103,064)	(6,921,810,855)
Total Liabilities and Equity		3,217,811,322,705	2,488,208,214,061

The accompanying notes form part of these financial statements.

(Mrs. Tarisa Watanagase) Governor

(Mrs. Sarida Sangchant) Director, Accounting Department

#### Profit and Loss Account

For the Year Ended December 31, 2009 and 2008

Unit : Baht

	Notes	2009	2008
Revenues			
Interest Income		38,099,131,150	68,270,885,539
Commission		677,314,845	466,306,797
Net Gains on Foreign Exchange		-	38,657,099,048
Others	18	27,861,694,119	7,491,993,710
Total Revenues		66,638,140,114	114,886,285,094
Expenses			
Interest Expense		50,200,673,388	76,262,853,674
Net Losses on Foreign Exchange		18,874,293,226	-
Personnel Expenses		3,401,896,637	3,264,403,293
Others	19	1,822,788,644	4,717,040,177
Total Expenses		74,299,651,895	84,244,297,144
Net Profit (Loss)		(7,661,511,781)	30,641,987,950

The accompanying notes form part of these financial statements.

#### Statement of Changes in Equity

For the Year Ended December 31, 2009 and 2008

Unit : Baht

	Initial Capital	Statutory Appropriation	Reserve for Stabilization of Profit Payable to the Government	Assets and Liabilities Revaluation Reserve	Revaluation Surplus (Deficit) on Investments	Accumulated Losses	Net Profit (Loss)	Total
Balance as of January 1, 2008	20,000,000	27,307,931,128	624,075,747		9,762,526,050	(94,599,867,094)	(10,476,837,326)	(67,362,171,495)
Changes during the Year								
Net Loss transferred to Accumulated Losses		-	-			(10,476,837,326)	10,476,837,326	-
Revaluation Surplus on Investments transferred to								
Assets and Liabilities Revaluation Reserve	-	-	-	9,762,526,050	(9,762,526,050)	-	-	-
Unrealized Gains on Assets and Liabilities Revaluation	-	-	-	29,798,372,690	-	-	-	29,798,372,690
Net Profit for the Year	-						30,641,987,950	30,641,987,950
Balance as of December 31, 2008	20,000,000	27,307,931,128	624,075,747	39,560,898,740	-	(105,076,704,420)	30,641,987,950	(6,921,810,855)
Changes during the Year								
Net Profit transferred to compensate the Accumulated Losses	-			-		30,641,987,950	(30,641,987,950)	
Unrealized losses on Assets and Liabilities Revaluation	-	-	-	(67,174,780,428)	-	÷	-	(67,174,780,428)
Net Loss for the Year							(7,661,511,781)	(7,661,511,781)
Balance as of December 31, 2009	20,000,000	27,307,931,128	624,075,747	(27,613,881,688)		(74,434,716,470)	(7,661,511,781)	(81,758,103,064)

The accompanying notes form part of these financial statements.

#### Statement of Cash Flows

For the Year Ended December 31, 2009 and 2008

Unit : Baht

			Unit : Bah
	Notes	2009	2008
Cash Flow from Operating Activities			
Net Profit (Loss)		(7,661,511,781)	30,641,987,950
Adjustments to Reconcile Net Profit (Loss) to Net Cash Flow			
from Operating Activities:			
Depreciation and Amortization Expenses		516,720,785	521,315,886
Gain on Disposal of Premises and Equipment		(2,746,854)	(29,220,797)
(Gain) Loss from Net Asset Value Changes of			
Investments Managed by External Fund Managers		(6,828,711,590)	6,298,569,757
Interest Income		(38,099,131,150)	(68,270,885,539)
Interest Expense		50,200,673,388	76,262,853,674
(Gain) Loss from Non-cash Foreign Assets and Liabilities			
Cost Averaging		29,534,297,206	(9,693,642,802)
Gain from Decreasing in Provision for Contingent Losses			
on Forward Contracts under Resale Agreements		(178,960,585)	(200,027,745)
Net (Increase) Decrease in Accrued Revenues		(233,174,502)	54,426,104
Net Increase (Decrease) in Accrued Expenses		(9,584,957)	3,970,460
Net Increase in Prepaid Expenses		(1,702,627)	
Cash Received from Operation		27,236,167,333	35,589,346,948
Cash Received from Interest Income		44,377,229,739	67,901,882,034
Cash Paid on Interest Expense		(35,579,660,219)	(47,198,041,162)
Net Profit from Operation before Changing in			
Operating Assets/Liabilities		36,033,736,853	56,293,187,820
(Increase) Decrease in Operating Assets			
Foreign Deposits		114,637,318,999	(215,892,196,102)
Reserve Tranche and Holdings of Special Drawing Rights		(46,146,084,320)	(4,385,548,327)
Securities Purchased under Resale Agreements		-	201,196,782,110
Loans		4,651,702,000	45,964,522,420
Other Assets		(38,554,261,710)	(1,194,395,715)

The accompanying notes form part of these financial statements.

#### Statement of Cash Flows

For the Year Ended December 31, 2009 and 2008

Unit : Baht

	Notes	2009	2008
Increase (Decrease) in Operating Liabilities			
Deposits		94,884,083,761	13,042,987,151
Securities Sold under Repurchase Agreements		47,858,477,019	(157,830,121,282)
Debt Securities Issued by the Bank of Thailand		560,504,867,975	557,725,848,758
Other Liabilities		33,724,328,990	(13,822,223,156)
Net Cash Flow from Operating Activities		807,594,169,567	481,098,843,677
Cash Flow from Investing Activities			
Net Increase in Investments in Domestic Securities		(43,321,688,218)	(12,494,729,999)
Net Increase in Investments in Foreign Securities		(776,904,341,864)	(466,664,316,648)
Net Increase in Premises and Equipment		(180,930,619)	(198,074,991)
Net Cash Flow used in Investing Activities		(820,406,960,701)	(479,357,121,638)
Cash Flow from Financing Activities			
Net Increase in Allocations of Special Drawing Rights		45,992,486,540	
Net Cash Flow from Financing Activities		45,992,486,540	
Assets and Liabilities Revaluation Reserve on Cash		472,376,771	(892,867,350)
Net Increase in Cash and Cash Equivalents		33,652,072,177	848,854,689
Cash and Cash Equivalents at the Beginning of the Year		49,498,131,379	48,649,276,690
Cash and Cash Equivalents at the End of the Year		83,150,203,556	49,498,131,379

The accompanying notes form part of these financial statements.

#### BANK OF THAILAND

#### NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2009 AND 2008

#### 1. Basis of Preparation of the Financial Statements

The financial statements of the Bank of Thailand (BOT) have been prepared in accordance with Section 54 of Chapter 9 of the Bank of Thailand Act, B.E. 2485 amended by the Bank of Thailand Act (No.4), B.E. 2551, stipulating that the accounting of the BOT shall be in compliance with the generally accepted accounting principles except for a particular matter which the BOT Board has prescribed to be in conjunction with general practices of other central banks.

The financial statements are specific to the account of the BOT, not including the accounts of the Currency Reserve, the notes issuance business and the Financial Institutions Development Fund (FIDF), and have been prepared under the historical cost unless otherwise disclosed in Note 2, Summary of Significant Accounting Policies.

#### 2. Summary of Significant Accounting Policies

#### 2.1 Revenues Recognition

Interest revenue is recognized on a time proportion basis that takes into account the effective yield on the asset. Other revenues are accounted for on an accrual basis.

#### 2.2 Expenses Recognition

Expenses are accounted for on an accrual basis.

#### 2.3 Foreign Currency Transactions

Transactions denominated in foreign currencies are translated into baht at the exchange rates prevailing at the date of transaction or at the preceding day-end reference exchange rates.

At the year end, assets and liabilities denominated in foreign currencies are revalued into baht at the exchange rates prevailing on the balance sheet date. Unrealized gains and losses from revaluation of foreign assets and liabilities are calculated from the difference between exchange rates prevailing on the balance sheet date and the weighted average rate of each foreign currency, and presented in the Assets and Liabilities Revaluation Reserve under the equity section.

Gain or loss from foreign currency transactions is recognized in the Profit and Loss Account when the position of each foreign currency is decreased. The cost of foreign currencies sold during the year is calculated based on the weighted average cost basis.

#### 2.4 Investments

Domestic securities are held for the purpose of monetary policy implementation and are stated at cost after amortization of premiums or discounts.

Foreign securities are held for the purpose of the international reserve management and are stated at fair value. Unrealized gains and losses from revaluation are presented in the Assets and Liabilities Revaluation Reserve under the equity section, and are recognized in the Profit and Loss Account on disposal. Except for the assets managed by external fund managers, gain or loss from change in net asset value is recognized in the Profit and Loss Account.

The cost of securities sold during the year is calculated based on the weighted average cost basis.

#### 2.5 Loans

Loans are stated at carrying balances of principals and the accrued interests are included in "Other Assets".

#### 2.6 Premises and Equipment

Land is stated at cost. Buildings and equipment are stated at cost after depreciation.

Buildings and equipment are capitalized when their useful lives are over one year. The depreciation is calculated by the straight-line method, based on the estimated useful lives of the assets, as follows:

Buildings	20	years
Temporary Buildings and Improvements	5	years
Equipment	3 –15	years

The cost of fixed assets jointly used by the BOT, the Currency Reserve, the notes issuance business and the FIDF is allocated to each unit according to an asset usage proportion basis.

#### 2.7 Intangible Assets

Intangible assets are stated at cost after amortization. The amortization is allocated by the straight-line method over five years.

#### 2.8 Derivatives

#### 2.8.1 Forward contracts

Forward contracts are used to hedge risk arising from the exchange rate fluctuation and are presented at fair value. Unrealized gains and losses derived from changes in the fair value are presented in the Assets and Liabilities Revaluation Reserve under the equity section. Gains and losses on forward contracts are recognized in the Profit and Loss Account on the settlement date.

#### 2.8.2 Futures contracts

Futures contracts are used to hedge risk arising from the interest rate or bond price fluctuation and are presented at fair values. Changes in the fair value of the contracts are recognized in the Profit and Loss Account when the price revaluation and the settlement of the variation margin take place.

#### 2.9 Provision for Contingent Losses on Forward Contracts under Resale Agreements

The BOT has undertaken commitments with the government agencies and the state enterprises to resell foreign currencies in the future at the specific rates. At the year end, until 2007, the contracts were valued by comparing the year-end exchange rates with the contracted rates. The provision was fully provided for the contracts resulted in contingent loss.

From the year 2008, the outstanding of such provision will be reduced when an individual contract is due. The non-settlement contracts are currently presented at fair values and the changes in the fair value are presented in the Assets and Liabilities Revaluation Reserve under the equity section.

#### 2.10 Debt Securities Borrowing

The BOT borrowed debt securities from specialized financial institutions and/or juristic persons, as prescribed by the BOT, and issued BOT debt securities as collateral. The BOT has conducted debt securities borrowing transactions to enhance the efficiency of monetary policy implementation as well as to foster the development of money market and debt securities markets in Thailand. The debt securities borrowing fee is recognized in the Profit and Loss Account. The amount of borrowed debt securities are disclosed in "Commitments and Contingencies".

When the BOT sold the borrowed debt securities under repurchase agreement, the amount of Claim on Debt Securities under Repurchase Agreement are presented in "Other Assets" (Note 8) and the amount of Obligations to return Debt securities are presented in "Other Liabilities" (Note 13).

#### 2.11 Pension Fund and Provident Fund

#### 2.11.1 Pension Fund

The BOT's Rules and Regulations for Pension Fund B.E. 2539 including the amendments state that the employees who joined the BOT before December 1, 1996 and are not the members of the "Provident Fund" have the rights to receive pension according to the stipulated conditions and calculation basis.

The BOT has maintained provision in accordance with these rules and regulations. Such provision is provided annually and charged as the expense in the Profit and Loss Account.

#### 2.11.2 Provident Fund

The BOT's Rules and Regulations for Provident Fund B.E. 2539 state that the BOT and the employees who are the members of the Provident Fund have to make contributions to the Provident Fund according to the stipulated conditions. This Provident Fund has already been registered under the Provident Fund Act B.E. 2530.

The contributions paid to the Provident Fund, made by the BOT, are charged to the Profit and Loss Account.

#### 3. Cash and Deposits

	Uı	nit : Million baht
	2009	2008
Cash and Cash Equivalents		
Cash	48,600.6	30,517.7
Domestic Deposits	17.3	10.7
Foreign Deposits (Demand Deposits)	34,532.3	18,969.7
Total Cash and Cash Equivalents	83,150.2	49,498.1
Foreign Deposits (Time Deposits and Special Deposits)	488,518.9	619,195.4
Total	<u>571,669.1</u>	668,639.5

Foreign Deposits (Time Deposits) are held for the purpose of international reserve management rather than for the purpose of meeting short-term cash commitments.

#### 4. Reserve Tranche and Holdings of Special Drawing Rights

	Unit	: Million baht
	2009	2008
Quota Subscribed to International Monetary Fund (IMF)	56,579.6	58,201.3
<u>Less</u> : IMF Current Account No.1	(20,065.9)	(25,324.6)
Non-Negotiable with Non-Interest Bearing		
Promissory Notes Payable to IMF	(24,481.7)	(25,454.4)
Reserve Tranche	12,032.0	7,422.3
Holdings of Special Drawing Rights	50,805.3	4,584.9
Total	62,837.3	12,007.2

Reserve Tranche is classified as the international reserves, calculated from the Quota Subscribed to IMF after deduction of the baht balances existing in the form of IMF Current Account No.1, and Non-Negotiable with Non-Interest Bearing Promissory Notes Payable to IMF.

"Quota Subscribed to IMF-Baht" is presented in Note 8, Other Assets. The aforementioned IMF Current Account No. 1, and Non-Negotiable with Non-Interest Bearing Promissory Notes, and IMF Current Account No. 2 for administrative expenses are stated under Note 13, Other Liabilities.

Holdings of Special Drawing Rights are also classified as the international reserves.

#### 5. Investments

	Unit : Million bah		
	2009	2008	
Domestic Securities			
Cost after amortization of premiums or discounts	340,036.8	298,209.8	
Foreign Securities			
Cost after amortization of premiums or discounts	2,087,830.3	1,363,530.0	
<u>Plus</u> : Unrealized gain from price and foreign exchange			
rate revaluation of investments	13,903.0	43,347.6	
	2,101,733.3	1,406,877.6	
Total	2,441,770.1	1,705,087.4	

#### 6. Loans

	Unit : Million bah	
	2009	2008
Programs guaranteed by the Ministry of Finance	2,546.1	2,530.3
Programs collateralized with entrepreneur promissory		
notes endorsed for the BOT by financial institutions	15,197.9	19,865.4
Total	<u>17,744.0</u>	22,395.7

As of December 31, 2009, the BOT has one lending program financing to economic sectors through financial institutions guaranteed by the Ministry of Finance and four lending programs collateralized with entrepreneur promissory notes endorsed for the BOT by financial institutions.

#### 7. Premises and Equipment, net

		Unit : Million b		: Million baht
	Balance	Changing is	n Book Value	Balance
	Dec 31, 2008	Increase	Decrease	Dec 31, 2009
Land	2,464.8	-	-	2,464.8
Buildings	3,505.7	24.4	0.3	3,529.8
Temporary Buildings and				
Improvements	227.7	7.3	-	235.0
Equipment	2,082.4	103.2	12.6	2,173.0
Assets under Construction	113.6	_251.3	200.9	164.0
Total	8,394.2	386.2	213.8	8,566.6
<u>Less</u> : Accumulated				
Depreciation				
Buildings	(1,398.7)	(140.7)	0.3	(1,539.1)
Temporary Buildings				
and Improvements	(184.3)	(27.2)	-	(211.5)
Equipment	_(870.6)	(232.1)	_10.9	(1,091.8)
Total	(2,453.6)	<u>(400.0)</u>	_11.2	(2,842.4)
Premises and Equipment, net	<u>5,940.6</u>	(13.8)	<u>202.6</u>	<u>5,724.2</u>
Depreciation for the year	412.9			400.0

The new head office building is constructed according to the BOT's Master Plan which aimed to develop the overall land and buildings utilization. The Master Plan, with the total budget of B2,751.4 million, was scheduled for completion on August 31, 2010. As of December 31, 2009, B2,589.8 million or 94.1 percent of the total budget was spent. Depreciation of the assets available for use is determined by the specific rule.

As the opening of new head office building, the BOT lessens the usage of the Surawongse Office. Besides, the Securities and Exchange Commission (SEC) had requested for permission from the BOT to utilize the office space of the Surawongse Office as its temporary office. Consequently, the BOT permitted the SEC to use some parts of such building as requested. On June 1, 2009, the BOT signed the Memorandum of Understanding (MOU) with the SEC on the utilization of office space of the Surawongse building for 10 years from the initial date given by the BOT in writing. The SEC will be responsible for expenses arising from renovating and utilizing, and will pay for the building depreciation. In case of emergency, the BOT has the right to access the reserved areas immediately. However, in case where the BOT needs to use the building during the period of this MOU, the BOT reserves the right to terminate this MOU before the effective date of termination. As the building is under renovation by the SEC, the BOT has not yet informed the initial date.

#### 8. Other Assets

	Unit : Million baht	
	2009	2008
Quota Subscribed to IMF – Baht	44,547.6	50,779.0
Assets from Derivatives Revaluation	16,895.5	4,685.0
Claim on Debt Securities under Repurchase Agreement	37,940.7	-
Investment in Other Organizations	1,718.9	1,768.0
Staff Loans	2,783.0	2,724.5
Intangible Assets	176.8	214.4
Accrued Income	11,672.7	12,002.8
Others	2,331.4	1,910.1
Total	118,066.6	<u>74,083.8</u>

Intangible assets of the BOT are computer software and systems as shown below

			Unit	: Million baht
	Balance	Changing i	n Book Value	Balance
	Dec 31, 2008	Increase	Decrease	Dec 31, 2009
Computer Software and Systems	678.1	79.0	-	757.1
<u>Less</u> : Accumulated Amortization	(463.7)	(116.6)		(580.3)
Net Intangible Assets	<u>214.4</u>	(37.6)		<u>176.8</u>
Amortization for the year	108.4			116.6

#### 9. Deposits

	Unit : Million bah	
	2009	2008
Government	167,179.3	65,865.3
Financial Institutions	54,947.6	63,097.6
Others	7,858.9	6,140.3
Total	229,985.8	135,103.2

#### 10. Allocations of Special Drawing Rights

The IMF's member countries are allocated Special Drawing Rights in proportion to their subscriptions to the IMF. In 2009, the BOT accepted new allocation of SDR885.6 million. Consequently, as of December 31, 2009, the BOT was allocated the balance of SDR970.3 million, an equivalent of B50,741.6 million.

#### 11. Securities Sold under Repurchase Agreements

The outstanding balance as of December 31, 2009 and 2008 was B380,100.0 million and B332,291.5 million, respectively, which was totally the securities sold under repurchase agreements in the domestic market.

#### 12. Debt Securities Issued by the Bank of Thailand

	Unit : Million bah	
	2009	2008
Bank of Thailand Bonds		
Remaining maturity:		
- 1 year or less	1,167,543.9	979,327.3
- over 1 year	618,470.6	406,887.6
<u>Less</u> : Held by the BOT	(2,582.4)	(12,614.3)
	1,783,432.1	1,373,600.6
Other BOT Debt Securities (Remaining maturity less than 1 year)	747,928.0	582,883.5
Total	2,531,360.1	1,956,484.1

The BOT has issued the BOT bonds and the BOT debt securities to be used as monetary instruments as well as to foster the development of money market and debt securities market in Thailand. In 2009, the interest paid presented as a part of Interest Expense, amount of B34,813.1 million was paid on the BOT bonds and B10,861.8 million was paid on the BOT debt securities.

In addition, the BOT bonds held by the BOT were a result of the BOT bonds buyback operations, which were undertaken to enhance the efficiency of the BOT's liquidity management in the money market.

#### 13. Other Liabilities

	Unit : Million bah	
	2009	2008
IMF Current Accounts No. 1 and 2	20,066.2	25,324.9
Promissory Notes Payable to IMF	24,481.7	25,454.4
Liabilities from Derivatives Revaluation	14,589.8	5,564.8
Obligations to return Borrowed Debt Securities	37,940.7	-
Liabilities from Forward Contracts under Resale Agreements	1,875.0	2,295.5
Accrued Expenses	7,449.3	7,210.5
Others	979.2	847.1
Total	107,381.9	66,697.2

Others includes B13.6 million of obligations from labor lawsuit compensation, which was paid on January 25, 2010.

#### 14. Statutory Appropriation

In 2002, B165,000.0 million was transferred from the Special Reserve Account of the Currency Reserve to the BOT in accordance with the Emergency Decree on the Partial Transfer of Assets from the Special Reserve Account, B.E. 2545 in order to compensate for the accumulated losses and to enhance the stability of the BOT. The residual amount, after deducted by the accumulated losses, of B27,307.9 million was presented as Statutory Appropriation.

#### 15. Reserve for Stabilization of Profit Payable to the Government

Reserve for Stabilization of Profit Payable to the Government was accumulated from net profit after appropriated for the year 1990 – 1996 in order to maintain the profit payable to the government. This profit appropriation rule was consented by the Ministry of Finance and the balance of this account could be transferred as additional public revenue on demand of the Ministry of Finance. Since 2002, no profit appropriation has been made to this account.

#### 16. Assets and Liabilities Revaluation Reserve

	Unit : Million baht	
	2009	2008
Unrealized Losses from Foreign Exchange Revaluation of		
Assets and Liabilities	(42,625.7)	(1,275.6)
Unrealized Gains from Price Revaluation of Investments	13,909.9	43,161.6
Unrealized Gains (Losses) from Revaluation of Derivatives	2,305.7	(879.8)
Unrealized Losses from Revaluation of Forward Contracts		
under Resale Agreements	(1,203.8)	(1,445.3)
Total	(27,613.9)	39,560.9

Subject to Section 13(2) of Chapter 3 of the Bank of Thailand Act, B.E. 2485, amended by the Bank of Thailand Act (No. 4), B.E. 2551, the Assets and Liabilities Revaluation Reserve is established to accumulate gains and losses derived from the revaluation of the BOT's assets and liabilities.

#### 17. Accumulated Losses

In 2009, the amount of net gain B30,642.0 million was transferred to compensate the Accumulated Losses and the balance as of December 31, 2009 was B74,434.7 million. Movements of the Accumulated Losses are stated in the Statement of Changes in Equity.

#### 18. Other Revenues

	Unit : Million bah	
	2009	2008
Gain from disposal of investments	21,232.1	6,887.8
Gain from investments managed by external fund managers	6,471.8	-
Others	157.8	604.2
Total	<u>27,861.7</u>	<u>7,492.0</u>

#### 19. Other Expenses

	Unit : Million baht	
	2009	2008
Loss from investments managed by external fund managers	-	3,345.3
Loss from derivative instruments	461.9	-
Others	1,360.9	1,371.7
Total	1,822.8	<u>4,717.0</u>

#### 20. Commitments and Contingencies

As of December 31, 2009, the outstandings of commitments and contingencies of the BOT are as follows:

#### 20.1 Forward Contracts

#### 20.1.1 Dollar-Baht Forward Contracts

The BOT had net position of outstanding dollar-baht forward contracts to buy USD15,670.0 million, due in 2010.

#### 20.1.2 Cross Currency Forward Contracts

The BOT had net position of outstanding cross currency forward contracts to buy EUR4,430.1 million, GBP876.3 million, AUD1,307.9 million, CAD1,161.2 million and to sell USD380.9 million, JPY884,603.5 million, due in 2010.

#### 20.1.3 Forward Contracts under Resale Agreements

The BOT had the obligations under Resale Agreements to sell JPY12,452.2 million, due in 2010 - 2020.

The fair values of such forward contracts are presented in Note 8, Other Assets, or Note 13, Other Liabilities.

#### 20.2 Debt Securities Borrowing

As of December 31, 2009, the outstanding obligations to return borrowed debt securities and obligations from issuing BOT debt securities as collateral, due in 2010, was B51.801.0 million. The amount of borrowed debt securities, sold under repurchase agreements, are presented in Note 8, Other Assets, and Note 13, Other Liabilities at B37,940.7 million.

#### 20.3 ASEAN Swap Arrangement and Bilateral Swap Arrangement

In 2009, the BOT renewed the Memorandum of Understanding on the ASEAN Swap Arrangement (ASA), which is the arrangement to provide short-term foreign exchange liquidity support in a total amount of USD2,000.0 million among the 10 ASEAN member countries. The two-year arrangement, expiring on November 16, 2011, obliges the BOT to contribute USD300.0 million and to borrow up to USD600.0 million.

The BOT also undertook a Bilateral Swap Agreement (BSA) under Chiang Mai Initiative with the Bank of Japan (BOJ). This three-year agreement, expiring on November 8, 2010, enables both countries to swap their local currencies (Thai Baht and Japanese Yen) against US dollar. Under the agreement, the BOT can borrow up to USD6,000.0 million, which is to be guaranteed by the Ministry of Finance of Thailand, whereas the BOJ as an agent of the Ministry of Finance of Japan can borrow up to USD3,000.0 million. In addition, the BOT is currently under the negotiation to renew BSAs with the Bank of Korea and the People's Bank of China.

In 2009, neither the BOT nor its counterparties activated any of the above mentioned arrangements.

#### 20.4 Lawsuits

As of December 31, 2009, the BOT, in the normal course of business, was taken legal actions at the amount of the claims totalling B17,400.2 million and all of which are in process of court trial. However, the forecasted amount of these claims when the final judgement is made may have no material effect on the BOT's financial position and operations.

#### 21. Risk Management at the Bank of Thailand

#### 21.1 Financial Risk Management

#### 21.1.1 BOT's Balance Sheet Risk

The key financial risks that affect the BOT's balance sheet are the followings:

21.1.1.1 Foreign Exchange Rate Risk

The BOT's assets are exposed to foreign exchange rate risk as they are mainly denominated in foreign currencies, which is necessary for monetary operations in order to ensure the stable financial environments.

#### 21.1.1.2 Interest Rate Risk

Interest rate risk emerges when the interest rate in domestic market, resulting from conducting monetary policies, is significantly different from the interest rate of foreign markets that the BOT invests in.

#### 21.1.2 Financial Risk Management of the International Reserves

Investment of the international reserves in foreign assets has inherent financial risks. There are three types of financial risks: market risk, credit risk and liquidity risk. Notably, the BOT's credit risk and liquidity risk are much lower than its market risk due to the BOT's policy to invest in high credit rated securities and to impose limits on illiquid assets.

The main objectives of financial risk management of the international reserves consist of:

- a. Preserving the value of the international reserves when measured in terms of stable currencies, and
- b. Ensuring an acceptable level of financial risks of the international reserves as well as risk diversification.

Financial risks of the reserves are managed in accordance with the following approaches:

#### 21.1.2.1 Market Risk

Market risk, comprising of interest rate risk and foreign exchange rate risk, is the risk of loss due to changes in the market value of assets or currencies. The BOT manages market risk through benchmarking, which involves setting asset and currency allocations in accordance with the objectives of each portfolio and the BOT's risk tolerance. The BOT performs risk analysis by carrying out stress tests to estimate potential impacts of various market scenarios on the reserves.

The BOT's compliance staff monitor and control market risk to prevent excessive risk incurred from the unapproved deviation of actual investment position from the aforementioned benchmarks. The BOT keeps these risks within acceptable levels by imposing tracking error limits.

#### 21.1.2.2 Credit Risk

Credit risk is the risk that the BOT's counterparties or the issuers of the securities held by the BOT default or are unable to fulfil their financial obligations with the BOT. It includes the risk of deterioration in the value of securities from the credit rating downgrades of Debt Instruments or Debt Issuers.

The BOT controls credit risk by using the following approaches:

- (1) Minimum Credit Rating, set for counterparties and issuers to limit the credit valueat-risk to a very low level
- (2) Aggregate Credit Exposure Limit, set for counterparties and issuers in the form of deposit equivalent exposure based on the credit rating and number of counterparties
- (3) Individual Credit Exposure Limit, set for counterparties based on their credit rating. However, exposure limit for some counterparties will be reduced in the case that the probability of being downgraded, indicated by a set of indicators, increases.
- (4) Sovereign Credit Limit, based on country credit ratings (Sovereign credit limits are used as constraints in benchmark construction.)

#### 21.1.2.3 Liquidity Risk

Liquidity risk is the risk of loss arising from the inability to liquidate assets at a reasonable price within the specified period.

The management of liquidity risk focuses on setting appropriate levels for illiquid assets based on the BOT's liquidity needs, and the cost-benefit comparisons between the returns from liquidity premiums and the costs of liquidation.

#### 21.2 Operational Risk Management

#### 21.2.1 Control Self-Assessment (CSA)

In accordance with internal guideline which stipulates that all departments are required to conduct CSA review process at least once a year from 2007 onwards; therefore in 2009, all departments have conducted CSA review process based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. In addition, operational risk management system "RMS" was implemented as a management tool to assist in the operational risk management process.

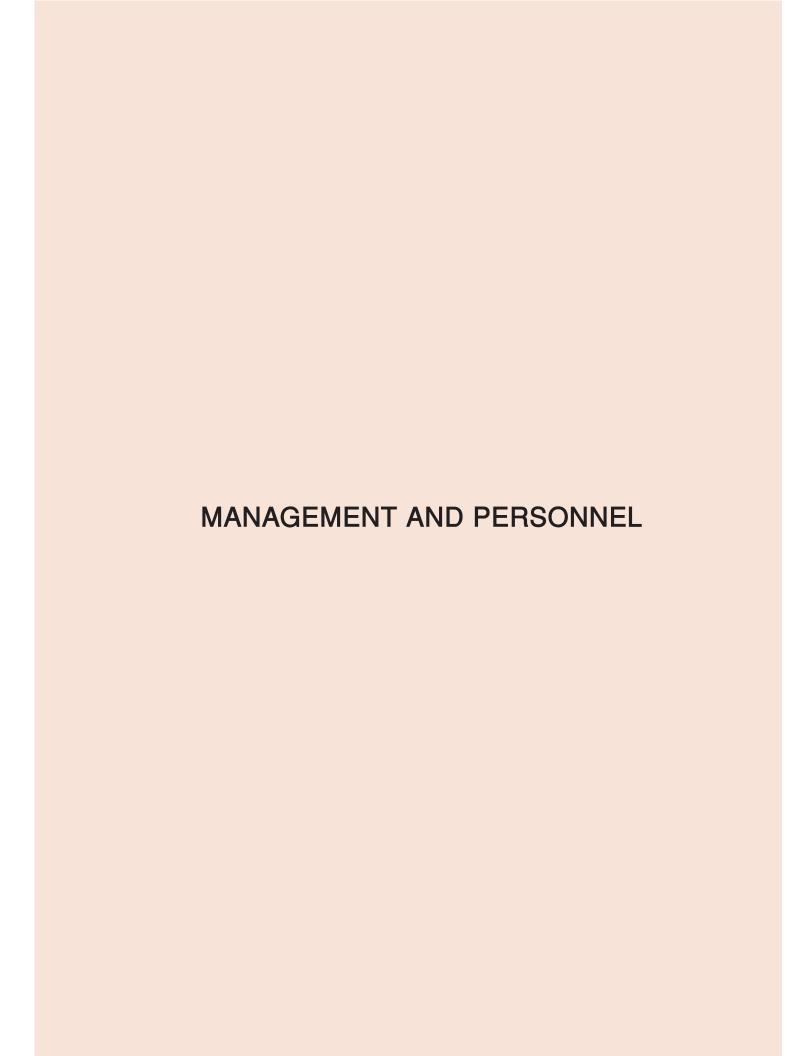
#### 21.2.2 Business Continuity Plan (BCP)

The BOT has developed the BCP against business disruption under various scenarios including disaster, political unrest / riot and pandemic influenza. In 2009, it undertook the proper review and update of the BCP for disaster and political unrest / riot and also conducted an annual drill test. The drills include the tests for security and the staff evacuation processes as well as the test for the readiness of computer backup system. The overall result of each drill was satisfactory.

Regarding the BCP for pandemic influenza, the plan was fully completed by the end of year 2009. During the drafting process, while the pandemic (H1N1) 2009 occurred in April, the Specific Working Committee was, therefore, appointed to implement prevention measures and a response plan against the impacts of the disease on the BOT's operations. The Working Committee was the center for a correct and update communication among the employees. In addition, the BCP for pandemic influenza was properly revised and updated in accordance with experiences received from the outbreak. The work-from-home exercise via remote access for specific functions was also tested which delivered a satisfactory result.

#### 22. Financial Restatements

Financial statements for the year ended December 31, 2008 have been restated in line with the presentation of financial statements for the year 2009 without causing any effect on the Profit and Loss Account.



## **Management and Personnel**

#### Strategic Plans and Superintendence

#### 1. Strategic Plan

In pursuance of the BOT's vision to be a forward-looking organization with competent staff dedicated to ensuring the resilience of the Thai economy against shock and instability, the BOT has conducted an annual review of the key concerns that might affect the BOT's operation. This was accomplished in conjunction with the five-year strategic plan for the year 2007-2011 in order to formulate strategic direction for the year 2009 and to ensure consistent organizational goal amongst all departments. The strategic plan for the year 2009 consisted of 18 strategic objectives, 23 strategies, and 39 action plans, and encompassed 3 main functions which are monetary stability, financial institutions stability, and internal management. Overall, the strategic plan was successfully implemented in 2009, with a few carried forward into 2010. The 18 strategic objectives for 2009 were as follows:

#### 1.1 Monetary Stability

- (1) The BOT's monetary policy and measures are effective and promptly responsive to economic circumstances.
- (2) To maintain external stability and to prevent excessive exchange rate volatility
- (3) To promote a resilient economy that can withstand financial instability.
- (4) The BOT's staff are well-regarded as having expertise in the areas of finance and economy.
- (5) To promote understanding and confidence on the policies and measures conducted by the BOT

#### 1.2 Financial Institutions Stability

- (6) That financial institutions are efficient according to international best practices.
- (7) The supervision and the enforcement of laws on financial institutions are efficient, in line with international standards, and able to keep pace with changes in financial institutions businesses.
- (8) The BOT's staff are well-regarded as having expertise in financial institutions examination.
- (9) Financial institutions do not encounter liquidity problems.
- (10) Policies and processes are in place to ensure that the financial institutions and non-banks treat their customer fairly and the stringent actions are taken against non conforming institutions.

#### 1.3 Internal Management

- 1.3.1 Information Technology
- (11) The work processes are modernized through the bank-wide deployment of electronic system and information technology.
  - 1.3.2 Human Resources

management

- (12) The BOT is able to recruit and retain the high-caliber staff as required.
- (13) The management and staff at all levels understand and apparently adhere to the BOT's core values
- (14) The BOT's staff are willing to commit full potential within a good work environment.
  - (15) The management at all levels

possesses leadership qualities.

(16) The BOT's management at all levels assume effective HR managers role.

1.3.3 Law and Public Relations

(17) The work processes are revised to ensure the smooth transition to the new laws.

(18) To undertake the study on the issuance of legislations concerning the granting of financial assistance to the distressed financial institutions

## 2. Organisation Structure, Work Systems and Work Process

Throughout the year 2009, the BOT had continuously improved the organisation structure, work systems, and work process to promote the work environment conducive to full efficiency and work engagement of BOT staff. The projects conducted can be summarised as follows:

#### 2.1 Reorganising

#### (1) Banknote Issuance

The BOT has continually modernised the work process of the Banknote Management Group by implementing more technologies and modern management system in the banknote management process. In 2009, the banknote management structure has been post-implemented to evaluate the efficiency of the structure and process. Therefore, the organisation structure has been adapted by separating the planning function and the accounting and supply function in order to improve the efficiency in implementing the strategic planning of the banknote management system.

#### (2) BOT's Regional Offices

The BOT reorganised its three regional offices in order to efficiently support the

BOT's core functions in monetary policy, financial institutions policy, and payment policy, and to be able to carry out ad hoc activities further assigned. The reorganising program was mainly done by centralising some banking operational functions, acquiring more technology, and outsourcing some supporting functions.

## 2.2 Work System and Work Process Improvement

(1) Compressed Workweeks Pilot Project

This continuing pilot project, whereby staff works longer hours for nine days every two weeks in exchange for one more day off, was initially launched in the third quarter of 2008 and was firstly implemented on security ink and chemicals production of Note Printing Works. In 2009, the project was extended to a group of Monetary Policy Group staff and a banknote counting team of Banknote Operation Department. The project outcome was positive. The evaluation showed that both staff and managers were satisfied with the new working hours. The framework has achieved improvement in quality and quantity of work, especially in security ink and chemicals production which the productivity was increased without any change in resources. Thus, the BOT has extended the pilot project into 2010.

(2) Project Study on Organisation Structure and Work System for BOT Staff Potential Enhancement

In 2009, the BOT conducted a staff opinion survey through questionnaires and intensive interviews on a group of staff and high level executives. The objective of the survey is to identify the factors that make individual competency of staff not fully utilized and to

gauge the staff bond with the BOT. The findings would be intensively analysed and used as a guideline for designing the organisation management and human resource management systems.

(3) Supporting Function Outsourcing Study

A working group of staff from various departments was assigned to study the BOT's Outsourcing Scheme in supporting areas, e.g., facilities management. This aims to achieve an efficient outsourcing arrangement that is in compliance with the Labour Protection Act. The working group has been in the process of examining the rules and regulations for a new outsourcing plan for premises management and services activities.

#### 3. Superintendence and Risk Management

#### 3.1 Superintendence

The Bank of Thailand Act B.E. 2485 as amended by the Bank of Thailand Act (No.4) B.E. 2551, stipulates main missions of the BOT and enthrusts the Bank of Thailand Board with the powers and duties to generally control the business and operations of the BOT, which includes considering and approving the operation and budgetary plan, as well as the management of assets of BOT. In addition, The Act stipulates the Structures, roles and responsibilities of three policy committees namely Monetary Policy Committee (MPC), Financial Institutions Policy Committee (FIPC) and Payment System Committee (PSC).

The Bank of Thailand Board, having the Governor and 3 Deputy Governors as members, meets at least once a month. For the purpose of supervising BOT's business, the Act also stipulates the Bank of Thailand Board to establish the Audit Committee.

#### 3.2 Financial Risk Management

Financial risk management at the Bank of Thailand covers financial risks arising from three main operations: the management of foreign exchange reserves, the implementation of monetary and exchange rate policy, and the role as the Banker to financial institutions. The financial risks can be divided into three categories:

- (1) Market risk is the risk of loss due to changes in the market value of assets or currencies.
- (2) Credit risk is the risk that counterparties or issuers of the securities default or are unable to fulfil their financial obligations with the BOT. It includes the risk of deterioration in the value of securities from credit rating downgrades.
- (3) Liquidity risk is the risk of loss arising from the inability to liquidate assets at a reasonable price within the specified period.

The objectives of the financial risk management at the BOT are as follows:

- (1) Enrich BOT's policy formulation process by utilizing risk management tools and techniques without imposing constraints on central banking operations.
- (2) Integrate the risk management frameworks into policy setting and implementation process.

The organization structure consists of committees and sub-committees responsible for the formulation and oversight of risk management policy. Details are as follows:

(1) The Bank of Thailand Board: The Board sets up the rules and guidelines for the management of foreign exchange reserves, including investment objectives of portfolios, tolerance levels of market risk, credit risk and liquidity risk, as well as eligible asset classes and financial instruments.

- (2) The Audit Committee: The Committee determines the audit policy which ensures that the financial risk management as well as the accounting of the BOT are in compliance with the guidelines prescribed by the BOT Board.
- (3) The Top Management Committee: The Committee is responsible for providing the BOT Board with advice and proposals on issues to be approved. The Committee is also authorized to undertake duties as prescribed by the BOT Board.
- (4) The Investment Sub-committee: The Sub-committee screens and submits risk management guidelines associated with the foreign exchange reserves management to the Top Management Committee and the BOT Board for approval.
- (5) The Financial Markets Operation Sub-committee: The Sub-committee screens and submits risk management guidelines associated with the implementation of monetary and exchange rate policy to the Top Management Committee for approval.

The Financial Risk Management and Operations Department is responsible for carrying out the risk policy implementations as set out by the committees. To ensure check-and balance, the Department is segregated from the Financial Markets and Reserve Management Department (front office), and reports directly to Deputy Governor, Monetary Stability.

The Financial Risk Management and Operations Department evaluates, oversees and monitors the management of foreign exchange reserves via the straight-throughprocessing system Finance Kit (FK). In addition to its compliance, access and audit trial systems, FK can measure risks in real-time. The Department has also developed the Integrated Risk Information System 1 (IRIS1), which provides executives with information about reserves management. The Department is currently developing the Integrated Risk Information System 2 (IRIS2), which focuses on balance sheet risks, and the costs and risks associated with domestic financial market operations. The project is expected to complete by 2010.

#### 3.3 Operational Risk Management

(1) Control Self-Assessment (CSA)

In accordance with internal guideline which stipulates that all departments are required to conduct CSA review process at least once a year from 2007 onwards; therefore in 2009, all departments have conducted CSA review process based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. In addition, operational risk management system "RMS" was implemented as a management tool to assist in the operational risk management process.

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of the disease on the Bank of Thailand's operations. The Working Committee was to be the center for a correct and update communication among the employees. In addition, the BCP for Pandemic Influenza was properly revised and updated in accordance with experiences received from the outbreak. The work- from- home exercise via remote access for specific functions was also tested which delivered a satisfactory result.

#### **Human Resource Management**

#### 1. The Status of Workforce

In accordance with the Regulation of Organization Structure 2004, the Bank of Thailand (BOT) has addressed the appropriate number of workforce, regardless of the increment of the number as a whole. Annually, BOT are recommended to report the total number of workforce to the board committee in order to design the lean and flexible organizational structure, to articulate the appropriate number of workforce, to set clear working plans and to design valuable jobs, which are all aimed to support the operational work effectively.

Practically, to support key strategies of the bank, line managers particularly in the areas of critical jobs could increase or spread out the number of workforce to the shortage areas. However, supporting departments should limit or reduce the number of workforce by introducing the technology to replace workforce, including adjusting working process, cutting off the non-valuable jobs, or substituting some jobs with contracted employment.

As of 31 December 2009, there are 3,923 employees totally, an increase of 13 employees or 0.3 percent of the entire employees, compared to last year. In 2009, the number of losses is 81 which are 51 retirements, 23 resignations, 5 early retirements, and 2 passed away.

Based on 3,923 employees, there are 1,795 males and 2,128 females or the ratio of 46: 54. In terms of the education level, 2 percent of the total number of employees or 64 employees hold doctoral degree, 37 percent or 1,444 employees graduated postgraduate degree, 46 percent or 1,821 employees graduated bachelor degree and 15 percent or 594 employees graduated lower than bachelor's degree.

## 2. Human Resource Management

Aligning with the BOT's HR Strategy 2007-2011, a forward-looking organization with competent staff dedicated to ensuring the resilience of the Thai economy against shock and instability, the bank has set up key HR strategic plans in 2009 as follows.

- (1) Sponsoring scholarship, according to the job demand on the lacking area of study, the bank has classified the scholarship by the objectives as follows 1) BOT Employee Scholarship, aimed to develop hi-potentials 2) Undergraduate Scholarship, aimed to keep the continuity of key working areas 3) Wiwattanachaiyanusorn Scholarship and Dr. Puey Ungphakorn Scholarship, aimed for charity and employees' benefit.
- (2) On the purpose of developing employees' knowledge, skills and working experience, the bank has provided the secondment program for employees to temporarily transfer to financial institutions both in the country and going abroad such as IMF, World Bank.
- (3) Performance based management; an intervention aligning with the vision, strategic objectives, and strategies both at the organizational and individual level is initiated to support employees working effectively through the process of giving the feedback for development, coaching, and counseling.
- 4) Developing HR interventions which are flexible and suitable for various groups of employees, the bank has developed HR systems to motivate, nurture and retain employees, especially hi-potentials, including the implementation of succession planning.
- (5) Encouraging line managers to play a role as HR managers which are responsible for developing and retaining their employees particularly the talent group. On this regard, the bank has conducted the survey regularly to monitor and develop line managers to play the role more effectively.

- (6) To recruit employees for some jobs requiring knowledge and experience in financial technology, the bank has reviewed and developed the process of selection continually, and also open more channels to recruit and approach to the right target.
- (7) To cultivate employees' characteristics aligning with the core values 'PIWADH' and encourage line managers to be the role model for employees at every level and also to develop them properly, 360 degree appraisals are conducted with the directors and upper level across the bank. In addition, the bank has organized many activities relevant to core values aimed to embed and induct employees so that they could behave on the right way.
- (8) Encouraging learning environment in terms of knowledge management (KM) is a tool to have employee engaged core values. BOT-Blog has been designed and developed on the purpose of being a channel for employees to share knowledge and experience.

In order to achieve the organizational objectives, the bank has emphasized on grooming core values and implementation of HR strategic plans until 2010.

## The Bank of Thailand Board

As of 31 December 2009

Chairman M.R. Chatu Mongol Sonakul

Deputy-Chairman Mrs. Tarisa Watanagase Mr. Bandid

Member Nijathaworn Mrs. Atchana Waiquamdee

> Mr. Krirk Vanikkul

Mr. Ampon Kittiampon

Mr. Nontaphon Nimsomboon

Mr. Borwornsak Uwanno

Khun Pornthip Jala

Ganjarerndee Mr. Siri Mr. Kanit Sangsubhan Mr. Satit Rungkasiri

## **Executives of The Bank of Thailand**

As of 31 December 2009

Governor	Mrs. Tarisa Watanagase
Deputy Governor, Monetary Stability	Mr. Bandid Nijathaworn
Deputy Governor, Financial Institutions Stability	Mr. Krirk Vanikkul
Deputy Governor, Corporate Support Services	Mrs. Atchana Waiquamdee
Assistant Governor, Monetary Policy Group	Mr. Paiboon Kittisrikangwan
Assistant Governor, Financial Markets Operations Group	Mrs. Suchada Kirakul
Assistant Governor, Financial Institutions Policy Group	Miss Pimpa Thawarayut
Assistant Governor, Supervision Group	Mr. Sorasit Soontornkes
Assistant Governor, FIDF Management Group	Mrs.Tongurai Limpiti
Assistant Governor, Management Assistance Group	Mr. Arkabusk Krairiksh
Assistant Governor, Strategic Capabilities Group	Mr. Vichan Amorojanavong
Assistant Governor, Information Technology Group	Mr. Chim Tantiyaswasdikul
Assistant Governor, Operations Group	Mr. Nopporn Pramojaney
Assistant Governor, Banknote Management Group	Mrs. Chittima Duriyaprapan

Deputy Governor, Monetary Stability	Mr. Bandid Nijathaworn	
Assistant Governor, Monetary Policy Group	Mr. Paiboon Kittisrikangwan	
Senior Director, Domestic Economy Department	Mr. Suchart Sakkankosone	
Director, Monetary Policy Department	Mr. Amporn Sangmanee	
Director, International Economics Department	Mr. Chirathep Senivongs	
	Na Ayudhya	
Director, Economic Research Department	Mr. Titanun Mallikamas	
Director, Office of Macroeconomic Policy and Analysis	Mr. Mathee Supapongse	
Assistant Governor, Financial Markets Operations Group	Mrs. Suchada Kirakul	
Senior Director, Financial Markets and	Miss Wongwatoo Potirat	
Reserve Management Department		
Director, Financial Markets Office	Mr. Singhachai Boonyayotin	

Director, Reserve Management Office

Director, Exchange Control and Credits Department

Director, Financial Risk Management and Operations

Department

Overseas Representative Offices

Mrs. Alisara Mahasandana

Miss Vachira Arromdee

Mr. Ronadol Numnonda

Chief, New York Representative Office Mr. Yoot Khunsihapak
Chief, London Representative Office Miss Arunrat Ngamjaruspong

Deputy Governor, Financial Institutions Stability Mr. Krirk Vanikkul Assistant Governor, Financial Institutions Policy Group Miss Pimpa Thawarayut Senior Director, Financial Institutions Strategy Department Miss Nawaporn Maharagkaga Director, Financial Analysis and International Strategy Office Mrs. Nawaron Dejsuvan Senior Director, Prudential Policy Department Mrs. Pongpen Ruengvirayudh Director, Risk Management Policy Office Mr. Somboon Chitphentom Mr. Sorasit Soontornkes Assistant Governor, Supervision Group Senior Director, Financial Institutions Monitoring Mrs. Ruchukorn Siriyodhin and Analysis Department Senior Director, Onsite Examination Department 1 Mrs. Salinee Wangtal Senior Director, Onsite Examination Department 2 Mr. Satorn Topothai

Senior Director, Onsite Examination Department 2 Mr. Satorn Topothai

Director, Planning and Development Department Mr. Vichit Kornvityakoon

Director, Financial Institution Applications Department Mrs. Niramon Asavamanee

Director, Specialized Financial Institutions Mr. Padoongsak Tiensuwan

and Non-bank Examination Department

Director, Risk Management and Information Mr. Jaturong Jantarangs

System Examination Department

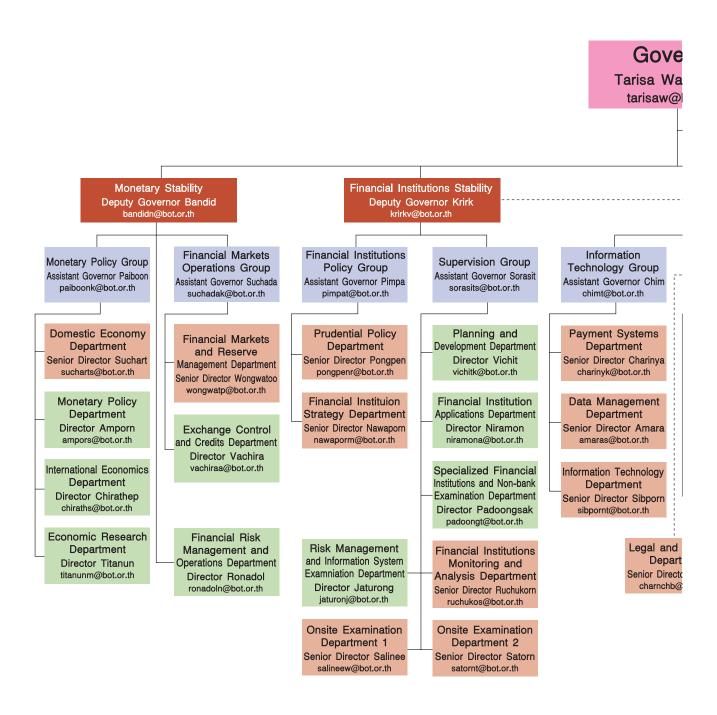
Deputy Governor, Corporate Support Services	Mrs. Atchana Waiquamdee	
Assistant Governor, Strategic Capabilities Group	Mr. Vichan Amorojanavong	
Senior Director, Human Resources Department	Mr. Somchai Setakornnukul	
Director, Human Resources Development Office	Miss Wanna Piyasirinond	
Director, Human Resources Management Office	Mr. Chanchai Buratavorn	
Director, HR Shared Services Office	Mr. Krisda Nilkositya	
Director, Strategic Services Department	Miss Matana Waitayakomol	
Director, Organization Development Department	Mrs. Piengta Dattanonda	
Director, Accounting Department	Mrs. Sarida Sangchant	
Assistant Governor, Information Technology Group	Mr. Chim Tantiyaswasdikul	
Senior Director, Payment Systems Department	Miss Charinya Kaewmanee	
Director, Payment Systems Policy and Oversight Office	Mr. Ronasak Ruengvirayudh	
Director, Payment Systems Development and Settlements Office	e Miss Kannika Junsaengaram	
Senior Director, Data Management Department	Mrs. Amara Sriphayak	
Director, Statistics Office	Mrs. Pusadee Ganjarerndee	
Director, Data Management Development and Planning Office	Mr. Parisun Chantanahom	
Senior Director, Information Technology Department	Miss Sibporn Thavornchan	
Director, Business Integration & Technical Management Office	Mrs. Bhusadi Muhpayak	
Director, Business Solution Delivery Office 1	Mrs. Pornvadee Tapasanan	
Director, Business Solution Delivery Office 2	Mrs. Jintana Tinburanakul	
Director, IT Operations Office	Mrs. Nawaporn Vachirakernkan	
Assistant Governor, Operations Group	Mr. Nopporn Pramojaney	
Senior Director, Northern Region Office	Mrs. Chantavarn Sucharitakul	
Director, Northern Region Office	Mr. Prasopsuk Puangsakorn	
Senior Director, Northeastern Region Office	Miss Nopawan Mahamusik	
Director, Northeastern Region Office	Mr. Praneet Chotikirativech	
Senior Director, Southern Region Office	Mr. Niruth Raksaseree	
Director, Southern Region Office	Mr. Piratchai Pragobsub	
Director, Deposits and Debt Instruments Department	Mr. Charnchai Yotavongs	

Director, General Administration and Procurement Departmer	nt Mrs. Nantinee Chatchavanusorn
Director, Building Construction Projects	Mr. Montree Weerawong
and Maintenance Department	Č
Director, Security Department	Mr. Anothai Khunorn
Assistant Governor, Banknote Management Group	Mrs. Chittima Duriyaprapan
Senior Director, Banknote Issue Department	Mr. Anuchart Chotimongkol
Director, Banknote Operation Office	Mrs. Jongruk Leerasetthakorn
Senior Director, Note Printing Works	Mr. Priyavat Chainuvat
Director, Production Office	Mrs. Suree Jeraratanasopa
Director, Banknote Strategic Planning Department	Mr. Woraporn Tangsaghasaksri
Director, Accounting and Supply Department	Mr. Ruengsak Kittisarakul
Assistant Governor, Management Assistance Group	Mr. Arkabusk Krairiksh
Senior Director, Management Assistance Department	Mrs. Wantana Hengsakul
Director, Office of the Governor	Mr. Pichit Patrawimolpon
Director, Communications and Relations Office	Miss Siritida Panomwon Na Ayudhya
Senior Director, Legal and Litigation Department	Mr. Chanchai Boonritchaisri
Director, Legal Office	Mr. Pruettipong Srimachand
Director, Litigation Office	Mrs. Wannee Pornsomboonsiri
Director, Bank of Thailand Museum	Mrs. Supawadee Punsri
(A) Director, Library and Archives	Mrs. Supawadee Punsri
Assistant Governor, FIDF Management Group	Mrs. Tongurai Limpiti
Senior Director, Fund Operation Department	Mrs. Povongtip Poramapojn
Director, Business Management Office	Miss Siriporn Eamrungroj
Director, Accounting Analysis and Administration Office	Mr. Nat Tapasanan
Director, Asset Management Office	Miss Utsanee Tachapoonpon
Senior Director, Internal Audit Department	Mr. Phong-Adul Kristnaraj
Director, Office of Business Audit	Miss Panida Oonyawongse
Director, Office of IT Audit	Mr. Permsuk Sutthinoon

## BANK OF THAILAND'S ORGANIZATION CHART

## Bank of Thailand's as of 31 Dec

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## Organization Chart ember 2009

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