

# ANNUAL ECONOMIC REPORT 2010

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### The Year 2010 at a Glance

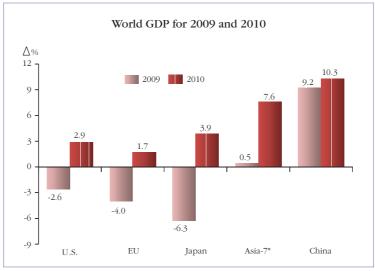
The Thai economy displayed a strong recovery despite facing several negative factors throughout the year, including uncertainties in the global economic recovery, domestic political unrest, exchange rate volatility and occurrences of natural disaster. Strong economic fundamentals, together with accommodative fiscal and monetary policies entailed an economic expansion of 7.8 percent, characterized by robust growth rates in export, tourism and domestic demand.

- Political unrest during April to May had limited impacts on economic activities, with an exception for the tourism sector being the most affected.
   Nevertheless, the number of foreign tourists in 2010 increased to a new historical record due to a rapid recovery after the incident subsided.
- Farm income increased in line with crop prices due to damages of agricultural production caused by natural disasters. This rising farm income supported domestic consumption.
- The fiscal sector remained supportive as indicated by the amount in the ordinary budget, additional finance under the Strong Thailand Project, as well as the living cost reduction measures such as subsidies in the energy and utility sectors.
- Financial Institutions Policy Committee (FIPC) imposed additional regulatory measures on housing loans to encourage financial institutions to be more prudent on granting housing loans as the housing market, especially the condominium sector, expanded buoyantly in 2010.
- Inflation rates, from a negative territory last year, turned positive as a
  result of the continued economic expansion and rising costs in both raw
  material and wages. This caused producers to gradually increase their
  prices.
- The Monetary Policy Committee (MPC) began to reduce accommodative stance since July to rebalance the economy as risks to inflation heightened while risks to growth became moderate. The MPC raised the policy rate 3 times in 2010, totaling 0.75 percentage points, to 2.00 percent per annum at the end of the year.
- The Thai baht appreciated in line with the regional currencies due to large capital inflows, as a result of different growth prospects between major industrialized countries, having weak economic conditions and accommodative monetary policies, while regional countries including Thailand having strong economic fundamentals. Despite exchange rate appreciation, Thailand's export values grew robustly by 28.5 percent, reflecting resiliency of the export sector.

### The Thai Economy in 2010

That economy benefited from the global economic recovery.

The world economy recovered markedly from a contraction in 2009, leading by a strong economic growth in emerging market economies, especially Asia. For the major industrialized countries (G3), the U.S. economic recovery was on the back of fiscal stimulus while the EU and the Japanese recoveries were gradual.



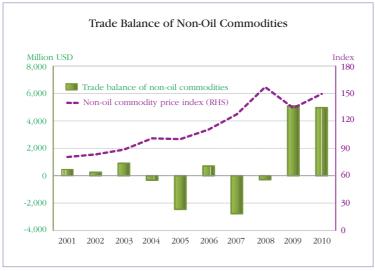
Note: \*Calculated by using weighted average of GDP-PPP among 7 Asian countries including Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea and Taiwan Source: Bureau of Economic Analysis, U.S. Department of Commerce, Eurostat, Cabinet Office of Japan, CEIC and BOT's calculation

This growth differential between G3 countries and emerging markets prompted a surge in capital flows to the emerging market economies, including Asia, causing regional currencies to appreciate. The Thai baht registered a 10.6 percent appreciation from the end of last year against the U.S. dollar.

Nevertheless, despite the baht appreciation, Thailand's export value continued to increase in tandem with the global economic recovery. Exports expanded by 28.5 percent, with higher share being contributed to the non-G3 countries. Meanwhile, the

number of foreign tourists registered a new historical record of 16.0 million persons, mainly attributable to tourists from China, Russia, and South Korea. These developments reflected the resiliency of Thai businesses, as well as their abilities to reap benefits from the different pace of global economic recovery.

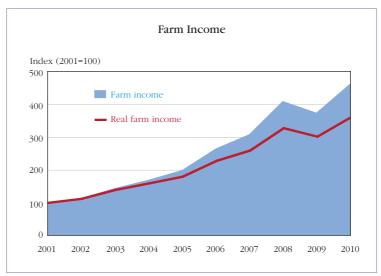
Agricultural prices were affected by increasing demand from the global economic recovery, rising demand for energy crops as well as supply disruption from occurrences of natural disasters in various countries, including Thailand. In particular, prices of cassava and oil palm increased rapidly. Meanwhile, prices of commodities excluding fuel also surged by 21.4 percent on a yearly average basis. Since the Thai economy exhibited a net trade surplus in non-oil commodities, rising agricultural prices were beneficial to farmers. Thus, farm income registered a strong growth rate of 24.0 percent despite lower agricultural supply caused by occurrences of natural disaster.



Note: Export of non-oil commodities includes rice, cassava, oil palm, sugar, and maize.

Import of non-oil commodities includes metal, wheat, soy bean and cotton.

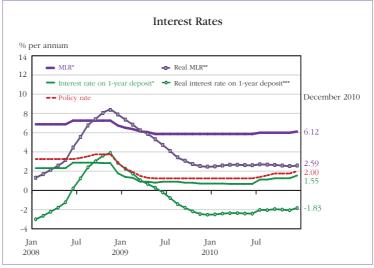
Source: IMF, COMTRADE (www.comtrade.un.org), the United Nations Commodity Trade Statistics Database and BOT's calculation.



Source: OAE and BOT

## Domestic economy was stimulated by accommodative stances from both fiscal and monetary policies.

Monetary policy was accommodative throughout the year despite the initiation of policy normalization since the second half of the year. Policy normalization was on the ground of lower risk on the world economic recovery and robust performance of the Thai economy. Nevertheless, real interest rate for 12-month deposit at the end of the year remained negative at 1.83 percent, which indicated a remaining accommodative policy environment.



Note: \* Average Interest rates of 4 major commercial banks

\*\* Real Interest rates calculated by using expected inflation over the next 12 months

\*\*\* Average of highest and lowest rates

Source: Bank of Thailand

Fiscal policy continued to be stimulative, as reflected by a budget deficit of 350 billion baht (3.5 percent of GDP), and additional finance of 219 billion baht under the Strong Thailand Project, as well as cost of living reduction measures such as subsidies on energy prices and utility costs. Furthermore, fiscal stance going forward continued to be accommodative as shown by the 420-billion-baht budget deficit (3.9 percent of GDP) for the 2011 fiscal year while another supplementary budget of 100 billion baht was also set.

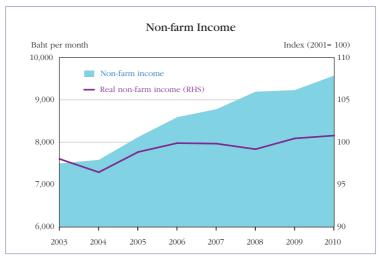
### **Budget Balance**

Fiscal Year	2008	2009	2010	2011	2012
(Unit:Thousand Baht)					
Budget balance	-165	-347	-350	-400*	-350
% to GDP	-1.8	-3.9	-3.5	-3.7	-3.0
Budget balance + Strong Thailand Project	-165	-362	-569	-473	-388
% to GDP	-1.8	-4.1	-5.7	-4.4	-3.4

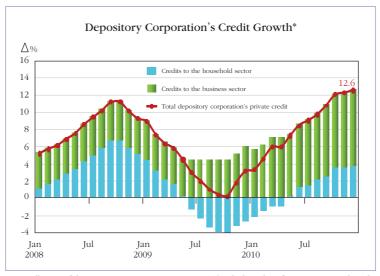
Note: \* The government initially set a budget deficit of 420 billion babt. However, the supplementary budget of 100 billion babt was also set due to higher than expected tax collections of 120 billion babt. Thus, fiscal deficit turned out to 400 billion babt. Source: Budget Bureau and Bank of Thailand's calculation

Global economic recovery, together with accommodative monetary and fiscal policies, has restored domestic spending, production, and investment to the normal levels.

The global economic recovery and accommodative public policies had positive impacts on restoring employment growth and working hours. In addition, higher farm income, together with a revival of consumer confidence, helped restore the domestic spending to 6.1 percent growth from 2.3 percent contraction last year. Strong domestic spending was mirrored by a robust depository corporations' private credits growth, which accelerated to 12.6 percent from a 3.1 percent growth last year.



Source: NSO and BOT's calculation



Note: All types of depository corporations except BOT (including data from savings and credit corporatives and Money Market Mutual Funds)

Source: BOT

Robust domestic spending and export growth had supported a strong rebound in manufacturing production which expanded from 6.1 percent contraction last year to 13.9 percent growth this year. As a result, capacity utilization picked up in various industries, especially in automobile, electronics, electrical appliances, food and other linkage industries, which reinforced private investment to expand by 13.8 percent from a sharp contraction of 13.1 percent last year.

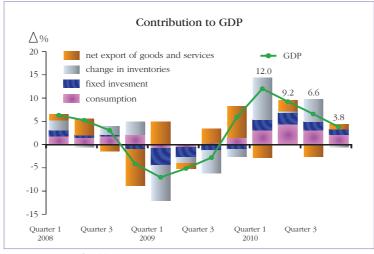
This improvement in economic activities from both demand and supply sides, supported by sound economic fundamentals, entailed a solid economic expansion for the Thai economy of 7.8 percent despite going through various negative factors. These included uncertainties in the world economic recovery, political unrest, exchange rate volatility and occurrences of natural disasters.

Thailand's GDP

	Δ	1%	Contribution to	GDP growth
	2009	2010	2009	2010
Consumption	0.1	5.0	0.1	3.1
Private	-1.1	4.8	-0.6	2.5
Public	7.5	6.0	0.7	0.6
Investment	-9.2	9.4	-2.0	1.9
Private	-13.1	13.8	-2.2	2.0
Public	2.7	-2.2	0.1	-0.1
Domestic Demand	-2.3	6.1	-2.0	5.0
Change in Inventories	-102.6*	39.3*	-3.9	3.3
Net Exports of Goods and Services	23.9	-2.7	3.4	-0.5
Exports of Goods and Services	-12.5	14.7	-9.0	9.5
Imports of Goods and Services	-21.5	21.5	-12.5	10.0
Gross Domestic Product	-2.3	7.8	-2.3	7.8

Note: \*billion baht

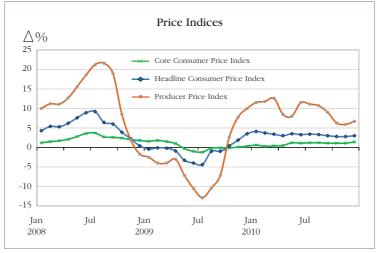
Source: Office of the National Economic and Social Development Board



Source: NESDB and BOT

Inflationary pressure gradually increased in line with economic expansion and higher production costs.

Following the Thai and global economic recovery, resource utilization increased, thereby inducing an upward pressure on costs of raw material, fuel prices, and wages. The pass-through of higher production costs to consumer's prices became more apparent in spite of the government attempts, which called for businesses' cooperation to withhold their upward price adjustments throughout the year. Thus, headline inflation edged up from -0.9 percent last year to 3.3 percent.



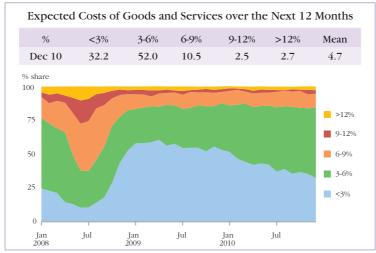
Source: Ministry of Commerce

For 2011, the Thai economy is expected to expand continuously with increasing price pressure.

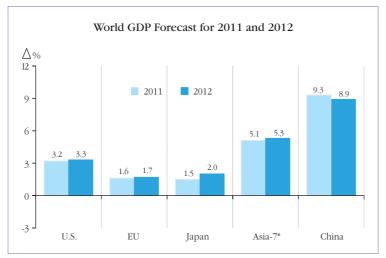
The Thai economy is expected to expand at a normal trend of 4.1<sup>1/</sup> percent in 2011 given the outlook of global economic recovery, robust confidence and spending from strong income, as well as sound credit expansion. Meanwhile, price pressure is expected to gradually increase in line with higher production costs and the ongoing domestic spending. An upward price

<sup>1/</sup> Forecast as of April 2011

pressure was reflected by the continuous increase in businesses' expectation of higher costs and inflation. The MPC expected the core and headline inflations to be  $2.3^{2/}$  and  $3.9^{2/}$  percent, respectively.



Source: Business survey 2011, BOT



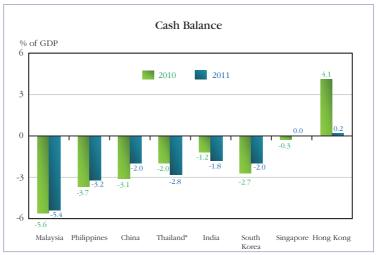
Note: \*calculated by using weighted average of GDP-PPP among 7 Asian countries including Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea and Taiwan Source: Consensus and the Bank of Thailand's calculation as of March 2011

<sup>2/</sup> Forecast as of April 2011

### Stimulus from the public sector became less necessary for the Thai economy.

The need for accommodative policies became less imperative as the private sector regained strength and became a key driver of economic growth, characterized by a broad-based expansion across sectors. This recovery pattern was in contrast to the recovery of major industrialized countries, which still relied heavily on fiscal stimulus.

Going forward, stimuli from fiscal and monetary policies become less necessary. An appropriate policy mix would be to unwind the accommodative stance. However, fiscal policy maintains its strong supportive role to the Thai economy as opposed to fiscal stances in other regional countries which already removed their fiscal stimuli in 2011.



Note: \*Forecast for year 2011 by using 93% disbursement rate Source: IMF Fiscal Monitor. November 2010 issue

### Economic Conditions in 2009-2010

				2010		
	2009	Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
(% from the same period of last year, unless specified otherwise	<del>:</del> )					
Gross domestic product <sup>1/</sup>	-2.3	7.8	12.0	9.2	6.6	3.8
Demand (Expenditures)						
Private consumption	-1.1	4.8	3.9	6.4	5.0	3.8
Government expenditure	7.5	6.0	11.0	8.4	3.7	1.8
Fixed investment	-9.2	9.4	12.1	11.3	7.9	6.4
- Private	-13.1	13.8	13.8	17.8	14.6	9.2
- Public	2.7	-2.2	6.9	-4.9	-5.4	-3.1
Exports of goods and services	-12.5	14.7	16.6	22.3	11.7	9.5
Imports of goods and services	-21.5	21.5	33.3	24.6	21.3	10.4
Supply (Production)						
Agriculture	1.3	-2.2	-2.2	1.5	-4.5	-3.3
Manufacturing	-6.1	13.9	22.9	17.6	11.6	4.8
Construction	0.4	6.8	7.9	8.0	5.2	6.6
Services and other	0.0	5.0	7.0	4.1	4.4	4.4
Domestic stability						
Headline consumer price index	-0.9	3.3	3.8	3.3	3.3	2.8
Core consumer price index	0.3	1.0	0.4	0.9	1.2	1.2
Unemployment rate (%)	1.5	1.0	1.1	1.3	0.9	0.8
Public debt (end of period, billion baht)	3,967	4,282	4,125	4,202	4,231	4,282
% share of GDP (end of period)	43.8	42.4	40.8	41.6	41.9	42.4
	13.0	12.1	10.0	11.0	11.7	12.1
External stability (billion USD)	10.4	140	2.0	4.0	2.2	4.1
Trade balance	19.4	14.0	2.0	4.6	3.3	4.1
Current account balance	21.9	14.8	5.5	1.7	2.0	5.5
Net capital flow	-2.8	15.9	3.8	1.1	8.0	3.1
Balance of payments	24.1	31.3	8.2	4.9	9.3	8.9
Official reserves	138.4	172.1 96.9	144.1	146.8	163.2	172.1
External Debt (end of period)  Official reserves (% of short-term debt)	75.3 4.2	3.7	79.1 4.0	81.1 4.0	90.1 3.9	96.9 3.7
External debt (% of GDP)	28.8	34.0	29.5	29.6		34.0
External debt (% of export earning)	39.3	46.7	40.4	40.6	32.3 44.2	46.7
Short-term debt (% of external debt)	39.3 44.0	48.2	45.1	45.8	46.7	48.2
	44.0	40.2	4).1	4).0	40.7	40.2
Monetary statistics (end of period, billion baht)						
Monetary base	1,103.3	1,243.3	1,097.4	1,072.0	1,118.1	1,243.3
$\Delta\%$	6.1	12.7	12.7	9.3	13.7	12.7
Narrow money	1,174.6	1,302.4	1,182.4	1,180.2	1,175.5	1,302.4
$\Delta\%$	12.8	10.9	14.5	15.1	11.7	10.9
Broad money	10,617.0	11,776.4	10,855.6	10,846.4	11,116.1	11,776.4
Δ%	6.8	10.9	6.1	7.0	9.9	10.9
Depository corporations deposits (including bills of exchange) <sup>2/</sup>	10,434.6	11,565.7	10,748.6	10,744.2	11,010.6	11,565.7
$\Delta\%$	6.6	10.8	5.7	6.3	9.9	10.8
Depository corporations private credits $^{2/}$ $\Delta\%$	8,832.7 3.1	9,947.0 12.6	8,967.8 6.0	9,196.7 8.5	9,432.7 10.8	9,947.0 12.6
Interest rates (% p.a.)						
- Repurchase rate, 1 day (closing rate daily average)	1.42	1.48	1.25	1.25	1.57	1.83
- Overnight interbank rate (mode daily average)	1.34	1.36	1.15	1.15	1.44	1.71
- Fixed deposit rate (1year) <sup>3/</sup> (end of month)	0.65-1.00	1.40-1.70	0.65-0.75	0.65-0.75		1.40-1.70
- Prime rate (MLR) <sup>3/</sup> (end of month)	5.85-6.25	6.12-6.50	5.85-6.25	5.85-6.25		6.12-6.50
Exchange rate (baht per U.S. dollar)	34.32	31.70	32.88	32.39	31.61	29.99
	J 1.J=	52.70	52.00	557	22.01	-/.//

Note: 1/ At constant price

Δ% Represents percentage change from the same period last year

Source: Office of the National Economic and Social Development Board, Ministry of Commerce, the National Statistical Office,
Public Debt Management Office and Bank of Thailand

<sup>&</sup>lt;sup>34</sup> As quoted by the 5 largest banks

### 1. International Economies

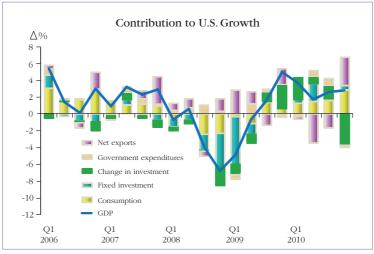
The world economy recovered markedly from a contraction in 2009, leading by a strong economic growth in emerging market economies, especially Asia. For the major industrialized countries (G3), the U.S. economic recovery was on the back of fiscal stimulus while the EU and the Japanese recoveries were gradual.

Major Industrialized Countries (G3)

The U.S. economy displayed an apparent recovery mainly due to government stimulus packages.

The G3 economies recovered but problems of high unemployment and public debt remained.

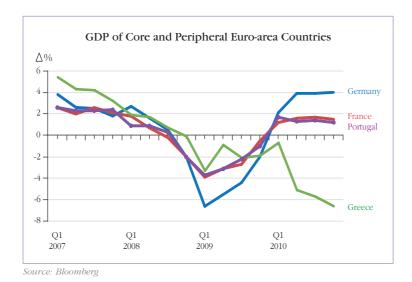
The U.S. economy expanded by 2.9 percent, recovering from a contraction of 2.6 percent last year as a result of various fiscal and monetary measures, including the Home Buyer Tax Credits, the Unemployment Benefits, as well as the Large-Scale Asset Purchases (LSAPs) carried out by the Federal Reserve in order to reduce the long-term cost of funding. These stimulus packages were the major drivers of the U.S. recovery which became more apparent toward the end of 2010.



Source: Bureau of Economic Analysis, U.S. Department of Commerce

## The Euro Area gradually improved but remained constrained by sovereign debt problems.

The EU economy gradually recovered from 2009 with major industrialized countries such as Germany and France being the main economic drivers, owing to strong export abilities to emerging markets, especially to Asia. Meanwhile, Greece, Ireland, Portugal and Spain still suffered from problems associated with high public debts. Greece and Ireland eventually sought financial assistance from the European Union (EU) and International Monetary Fund (IMF). In addition, weak domestic demand, as well as high unemployment rates, yielded low economic growth performances among the EU countries.



Japanese economy recovered from improvement in exports and the implementation of government stimulus packages. However, the recovery became moderate in the second half of 2010 due to the yen appreciation and deflation problems.

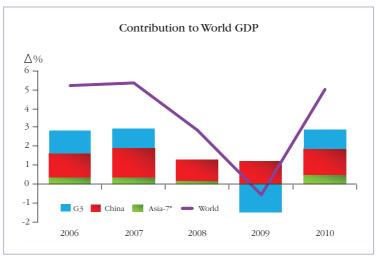
The Japanese economy recovered from strong exports and the improvement in private consumption as a result of the government stimulus packages such as subsidy programs in vehicles and electrical appliances (the Eco-car Subsidy Program and the Eco-point Program).

Nevertheless, the pace of economic recovery slowed down in the second half of 2010 due to weakening exports from decelerated external demand, the rapid yen appreciation, and the expiration of certain government stimulus packages. In addition, the Japanese economy continued to experience problems of deflation and high unemployment rate, which posed constraints for the economic expansion going forward.

Asian Economy became the main driver of global economic growth.

The Asian economy improved robustly from both exports and domestic demands.

Asian economy recovered rapidly and continued to strengthen due to robust performances in both exports and domestic demand. Strong external demand which expanded in line with the global economic recovery led to a surge in Asian exports after a severe contraction in 2009. At the same time, domestic demand increased from an improvement in consumer confidence, continued fiscal stimulus, and accommodative monetary policies albeit normalization process, which already began in some countries.



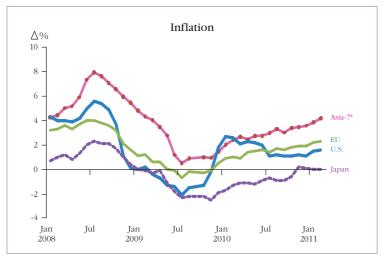
Note: \*Asia-7 includes Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea

Source: Bloomberg, Cabinet Office of Japan, IMF WEO (January 2011) and BOT's calculation

#### Inflation

Inflationary pressure in the G3 countries remained subdued while inflationary pressure for Asia continued to increase.

Inflationary pressure differed among the G3 and Asian economies. Inflation within the G3 economies remained subdued in line with fragile economic recovery whereas the Asian economies experienced higher inflationary pressure due to strong economic growth and rising prices of food and energy. For Asian economies, these commodities had a relatively larger share in the basket of consumer goods.



Note: \*Asia-7 includes Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea and Taiwan

Source: Bloomberg, Cabinet Office of Japan, IMF WEO (January 2011) and BOT's calculation

### **Monetary policy**

Monetary policies in the G3 economies remained accommodative while the Asian countries gradually began their normalization processes.

The G3 economies gradually recovered with subdued inflation which caused the U.S. Federal Reserve to maintain its policy rate at 0-0.25 percent per annum throughout the year and engaged in large-scale asset purchases to stimulate the weak economy. Likewise, the European Central Bank (ECB) also maintained the

policy rate at 1.00 percent per annum throughout 2010 and implemented liquidity measures for some troubled financial institutions. Meanwhile, the ongoing deflation problems in Japan prompted the Bank of Japan (BOJ) to hold the policy rate at a near-zero level.

For the Asian region, several Asian central banks gradually began their normalization processes in response to accelerating inflationary pressure. Most Asian monetary authorities also implemented macro-prudential measures to ensure economic stability and prevent imbalances in the financial system. These measures included restrictions on credit granted to the real-estate sector, as well as measures to limit transactions associated with capital flows.

**Global Economic Indicators** (year-on-year growth)

Countries	GDP g	rowth	Infla	ıtion
	2009	2010	2009	2010
G3				
United States	-2.6	2.9	-0.4	1.6
Euro Zone	-4.0	1.7	0.3	1.6
Japan	-6.3	3.9	-1.4	-0.7
Asian Economies				
China	9.2	10.3	-0.7	3.3
India <sup>1/</sup>	6.8	8.6	2.1	9.6
Hong Kong	-2.8	6.8	0.5	2.4
South Korea	0.2	$6.1^{2/}$	2.8	3.0
Taiwan	-1.9	10.8	-0.9	1.0
Indonesia	4.6	6.1	4.8	5.1
Malaysia	-1.7	7.2	0.6	1.7
Philippines	1.1	7.3	3.2	3.8
Singapore	-0.8	14.5	0.6	2.8

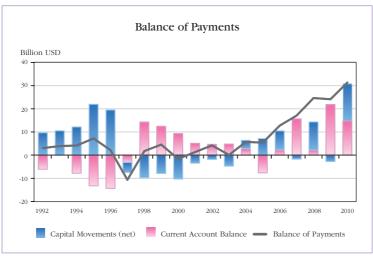
Note: <sup>1/</sup> GDP growth based on the calendar year basis, inflation calculated using wholesale price index (WPI)

Source: Bloomberg, CEIC, Reuters and Official statistics

<sup>&</sup>lt;sup>2</sup> Forecasted figure as of March 2011

# 2. International Trade and the Balance of Payments

International trade, both exports and imports, achieved high growth this year in line with the global and Thai economic recovery. This improvement was reflected by a smaller surplus in the current account whereas the capital account experienced a larger surplus from inflows of capitals. As a result, these developments constituted the highest record of the balance of payment surplus in history.



Source: Bank of Thailand

### **Exports**

Exports achieved a remarkable growth, both in terms of price and quantity, in line with the economic recovery of Thailand's trading partners. Meanwhile, Thai exporters could raise their export prices in response to the baht appreciation.

Thailand's export values registered 28.5 percent growth from the previous year in response to the economic recovery of Thailand's major trading partners. In terms of quantity, Thai exports grew by 17.7 percent with a broad base expansion across all product categories

Exports expanded robustly in line with the economic recovery of Thailand's trading partners.

except the agricultural products, which were affected by natural disasters, pest outbreaks and a loss in price competitiveness of rice exports to Vietnam. Export prices also displayed a remarkable growth rate of 9.1 percent, which exceeded the 7.6 percent of baht appreciation on a yearly average basis. This partly reflected the exporters' ability to adjust prices to compensate for the exchange rate appreciation.



Source: Ministry of Commerce and Bank of Thailand

Agricultural and fishery exports benefited from China's rapid economic growth, as well as supply disruption in major competitors.

Export value of agricultural products expanded by 36.2 percent, mainly from robust growths in rubber and cassava. This was supported by increasing demand from China in several sectors including automobile, animal feeds and energy. Meanwhile, the value of fishery exports registered 18.5 percent growth owing to accelerated export growths of both fresh and frozen shrimps. This was due to production problems of major competitors caused by epidemic, as well as the oil leakage crisis in the Gulf of Mexico.

Exports of high technology products continued to be the main driving force for Thailand's exports.

Export value of manufacturing products registered a 27.8 percent growth, leading by a 31.0 percent growth in high technology products, which displayed a robust expansion across all items. In particular, exports of automobile benefited from the production and exports of eco cars. Meanwhile, the electrical appliances category such as air conditioners, radios and refrigerators also reaped benefits from reallocations of production base to Thailand. Moreover, exports of electronics experienced a rapid growth due to stock accumulation during the first half of the year following a faster-than-expected recovery of global demand.

Value of labor-intensive manufacturing exports, on the other hand, registered a lower growth rate relative to other export categories due to several factors, including the higher reliance on the G3 markets, raw material shortages, rising minimum wages, and the exchange rate appreciation.

### **Imports**

Rapid acceleration of imports reflected a strong and broad-based recovery of economic activities, particularly consumption, investment and production.

Imports values expanded by 36.8 percent with robust growth rates displayed across all product categories, including consumer goods, capital goods, intermediate products, as well as raw materials. These developments were well in line with the global and domestic economic recoveries.

Imports accelerated in tandem with the economic recovery.

	% Change	Contribution to Growth (%)
Consumer Goods	26.3	2.6
Non - Durable Goods	23.1	1.3
Durable Goods	30.5	1.3
Raw Materials and Intermediate Goods	41.7	16.4
Capital Goods	26.6	7.3
Other Imports	44.6	10.5
Vehicles and Parts	73.3	2.6
Fuel and Lubricant	26.6	5.0
Non-Monetary Gold	107.3	3.1
Total Imports	36.8	36.8

Imports Classified by Economic Classification

Source: Ministry of Commerce and Bank of Thailand

### Current account

Large capital inflows were attributable to Thailand's rapid economic recovery.

Trade balance registered a lower surplus from 19.4 billion U.S. dollars last year to 14.0 billion U.S. dollars this year due to higher import growth relative to export. In addition, the service, income and transfer account also registered a smaller surplus as a result of higher repatriation of profits and dividends despite a rapid income growth from tourism revenue. Thus, the current account surplus reduced to 14.8 billion U.S. dollars this year.

### **Net Capital Movements**

Net capital movement recorded a large surplus of 15.9 billion U.S. dollars from a deficit of 2.8 billion U.S. dollars last year. This was attributable to growth differentials among the major industrialized countries and emerging market economies, which resulted in more capital flows into Asia, including Thailand. Capital inflows to Thailand were mostly in the form of shortterm loans in the banking sector, foreign portfolio investment and foreign direct investment.

Increases in short-term loans within the banking sector were part of the operation procedure to accommodate rising demand of foreign exchange hedging transactions by Thai exporters. Meanwhile,

foreign portfolio investment, including purchases of government bonds and the Bank of Thailand bonds in the secondary market, were the result of higher returns of investment relative to major industrialized countries. In addition, Thailand still experienced a continuous inflow of foreign direct investment despite the incident of political unrest during April and May.

### **Balance of Payments**

The balance of payment surplus reached a historical record of 31.3 billion U.S. dollars compared to a surplus of 24.1 billion U.S. dollars in the previous year. Thus, international reserves rose from 138.4 billion U.S. dollars at the end of 2009 to 172.1 billion U.S. dollars at the end of 2010, with the Bank of Thailand's net forward position amounted to 19.6 billion U.S. dollars.

### **Balance of Payments**

(Unit: Million U.S. dollars)

		2009			20101/		
	H1	H2	Year	H1	H2	Year	
Exports, f.o.b.	67,251	83,493	150,743	92,092	101,571	193,663	
$\Delta\%$	-23.3	-4.7	-14.0	36.9	21.7	28.5	
Imports, c.i.f.	55,625	75,730	131,355	85,436	94,196	179,632	
$\Delta\%$	-35.6	-15.2	-25.2	53.6	24.4	36.8	
Trade balance	11,626	7,763	19,388	6,656	7,376	14,031	
Net services income & transfers	1,481	997	2,478	573	180	753	
Current account balance	13,106	8,760	21,866	7,229	7,555	14,784	
Capital movements (net)	-6,099	3,322	-2,777	4,875	11,040	15,915	
Monetary authorities	-206	1,687	1,481	575	2,087	2,662	
Government	-198	787	590	1,138	2,141	3,279	
Bank	-1,190	9,036	7,846	3,527	6,261	9,788	
of which: Off-shore borrowing	-699	3,615	2,916	2,058	6,377	8,435	
Other sectors	-4,505	-8,188	-12,694	-364	551	187	
-Non-bank	-3,765	-6,316	-10,082	-847	-580	-1,427	
Foreign direct investment	2,066	2,429	4,495	2,444	2,000	4,444	
Equity investment and reinvested earnings	2,729	2,561	5,291	2,826	2,162	4,988	
Direct loan	-663	-133	-796	-381	-163	-544	
Portfolio Investment	-3,377	-4,323	-7,700	934	1,275	2,209	
Foreign	262	575	837	-898	1,453	554	
Equity securities	323	416	739	-570	2,530	1,960	
Debt securities	-61	158	97	-328	-1,077	-1,405	
Thai	-3,640	-4,898	-8,537	1,832	-177	1,655	
Other loans (foreign)	-131	-1,141	-1,272	-104	611	507	
Others	-2,323	-3,281	-5,604	-4,121	-4,467	-8,587	
of which: Trade credits	-1,238	-1,723	-2,961	-3,310	-678	-3,989	
-State enterprises	-740	-1,872	-2,612	483	1,131	1,614	
Errors and omissions	1,695	3,343	5,038	1,044	-419	624	
Overall balance <sup>2/</sup>	8,702	15,425	24,127	13,148	18,176	31,324	

Note : <sup>1/</sup> Preliminary data <sup>2/</sup> Actual data

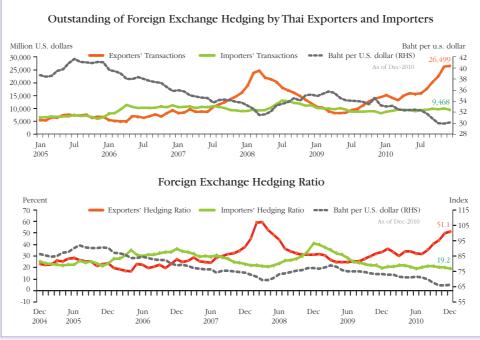
\$\Delta \text{\Lambda} \text{\Represents percentage change from the same period last year} \$\$Source: 1. Customs Department 2. Bank of Thailand

# Exporters' Adaptability under Volatile Exchange Rate and Capital Flow

At the end of 2010, the Thai baht appreciated against the U.S. dollars by 10.6 percent from the previous year. This was mainly due to surpluses in the trade balance and large net capital inflows, which induced the highest surplus record of the balance of payment at 31.3 billion U.S. dollars.

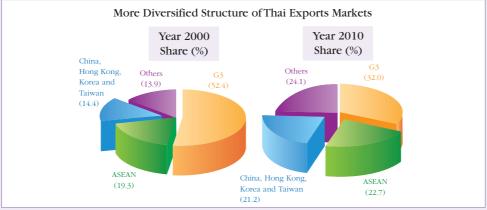
Nevertheless, export growth performed much better than anticipated, both in terms of price and quantity, which indicated a greater flexibility of exporters' adjustment on top of the economic recovery of Thailand's major trading partners. Adaptive strategies of the Thai exporters were as followed:

1. Hedging of exchange rate risks: The Bank of Thailand, together with commercial banks, put great efforts in providing tools and knowledge to exporters in order to promote the use of hedging instruments. As a result, the use of hedging instruments increased during the period of baht appreciation, as reflected by a continuous increase in the hedging ratio for transactions conducted between exporters and commercial banks, which led the export hedging ratio to stand at 51.1 percent by the end of the year.



Source : Customs Department and Bank of Thailand

- 2. Costs reduction: Notwithstanding the difficulty of implementing cost reduction strategies, exporters attempted to reduce their costs in order to increase their competitiveness. Such strategies included cooperative exchanges of production among similar or related industrial groups, reduction in raw material storage cost, import of cheaper raw materials to substitute for local contents, negotiation to fix raw material prices, as well as shortening the term of purchase in order to reduce the exchange rate risks.
- 3. Export market diversification: In recent years, Thai exporters constantly seek new export markets across the globe and became less dependent on the G3 markets. Exports became more diversified into ASEAN, China, Asian regions, as well as other new markets.



Source : Customs Department

4. Price adjustment: Given intense competition, price adjustment remained the last option for exporters since it affected their competiveness. In addition, an increase in the export price must occur along with quality enhancement and other cost reduction strategies in order to maintain a competitive edge against competitors. Such a strategy was observed in high-technology industries as prices were adjusted in line with the product quality. Furthermore, trades among affiliated companies allow for easier price negotiation and some payments to be carried out via "net settlement" contracts, which mitigated the exchange rate risk. Meanwhile, prices of agricultural exports increased in line with the price trend of commodity prices. However, several export sectors including fishery, labor-intensive or resource-based industries were likely to be constrained from price adjustment due to lower bargaining power, as well as intense competition among competitors.

The remarkable export growth reflected the Thai exporters' ability to adjust to new circumstances. Nevertheless, small and medium-sized exporters still faced various constraints regarding the ability to adjust their prices, as well as their accessibility to hedging instruments. Thus, the authorities must continue to provide knowledge and know-how to small-sized exporters to facilitate their adjustment and usage of the hedging instruments.

### 3. Domestic Demand

### 3.1 Private Consumption

Sound household's financial position and fiscal stimulus facilitated the recovery of private consumption, which became one of the main driving forces for the economy.

Private consumption, which was one of the main economic drivers, recovered rapidly with a robust growth rate of 4.8 percent after withstanding the global economic crisis which dampened consumer's confidence and purchasing power in 2009. On top of the economic recovery, strong economic fundamentals and fiscal stimulus played an important role in facilitating the consumer confidence and spending.

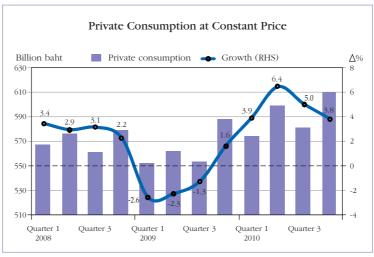
- Household's financial position improved as a result of higher income in both agricultural and non-agricultural sectors. Farm income increased in line with the global agricultural prices while non-agricultural income rose in tandem with improving employment condition and higher working hours.
- Ample liquidity and low interest rates facilitated the purchase of durable goods, especially automobiles, which registered a new historical record.
- Extension of the government's subsidies for energy prices and utility costs helped postpone the cost of living from rising, which helped stabilize the real purchasing power of consumers.

Going forward, private consumption is expected to grow continuously.

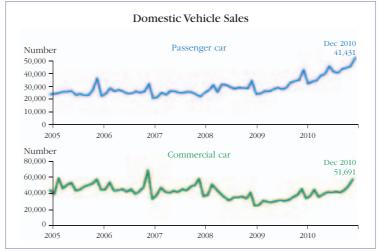
The ongoing growth momentum from 2010, as well as strong economic fundamentals, would enable a continuous expansion of private consumption, which is expected to be an important growth driver in 2011. In addition to the same underlying factors that facilitated consumption in 2010, increases in wages and salaries of

Purchasing power increased on the back of improving income and employment condition.

the civil servants bode well for consumption outlook. Nevertheless, an upward trend of inflation and interest rate can undermine consumers' purchasing power going forward.



Source: NESDB



Source: The Federation of Thai Industries

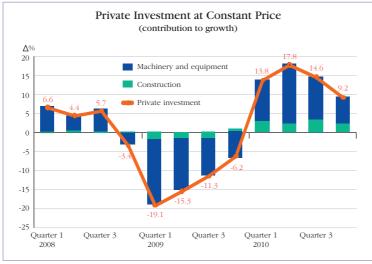
#### 3.2 Private Investment

### Private investment resumed its role as an economic driver.

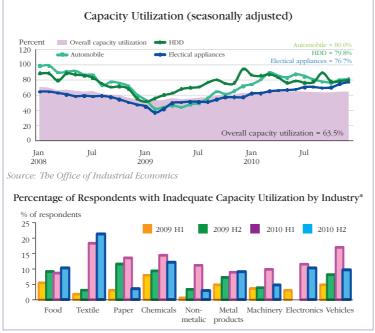
Private investment recovered continuously with a remarkable growth rate of 13.8 percent after contracting by 13.1 percent in the previous year. Private investment

Investment displayed a strong rebound in both machinery and construction investments.

contributed for a quarter of GDP growth in 2010 despite having encountered various negative factors including political unrest and problems in the Mab Ta Phut area, which prompted investors to postpone their investments while assessing the overall impact.



Source: NESDB



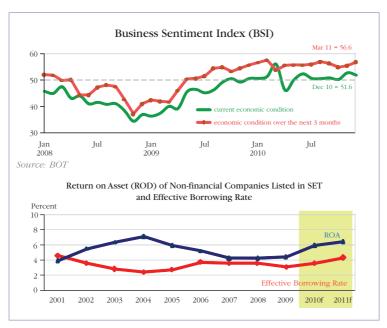
Note: \*Average from January to June 2011

Source: BOT

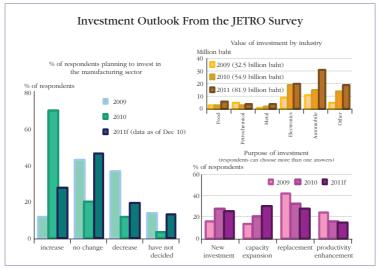
Machinery investment rebounded from a contraction of 15.3 percent in the previous year to an expansion of 14.7 percent across investment components; both in terms of new investment and replacement investment. Economic fundamentals that supported investment were as followed:

- Expansions of both domestic and external demands resulted in an increase in the capacity utilization rate in several industries, which might become inadequate for serving future demand especially in electronics, automobile and electrical appliances industries.
- Ample liquidity, low interest rates, and a high rate of investment returns, provided favorable investment incentives.
- Investor confidence remained satisfactory. Business Sentiment Index (BSI) surveyed by the Bank of Thailand continued to improve, both in the current and the three-month-expected indices. This agreed with the finding in the survey from Japan External Trade Organization (JETRO), undertaken during 25 May - 25 June 2010, that more than 60 percent of investors expected an improvement in business condition in the latter half of 2010.
- Appreciations of the Thai baht were favorable to imports of machinery and equipment, which enhanced productivity.

Meanwhile, construction investment benefited from the government's stimulus measures in the real-estate sector and public infrastructure investment, in addition to a favorable financial environment. Thus, private construction investment expanded markedly by 10.6 percent from a contraction rate of 5.1 percent in the previous year.



Source: The Stock Exchange of Thailand (SET) and BOT



Source: Survey of Business Sentiment on Japanese Corporations in Thailand for the Autumn, H2 2010 (JETRO)

# In 2011, an upward investment trend is expected to continue.

Private investment is expected to expand following the private sector's investment plan to accommodate the economic expansion. Supportive factors for investment from 2010 continued to persist throughout 2011. This includes favorable investment environment, low interest rates, and adequate liquidity in the financial institution system. Moreover, tight labor market and rising wages provide incentives for firms to increase their machinery investment as a substitute for labor. Furthermore, public investment in basic infrastructure is expected to continue, which will boost investor confidence and provide favorable investment climate for the future. Nevertheless, private investment could face several downside risks going forward, which include higher production costs, an increasing difficulty of the pass-through of production costs into consumer prices, as well as political instability.

#### 3.3 Fiscal Sector

The government continuously stimulated the economy throughout the fiscal year 2010. Going forward, the fiscal policy remains expansionary despite a lesser need of fiscal stimulus.

The fiscal sector remained supportive.

For the fiscal year 2010, the government continued to stimulate the economy by setting a budget deficit of 350 billion baht (3.5 percent of GDP) and incurring additional non-budgetary borrowing for the Strong Thailand Project in the fiscal year 2010 amounted to 219 billion baht.

With a continuous increase in expenses on social welfares and public policy including subsidies in energy prices, utility costs, as well as the farm income guarantee scheme, the government's budget recorded a disbursement of 1,712 billion baht which translated into a 95.8<sup>3/</sup> percent of the total budget. This was higher than the targeted disbursement rate of 94.0 percent. Moreover, adding the expenditures from the Strong Thailand Project of 219 billion baht would increase the overall expenditure to 1,931 billion baht, equivalent to a 6.2 percent increase from the previous fiscal year.

<sup>3/</sup> Including the disbursement of the expenditures for replenishment of treasury account balance and principal repayment.

# Government Revenue\* (Unit: Billion baht) Fiscal year

	2007	2008	2009	2010 <sup>p</sup>
Total revenue	1,703.8	1,837.6	1,684.3	1,995.0
$(\Delta \%)$	(7.7)	(7.9)	(-8.3)	(18.4)
Taxes	1,497.1	1,654.0	1,510.1	1,767.6
$(\Delta\%)$	(4.9)	(10.5)	(-8.7)	(17.1)
- Income base	643.1	739.5	681.0	730.5
$(\Delta\%)$	(7.0)	(15.0)	(-7.9)	(7.3)
Personal income tax	192.8	204.8	198.1	208.4
$(\Delta\%)$	(13.4)	(6.3)	(-3.3)	(5.2)
Corporate income tax	384.6	460.7	392.2	454.6
$(\Delta\%)$	(2.7)	(19.8)	(-14.9)	(15.9)
- Consumption base	755.9	806.9	741.1	930.9
$(\Delta\%)$	(4.6)	(6.7)	(-8.2)	(25.6)
Value added tax	434.3	503.4	431.8	502.2
$(\Delta\%)$	(3.9)	(15.9)	(-14.2)	(16.3)
Specific business tax	287.2	25.1	18.1	22.9
$(\Delta\%)$	(4.8)	(-27.0)	(-28.0)	(26.5)
Excise tax	287.2	278.3	291.2	405.9
$(\Delta\%)$	(4.8)	(-3.1)	(4.6)	(39.4)
- International trade base	88.5	97.4	77.6	93.7
$(\Delta\%)$	(-5.8)	(10.1)	(-20.4)	(20.7)
Other incomes (non-tax incomes)	206.7	183.7	174.2	227.4
$(\Delta\%)$	(34.2)	(-11.2)	(-5.1)	(30.5)

Note: \*Due to incompleteness of Government Fiscal Management Information System (GFMIS), used since 2005, revenue in this table is on a collection basis received from Fiscal Policy Office since December 2004, not on a cash basis received from the Comptroller General's Department.

P = Preliminary data

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

Source : Fiscal Policy Office, Ministry of Finance

Data Management Department, Bank of Thailand

Nevertheless, the government incurred a cash deficit of 200.5 billion baht (2.0 percent of GDP), which was lower than anticipated due to higher than expected revenue collection, especially from income tax and consumption tax following a strong economic recovery. Thus, the government borrowing was moderated to 232.6 billion baht. With the inclusion of the non-budgetary borrowing from the Strong Thailand Project, the amount rose to 345.2 billion baht.

Fiscal Position\* (Unit: Billion baht) Fiscal year

	2007	2008	2009	2010 <sup>p</sup>
Revenue	1,432.8	1,545.8	1,409.7	1,683.6
$(\Delta\%)$	(6.9)	(7.9)	(-8.8)	(19.4)
Expenditure	1,520.5	1,582.6	1,803.0	1,712.0
$(\Delta\%)$	(11.8)	(4.1)	(13.9)	(-5.0)
Disbursement rate (%)	92.8	91.1	92.9	93.7
(excluded principal repayment)	)			
Budgetary balance	-87.6	-36.7	-393.3	-28.4
Non-budgetary balance	-7.2	12.7	-27.0	-172.1
Strong Thailand Project 2012			-14.9	-218.8
Cash balance	-94.8	-24.0	-420.3	-200.5
(% of GDP)	(-1.1)	(-0.3)	(-4.7)	(-2.0)
Financing				
Net domestic borrowing	158.4	145.5	496.9	347.7
Net foreign borrowing	-59.3	-34.3	-11.9	-2.5
Use of treasury cash balance	-4.3	-87.1	-64.7	-144.7
Treasury cash balance (end-period)	142.8	229.9	294.6	439.3

Note: \*Different from the previous table, revenue in this table is on a cash basis received from Fiscal Policy Office since October 2005.

 $P = Preliminary\ data$ 

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

Source: Fiscal Policy Office, Ministry of Finance

Data Management Department, Bank of Thailand

The government's borrowing caused the public debt to rise to 4,230.7 billion baht (42.3 percent of GDP) at the end of the fiscal year 2010. Although the public debt to GDP ratio was well below the 60 percent ceiling under the fiscal sustainability framework, the persistence of structural fiscal imbalances between spending and revenue remained the critical risk for fiscal sustainability going forward.

Going forward, fiscal policy remains expansionary despite a lesser need of fiscal stimulus.

For the fiscal year 2011, the government set an initial budget deficit of 420 billion baht (4.0 percent of GDP), followed by a supplementary budget of 100 billion baht in response to a higher than expected revenue collection. Thus, the total budget expenditure rose to

2,170 billion baht. The government also has expenditure burdens from the extension of various subsidy measures in the energy and utility sectors. As for the fiscal year 2012, the government planned to conduct a budget deficit of 350 billion baht (3.0 percent of GDP). These developments indicated that fiscal stimulus will continue even though the economy has already resumed its normal growth trend.

# 4. Supply Side

#### 4.1 Agricultural Sector

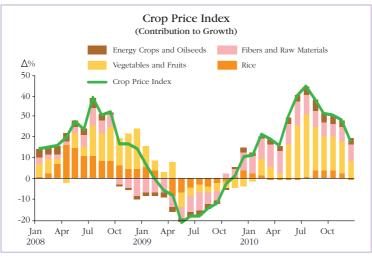
Prices of agricultural products surged to a new record in response to buoyant global demand. In particular, demand for energy crops rose following a continual rise in crude oil prices. Meanwhile, the global and domestic supplies of agricultural products were adversely affected by unfavorable weather conditions. Farm income, therefore, rose substantially.

<b>A</b>				2010		
$\Delta\%$	2009	Year	Q1	Q2	Q3	Q4
Farm income	-8.7	24.0	16.2	33.3	30.1	19.4
Crop production	-1.3	-2.4 <sup>E</sup>	-0.8 <sup>E</sup>	$4.2^{\mathrm{E}}$	-5.9 <sup>E</sup>	-5.0 <sup>E</sup>
Crop price	-7.5	27.1	17.1	28.0	38.2	25.7

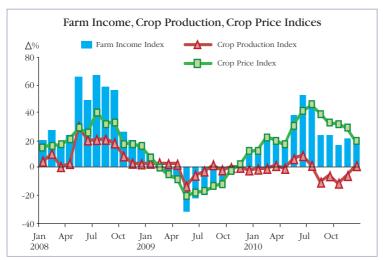
Note: E = Estimated data

Source: Office of Agricultural Economics and Bank of Thailand

The domestic prices of agricultural products, especially rubber and energy crops, accelerated in line with the global prices. This was due to strong external demand, particularly from China, as well as rising demand for energy crops. In addition, the global and domestic agricultural productions were disrupted by undesirable weather conditions, including droughts and flooding, as well as pest outbreaks. As a result, the domestic crop production contracted by 2.4 percent, mainly from a decline in maize, cassava, coconut and oil palm production.



Source: Office of Agricultural Economics and Bank of Thailand



 $Source: Of fice\ of\ Agricultural\ Economics\ and\ Bank\ of\ Thail and$ 

Despite a new record of agricultural prices, farm income merely grew by 24.0 percent, partly due to a decline in rice prices, which accounted for a quarter of farm income. As a result, rice farmers were the only group deserted from the benefit of rising global agricultural prices. Nevertheless, the government's farm income guarantee scheme, which secured an income of 10,000 baht per ton of rice, provided partial supports to the rice farmers.

Farm income increased mainly from a favorable price condition.

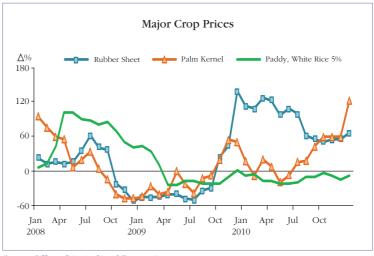
Livestock prices increased by 7.4 percent following scarce supplies of swine, fowl and egg, which were affected by hot climate during the midyear, as well as the swine disease epidemic. In addition, the costs of animal feeds in 2010 rose in response to rising maize and soybean residue prices.

Fishery prices grew by 2.7 percent, mainly from increasing shrimp prices as the global supplies of shrimp were disrupted by a severe epidemic in Indonesia's shrimp farms and flooding in the Southeast Asian region. In addition, the leakage of crude oil in the Gulf of Mexico prompted the United States to resort to shrimp orders from the Asian region.

#### Outlook in 2011

Crop price and production in 2011 tends to expand.

Agricultural prices are expected to increase on the back of global economic expansion and rising demand for energy crops. Meanwhile, less severe climate conditions expected in 2011 should result in higher domestic production compared with the previous year. However, the global supply of agricultural production is likely to remain tight, which reinforces improvement in farm income going forward.



Source: Office of Agricultural Economics

## Thai Agricultural Prices

(Unit: baht/ton)

	2009	Year	Q1	2010 Q2	Q3	Q4
Agricultural Price Index	255.1	310.0	284.1	305.2	321.2	329.4
(1995 = 100)						
$\Delta\%$	-5.2	21.5	13.4	22.2	29.7	20.9
1. Crop Price Index	310.8	395.1	356.8	389.0	409.8	424.9
(1995 = 100)						
$\Delta\%$	-7.5	27.1	17.1	28.0	38.2	25.7
Hom Mali Paddy	13,513	13,552	14,130	13,196	13,516	13,364
$\Delta\%$	-1.4	0.3	11.2	0.5	-3.0	-6.5
Paddy Class 1 (5%)	9,717	8,441	9,121	8,053	8,316	8,276
$\Delta\%$	-9.0	-13.1	-10.1	-20.1	-13.1	-8.8
Rubber	56,358	102,700	93,954	104,599	98,640	113,609
$\Delta\%$	-26.4	82.2	115.6	109.2	70.0	53.9
Maize	6,139	7,971	7,238	8,316	8,389	7,941
$\Delta\%$	-21.8	29.8	12.9	26.9	50.6	31.7
Cassava	1,252	2,329	1,861	2,181	2,708	2,566
$\Delta\%$	-30.7	86.0	58.9	93.9	122.1	71.7
2. Livestock Price Index	156.6	168.2	166.5	170.0	171.8	164.2
(1995 = 100)						
$\Delta\%$	3.6	7.4	12.0	6.5	7.4	3.9
3. Fishery Price Index <sup>1/</sup>	177.3	182.1	171.4	175.0	189.9	192.1
(1995 = 100)						
$\Delta\%$	1.7	2.7	-5.1	3.8	5.4	6.9
4. Forestry Price Index <sup>2/</sup>	153.5	166.3	155.3	165.9	171.1	173.0
(1995 = 100)						
$\Delta\%$	21.0	8.4	1.1	8.1	11.6	12.8

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

 $<sup>^{1\</sup>prime}$  adjusted weights between vannamei and black tiger shrimps since 2008 and referred to

Samutsakorn's vannamei price since 2010

<sup>2</sup> the data since Jan 2009 sourced from Bureau of Trade and Economic Indices

Source: Office of Agricultural Economic, Bureau of Trade and Economic Indices, Fish Marketing

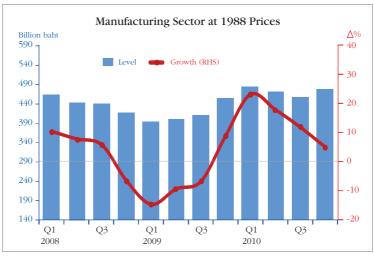
Organization, and Department of Fisheries

## 4.2 Manufacturing Sector

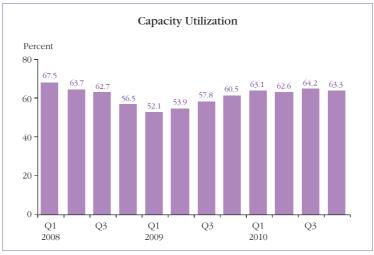
Production in the manufacturing sector exhibited a remarkable expansion in tandem with the global and domestic economic recovery. In addition, many industries received benefits from the ASEAN free trade agreement.

Production increased in tandem with economic recovery.

Manufacturing production expanded by 13.9 percent in response to improving external and domestic demands, as well as the positive effects from tax exemption under the ASEAN free trade agreement, which resulted in an expansion of production capacity in various industries. Meanwhile, the capacity utilization continued to increase from 56.1 percent last year to 63.3 percent this year.



Source: NESDB



Source: OIE

Industries which expanded particularly well were vehicles, electronic tubes, hard disk drives, and electrical appliances, which were supported by several contributing factors in addition to the global and domestic economic recovery as followed:

- Strong growth performances in the automobile industry were due to continuous introduction of new models, the increase in preference for small-sized cars, as well as benefits gained from the ASEAN free trade agreement.
- Electronics industry, including electronic tubes and hard disk drives, continued to produce new products to stimulate customer demand.
- Electrical appliances industry, particularly airconditioners, refrigerators and compressors benefited from numerous factors, including a warmer global climate, a shift in consumer's taste toward quality, energy efficient and environmentally friendly products. In addition, the industry also received benefits from the exemption of an excise tax on air-conditioners and the ASEAN free trade agreement.

Robust growth in the aforementioned industries had favorable impacts on the production of linkage industries including metal, rubber, plastic pallet, and petroleum industries, which led to a broad-base recovery within the manufacturing sector.

## 4.3 Tourism and Hotel Industry

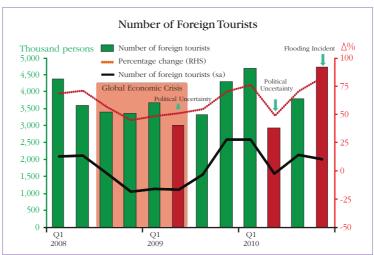
The number of foreign tourists registered a new historical record despite the domestic political unrests, which indicated robustness of Thailand's tourism sector.

The number of foreign tourists reached a new historical record of 16.0 million persons in 2010. Although the inbound tourists during the second quarter was adversely affected by the domestic political unrest, the tourism sector displayed a remarkable recovery in its aftermath, owing to the improvement of the global

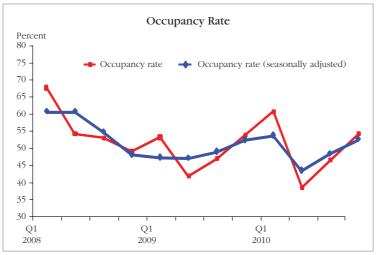
The tourism sector recovered rapidly after the political unrests subsided.

economic conditions, led by emerging market economies, especially within the Asian region. As a result, the number of foreign tourists from East Asia, which accounted for the largest share, together with tourists from Russia, Middle East, and South Asia, increased markedly. Meanwhile, the share of foreign tourists from the G3 countries dropped slightly, indicating a slow economic recovery within the area.

The structural shift in foreign inbound tourists toward the Asian region, which had lower average spending per person and shorter length of stay relative to tourists from the G3 countries resulted in a reduction in the tourist income per person. Nevertheless, a significant increase in the number of tourists entailed an expansion of tourism revenues of 16.0 percent from the previous year.



Source: Tourism Authority of Thailand and Department of Tourism



Source: Survey Data by Bank of Thailand

# Political unrests induced more scattered foreign tourist occupancy in regional areas other than Bangkok.

Foreign tourists became more dispersed into regional areas due to several factors which included the political unrest in the central region, continuous tourist promotions across regional areas, as well as an increase in the number of direct flights to regional areas, especially in the southern region. As a result, the occupancy rates in the regional areas including the southern, northeastern, and northern regions increased from the previous year.

For 2011, the tourism sector is projected to expand continuously given a strong economic outlook in Asia and the recovery of the G3 countries. Nevertheless, domestic political uncertainties, along with higher costs, are the downside risks to growth in the tourism sector.

#### **Tourism Indicators**

				2010 <sup>p</sup>				
	2009	Year	Q1	Q2	Q3	Q4		
		2010						
1. Number of foreign tourist								
(million persons)	14.1	16.0	4.7	2.9	3.8	4.6		
$\Delta\%$	-3.0	12.6	27.8	-2.2	14.5	8.4		
2. Income from tourism								
(billion baht)	535.8	621.7	195.4	98.0	142.4	185.8		
$\Delta\%$	-11.2	16.0	36.2	-1.2	12.5	11.6		
3. Occupancy rate								
(percent)	49.2	50.2	61.0	38.8	46.7	54.3		
• North	38.0	40.3	48.7	29.4	34.8	47.9		
<ul> <li>Northeast</li> </ul>	45.3	48.4	49.8	45.0	49.5	48.8		
• Central	52.5	50.1	62.8	35.2	46.7	55.9		
• South	48.9	56.1	66.6	49.9	52.3	55.8		

Note: P = Preliminary data

 $\Delta$ %. Represents percentage change from the same period last year Source: Tourism Authority of Thailand, Department of Tourism, and Bank of Thailand

#### International Tourists Classified by Nationality

	Chang	Change (%)		are (%)
Country	2009	2010	2009	2010
East Asia	-6.9	14.1	50.0	51.0
- Malaysia	-2.6	11.7	12.4	12.4
- China	-5.9	45.1	5.5	7.1
- Japan	-12.9	-2.0	7.1	6.2
- Korea	-30.5	32.0	4.4	5.2
- Laos	5.4	5.3	4.6	4.4
- Singapore	-1.1	2.8	4.0	3.7
Europe	1.9	6.9	28.7	27.4
- Russia	4.0	81.3	2.4	3.9
The Americas	-5.9	0.3	6.0	5.4
South Asia	16.2	25.0	5.8	6.5
Oceania	-7.4	10.1	5.2	5.1
Middle East	4.2	23.0	3.4	3.8
Africa	-5.5	13.0	0.8	0.8

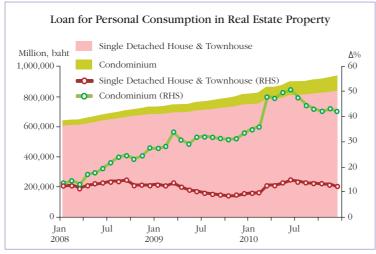
Note: Region classification is corresponding to Tourism Authority of Thailand's criteria Source: Tourism Authority of Thailand and Department of Tourism

#### 4.4 Real Estate Sector

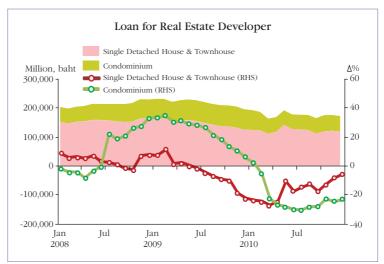
Real estate sector expanded following the economic recovery and the government's stimulus measures.

Real estate market experienced a broad-base expansion in response to the government's stimulus measures, low interest rates, and an intense competition among the financial institutions in granting housing loans. These environments prompted consumers to hasten their purchasing decisions on residential properties during the first half of the year. In particular, condominium sales showed a buoyant growth rate as a result of changes in consumers' preferences and lifestyle in urban areas.

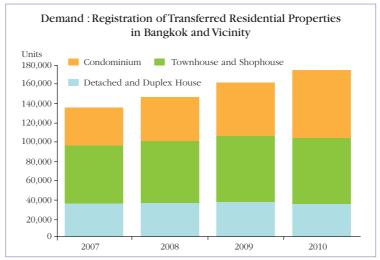
Despite a slowdown in demand as the government's stimulus measures expired in June 2010, housing demand started to gradually improve on the back of strong economic fundamentals. As a result, the registration of transferred residential properties in Bangkok and its vicinity grew by 10.5 percent from the previous year.



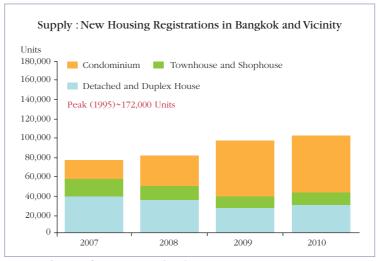
Source: Bank of Thailand



Source: Bank of Thailand



Source: Real Estate information Center (REIC)



Source: Real Estate information Center (REIC)

As housing demand increased, developers launched several new residential projects and accelerated the construction of many existing projects in order to complete the projects within the year. As a result, new housing registrations grew by 13.6 percent, reaching the highest level after the economic crisis in 1997, with condominium accounting for half of the new registrations. These developments were mirrored by a broader source of finance as more developers increased their reliance on debt securities, which led to a historical record of 99,040 million baht in debt securities issued by the real estate sector.

Given quick responses from the supply side, the average price of residential properties with approved loans from commercial banks in 2010 increased slightly by 2.4 percent from the previous year.

Going forward, the real estate sector is expected to expand continuously in 2011 as large developers plan to launch several new residential projects due to their confidences in the economic condition despite an increasing trend of construction costs and interest rates.



 $Source: Real\ Estate\ information\ Center\ (REIC)$ 

#### **Real Estate Indicators**

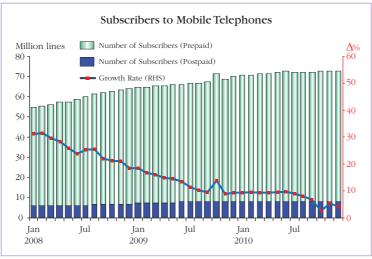
	2008	2009	2010	20	10
	2006	2009	2010	H1	Н2
1. Demand Side Indicators					
1.1 Registration of transferred residential properties in	146,451	161,240 <sup>R</sup>	178,128	109,183	68,945
Bangkok and its vicinity (units, REIC)	(8.2)	(10.1)	(10.5)	(50.0)	(-22.0)
- Single detached house and duplex house (units)	36,948	$37,845^{R}$	36,436	21,749	14,687
- Townhouse and shophouse (units)	63,688	$67,281^{R}$	68,779	41,832	26,947
- Condominium (units)	45,815	$56,114^{R}$	72,913	45,602	27,311
1.2 Outstanding loan for personal consumption in real	873,012	961,796	1,092,407	1,051,102	1,092,407
estate property <sup>1/</sup> (million baht, BOT)	(12.3)	(10.2)	(13.6)	(16.2)	(13.6)
- Low-rise residence (million baht)	691,575	757,551	850,328	820,351	850,328
	(12.8)	(9.5)	(12.3)	(14.6)	(12.3)
- Condominium (million baht)	54,231	72,316	102,548	91,654	102,548
	(27.4)	(33.4)	(41.8)	(50.4)	(41.8)
2. Supply Side Indicators					
2.1 New housing registrations in Bangkok and its	85,579 <sup>R</sup>	$94,977^{R}$	$107,904^{\rm E}$	$48,876^{R}$	59,028 <sup>E</sup>
vicinity (units, REIC)	(13.3)	(14.3)	(13.6)	(15.5)	(12.1)
- Single detached house and duplex house (units)	$36,914^{R}$	$30,136^{R}$	$33,322^{E}$	15,337 <sup>R</sup>	17,985 <sup>E</sup>
- Townhouse and shophouse (units)	$14,616^{R}$	$11,116^{R}$	$14,663^{E}$	$7,532^{R}$	$7,131^{E}$
- Condominium (units)	$34,049^{R}$	53,725 <sup>R</sup>	59,919 <sup>E</sup>	$26,007^{R}$	$33,912^{E}$
2.2 Outstanding loan for real estate developer <sup>1/</sup>	416,977	380,161	360,860	372,282	360,860
(million baht, BOT)	(22.1)	(-8.8)	(-5.1)	(-10.8)	(-5.1)
2.3 New issuance of private debt securities by real	65,926	70,368	$99,040^{\rm p}$	39,036	60,004 <sup>p</sup>
estate sector (million baht, BOT)	(10.8)	(6.7)	(40.7)	(11.2)	(70.2)
2.4 Net flow of foreign direct investment in real estate	33,957	24,974	19,326 <sup>p</sup>	14,460 <sup>p</sup>	4,866 <sup>p</sup>
sector (million baht, BOT)	(-18.5)	(-26.5)	(-22.6)	(19.9)	(-62.3)

Note: <sup>1/</sup> Outstanding credit extended by commercial banks (excluding foreign branches of Thai commercial banks) at end-period
<sup>2/</sup> Numbers in () are year-on-year growth rates
P = Preliminary data
R = Revised data
E = Estimated data
Source: Real Estate Information Center (REIC) and Bank of Thailand (BOT)

#### 4.5 Telecommunication Sector

Although telecommunication business continued to expand in 2010, its future growth may rely on other additional services which require the use of 3G technology.

Telecommunication usage increased from the previous year in response to a robust economic expansion, together with lower fees in both telephone and other additional services due to a more competitive environment. However, the future development of this sector cannot merely rely on an increase in the number of subscribers due to its saturated market condition. This is evidenced by a fall in the number of subscribers of fixed-line telephone, as well as a decline in the growth rate of subscribers for mobile phone from 9.1 percent last year to 5.2 percent this year. Nevertheless, growth opportunity exists for other additional services, which are expected to expand steadily. These services include internet service through the GPRS, short message service (SMS), and the participation of a social network such as Twitter and Facebook. Moreover, the unavailable 3G network service will hinder the industry's growth prospect going forward.



Source: TOT Corporation Pubilc Company and CAT Telecom Public Company Limited

## Telecommunication Services<sup>1/</sup>

(Million lines)	2000	2010			20	10		
(Willion lines)	2007	2010	Q1	Q2	Q3	Q4	Nov <sup>E</sup>	Dec <sup>E</sup>
Fixed-line telephones								
Bangkok metropolitan area	3.38	3.35	3.40	3.40	3.37	3.35	3.36	3.35
Fixed-line telephones								
Provincial area	3.46	3.30	3.44	3.42	3.35	3.30	3.31	3.30
Total fixed-line telephones	6.85	6.65	6.84	6.81	6.72	6.65	6.68	6.65
$\Delta\%$	-1.7	-2.8	-1.7	-1.6	-2.5	-2.8	-2.9	-2.8
Mobile phones								
Postpaid	7.42	7.84	7.53	7.55	7.69	7.84	7.76	7.84
Mobile phones								
Prepaid	62.08	65.24	63.24	64.49	63.98	65.24	64.41	65.24
Mobile phones	69.50	73.08	70.78	72.04	71.67	73.08	72.17	73.08
$oldsymbol{\Delta}\%$	9.1	5.2	9.1	9.4	6.5	5.2	5.2	5.2

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

E = Estimated datd

# Summary of the Economic/Business Information Exchange Program between the Bank of Thailand and the Business Sector in 2010

#### Overall economic/business conditions in 2010

According to the Economic/Business Information Exchange Program between the Bank of Thailand and 828 firms nationwide in 2010, overall business conditions continued to expand despite facing several negative economic shocks including drought, political instability, flooding, and a continuous appreciation of the Thai baht. Robust business performance was supported by strong economic fundamentals, as well as the stimulus measures from the government. However, businesses are expected to encounter various risks and hindrances going forward including difficulties in price adjustments, higher production costs, labor shortages, uncertainty in the global economy, and the political instability.

**Private consumption:** In 2010, consumption expanded favorably on the back of robust economic growth, higher farm income, more aggressive businesses' marketing strategies, as well as eased credit standards from financial institutions. Meanwhile, the political unrest during April-May and the flooding during October-November merely resulted in a temporary slowdown in consumption.

Private investment: Thailand's investment in 2010 registered a robust expansion, especially in automobile, electronics and electrical appliances industries. In addition, investment demand for production of high technology products, as well as for substituting labor input, increased in several sectors such as automotive parts and agro-industries. For the wholesale and retail sectors, more branches and warehouses are expected to be opened throughout 2011.

Production and exports: In 2010, the production and exports of automobile, air-conditioners, electronics, agricultural products, and food processing products expanded particularly well. Political instability moderately affected the transportation of goods and raw materials in the short run. Meanwhile, the appreciation of the Thai baht in the fourth quarter led to producers' adjustments by improving productivity, shortening advance booking of orders, seeking new markets, using hedging instruments, and increasing prices of products. However, an upward price adjustment was limited due to intense competition, and also depended on each business' negotiating power.

Credits in the banking system: Credits granted to both large corporations and SMEs expanded well, especially in the last quarter of the year. For large corporations, loans for fixed investment accelerated relatively faster than loans for working capital due to the continued demand for capacity expansion in 2011. Meanwhile, the credit standards for corporate loans remained approximately stable throughout 2010. For consumer loans, housing loans rose significantly prior to the expiration of stimulus measures in the real estate sector while leasing loans also increased in response to solid performance of car sales throughout the year. In terms of credit quality, the non-performing loan ratio and delinquency rate remained low.

Real estate: The sector expanded from the previous year on the back of strong demand for residential properties owing to the government's stimulus measures, low interest rate environment and the restoration of consumer confidence. The improvement enhanced developers' confidences, which led to the launching of new residential projects. In particular, the condominium sector recorded highest expansion in history due to strong demand for accommodation in the inner city.

Employment: Many industries faced labor shortage problems as a result of the skill mismatch and seasonal labor moving to the agricultural sector. This caused businesses to adjust by extending over-time working hours, making use of outsourced labor, employing more migrant workers, and increasing wages, which raised difficulties for SMEs to compete against wages of large corporations.

Production costs and prices: An upward cost pressure persisted throughout the year due to rising demand for raw materials, as well as an upward trend in oil and other commodity prices. Nevertheless, businesses adjusted by enhancing their productivity instead of raising prices due to intense competitions.

Business constraints and risks: During the first half of the year, political instability became the top hindrance for business constraint. However, after political tensions subsided, businesses perceived difficulties in price adjustment as the most constraining factor. This was due to intense competition and price control measures imposed by the government while businesses faced rising cost pressure from rising oil and raw material prices, as well as higher wages.

#### Real Estate Boom: Risk of Price Bubble?

The year 2010 was the golden year for real estate businesses. At the same time, the sector's high growth rate raised concerns regarding risks to accumulation of asset price bubble as experienced during the 1997 crisis.

A real estate price bubble is characterized by a sharp and continuous increase in real estate prices which induce circles of speculations, mirrored by expansion in housing loans. Therefore, proper indicators of asset price bubble includes (1) a sharp and continuous increase in asset prices and (2) a considerable and continuous increase in housing loans granted to developers and consumers. These two signs were observed in the US market where the house price index rose by 10 percent, on an average, per year over ten consecutive years, with the housing loan growth expanding by more than 10 percent per year for 8 consecutive years.

For Thailand, no such signs were observed in housing loans for real estate sector.

Nevertheless, favorable economic conditions, as well as a sustained and low interest rate environment can be the recipe for excessive risk taking behavior which facilitated the buildup of asset price bubble or financial imbalances. Thus, although the current indicators showed no sign of asset price bubble, past experiences from several countries showed that bubbles were often observed only when close to or after bursting. The authority must therefore be vigilant against such developments and monitor the situation closely from all dimensions.

In 2010, risk taking behavior started to become more apparent as launches of new residential projects increased significantly, half of which accounted for condominium projects. Meanwhile, housing demand became moderate after the expiration of the government's stimulus measures in the real estate sector by mid 2010. In response to decelerated demand, developers introduced aggressive marketing strategies such as allowing home buyers to have a first year move in privilege free of charge before paying the first installment as well as granting loans equal to collateral value, and paying installments with 0-percent interest rate in early periods. These strategies attracted more home buyers with insufficient purchasing power or subprime customers. At the same time, financial institutions tended to grant more housing loans with loan-to-value ratio (LTV) of more than 90 percent owing to intense competition. These loans were mostly for residential properties with price below 10 million baht. Moreover, although the number of non-performing loans (NPL) of the aforementioned segment was low, it tended to increase over time. These approvals of loans with higher LTV ratio resembled the situation observed at the nascent stage of real estate price bubble in the U.S. where the observed LTV increased from the normal ratio of 70-80 percent to 120 percent.

Given the aforementioned risk taking behavior under favorable economic environment, replenished confidence and accommodative interest rate, the timing was proper for the Bank of Thailand to impose preventive macro prudential measures<sup>1/</sup> in order to reduce such risks going forward. As a result, BOT launched the new measure on housing loans with property price below 10 million baht, which will be effective in January 2011 and January 2012 for condominiums and low-rise housing, respectively. The new measure will employ variable risk-wieght (RW) instead of the previously set risk-wieght of 35 percent. Loans with high LTV ratio for this group would be subject to high risk-weight. This measure aimed to increase financial institutions' cost of funding on such loans but did not confine financial institutions from granting loans at any LTV ratio. Financial institutions would have to manage their risks accordingly for loans with higher than the assigned LTV ratio. Overall, the measure acted as a signal to all market participants, which encouraged them to become more prudence and ultimately helped maintain economic stability.

Supervision measures for housing loans by commercial banks						
2009	• Set Risk Weight (RW) <u>unchanged</u>	• Cancel old rule of LTV not more than 70%				
	$LTV \le 100\%$ , set RW 35%	• <u>Set new RW</u>				
	LTV > 100%, set RW 75, 100%	$LTV \le 80\%$ , set RW 35%				
		LTV 80 - 100%, set RW 75%				
		LTV > 100%, set RW 75, 100%				
2010	• <u>Set new RW</u>	• <u>Set RW unchanged</u>				
	- For condominium:					
	$LTV \le 90\%$ , set RW 35%	$LTV \le 80\%$ , set RW 35%				
	LTV 90-100%, set RW 75%	LTV 80 - 100%, set RW 75%				
	LTV > 100%, set RW 75, 100%	LTV > 100%, set RW 75, 100%				
	(Effective on preliminary contract from	n 1 January 2011)				
	- For low-rise housing:					
	$LTV \le 95\%$ , set RW 35%					
	LTV 95-100, set RW 75%					
	LTV > 100%, set RW 75, 100%					
	(Effective on preliminary contract from	n 1 January 2012)				
ource:Ba	nk of Thailand					

<sup>&</sup>lt;sup>1/</sup>The Notification of the Bank of Thailand No. FIPG. 10/2553. Re: Regulation on Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA) (No. 3).

# 5. Monetary Conditions

# 5.1 Monetary Conditions and the Exchange Rates

Sustained credit growth and low interest rates continued to accommodate the pace of economic expansion. Meanwhile, the short-term money market rates rose in line with the policy rate hike.

Monetary conditions remained accommodative to economic growth

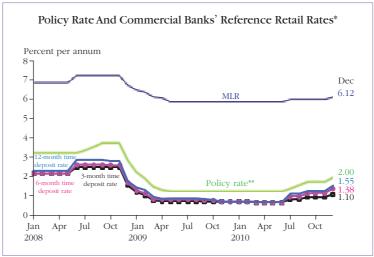
During the first half of the year, concerns over risks to global economic growth and the domestic political instability were major factors for the MPC to maintain the policy interest rate at 1.25 percent per annum. Nonetheless, in the latter half, risks to global growth declined and the Thai economy continued to expand robustly. As a result, inflationary pressure started to rise with some possibilities of breaching the upper band of the target range in the future periods. The MPC therefore decided to gradually raise the policy interest rate 3 times, totaling 0.75 percent per annum, from 1.25 to 2.00 percent per annum by the end of 2010.

At the end of 2010, the 1-day repurchase rate and the overnight interbank rate (quarterly averaged) increased from the previous year to 1.48 and 1.36 percent per annum, respectively, in line with the policy interest rate.

Commercial banks' reference retail rates<sup>4/</sup> increased in tandem with the policy interest rate.

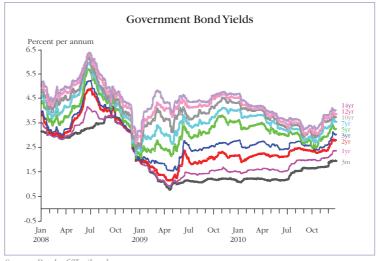
Commercial banks' reference retail deposit and lending rates started to adjust upward in the second half of the year, following the policy rate increase. The minimum lending rate (MLR) and the 12-month deposit rate of the four largest commercial banks increased by 0.26 and 0.87 percent to 6.12 and 1.55 percent per annum, respectively, at the end of the year.

<sup>&</sup>lt;sup>4/</sup> Average rate of the 4 Largest commercial banks.



Note: \*The average between minimum and maximum rates of the 4 largest commercial banks at end-period

Source: Bank of Thailand



Source: Bank of Thailand

# Short-term government bond yield increased in line with the MPC's signal of policy normalization.

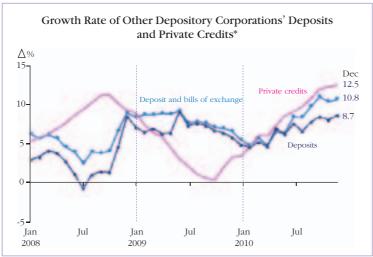
Short-term government bond yield gradually rose during the second half of 2010 as expectation of interest rate outlook rose in tandem with the MPC's policy signal. This was despite the decline in medium and long-term yields of government bonds since the beginning of the year due to an increase in investors' demand, especially from the insurance companies, as well as the

<sup>\*\* 14-</sup>day RP was applied as a policy interest rate instead of 1-day RP on January 17, 2007

expectations of lower supply of government bonds as a result of higher than expected fiscal revenues. Nevertheless, in the last quarter, both medium and long-term yields of government bonds started to adjust upward in line with the policy interest rate.

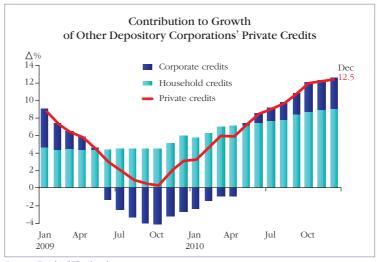
Private credits accelerated following the economic expansion.

Credits to household accelerated in line with robust private consumption growth. In particular, auto leasing loans accelerated rapidly following the new historical record of car sales. Meanwhile, housing loans continued to grow partly due to stimulus measures in the property sector. Loans extended to the business sector grew at a more moderated pace, partly a result of businesses' diversification of funding through debt and security issuance.



Note: \*ODCs consists of domestically registered commercial banks, branches of foreign banks, international banking facilities, finance companies, Specialized Financial Institutions, saving cooperatives, and money market mutual funds.

Source: Bank of Thailand



Source: Bank of Thailand

Commercial banks and SFIs accelerated deposits and bills of exchange accumulation to accommodate higher credit demand.

Deposits and bills of exchange of commercial banks and specialized financial institutions expanded by 10.8 percent from the previous year, partly due to the return of funds from matured foreign investment funds (FIFs), as well as the acceleration in deposit accumulation by financial institutions. These developments led to ample liquidity, which was adequate to accommodate the credit demand going forward.

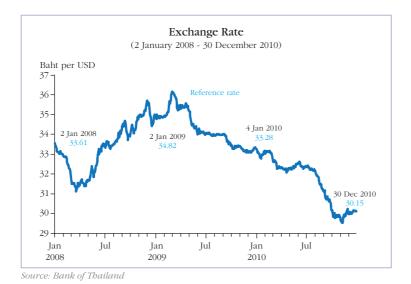
Monetary base and broad money expanded in line with increasing economic activities.

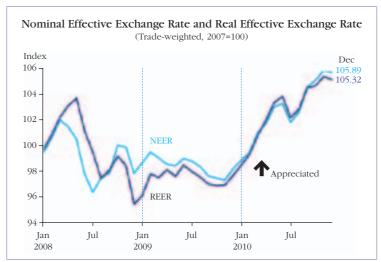
Rapid expansions of the monetary base in the first half of 2010 resulted from an increase in precautionary demand for cash during the domestic political instability. Nevertheless, such demand decreased after the incident subsided, which resulted in an overall expansion of the monetary base by 12.7 percent at the end of the year in line with the pace of economic expansion.

Broad money expanded by 10.9 percent from the previous year in tandem with the expansion of the monetary base.

# The Thai baht appreciated against the U.S. dollar due to inflows of capital and surpluses in the current account.

At the end of 2010, the Thai baht stood at 30.15 baht per U.S. dollar, appreciating against the U.S. dollar by 10.6 percent from the end of 2009 due to surpluses in the current account and inflows of the foreign capital into equity and bond markets. This was due to the economic growth differentials between the emerging market economies and the major industrialized countries which induced a surge in capital inflow into the region, including Thailand. Nevertheless, the Thai baht appreciation became moderate toward the end of the year due to several factors, including investors' concerns on the public debt problem in Ireland, tighter monetary condition to curb inflation in China, tension within Korean peninsula, as well as investors' optimistic view on the U.S. economic recovery.





Source: Bank of Thailand

The Nominal Effective Exchange Rate<sup>5/</sup> (NEER) appreciated by 4.5 percent from the previous year on a yearly average basis as a result of the weakening of the U.S. dollar, euro, and pound sterling. In particular, the U.S. dollar depreciated following concerns regarding uncertainties in the economic recovery. Meanwhile, the euro and pound sterling depreciated from concerns over the capability of fiscal deficit reduction to alleviate the public debt problem in Portugal, Ireland, Greece, and Spain. In addition, the expected accommodative stance of the Bank of England also exerted a depreciation pressure on the pound sterling.

The Real Effective Exchange rate (REER), which takes into account the effect of inflation to reflect the country's price competitiveness, appreciated by 5.5 percent, in line with the NEER appreciation. Meanwhile, the movement of Thailand's price index was in line with the regional countries.

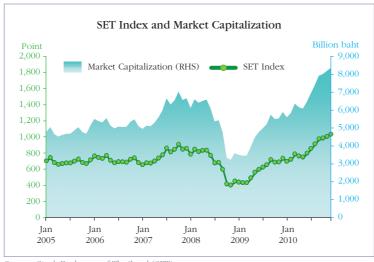
<sup>5&#</sup>x27; The Bank of Thailand released the new series of Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) indices, with the updated trade weight and base year (in 2007). The first dissemination was scheduled in February 2011 onward.

## 5.2 Equity and Bond Markets

Large capital inflows provided opportunity for the private sector to raise funds from the equity and bond markets.

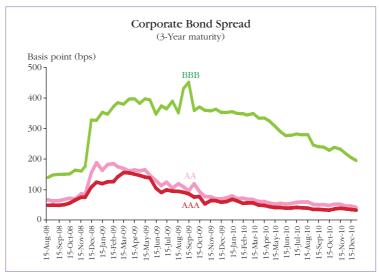
The difference in the pace of economic recovery between the Asian and the major industrialized countries resulted in greater foreign investments into bond and equity markets in developing countries including Thailand. As a result, the Stock Exchange of Thailand (SET) index rebounded sharply by 40.6 percent from the end of 2009, representing the third largest increase in the world and the second largest increase in Asia after Indonesia. The year-end market capitalization therefore grew by 41.9 percent from 2009, reaching 8.33 trillion baht or 82.5 percent of GDP, the highest record since the establishment of the SET.

Non-financial corporate sectors, especially in the transportation, manufacturing, and real estate sectors, increasingly raised funds through the equity channel. Thus, the newly-issued equities for the whole year were amounted to 87.5 billion baht, increasing by four times compared to the previous year.



Source: Stock Exchange of Thailand (SET)

The private sector increasingly raised fund from the equity and bond markets.



Note: 1. Only bonds with more than 10 transactions in a year, or with outstanding amounts exceeding 2 billion bahi

2. The bond spread was calculated on the 15th and the last trading day of each month

In addition, the private sector also raised funds through the bond market which resulted in 1.3 trillion baht of corporate bond outstanding by the end of the year, exceeding last year's amount by 54 billion baht.

Meanwhile, the outstanding amount of government bonds at the end of the year rose to 5.6 trillion baht from 779.6 billion baht in 2009. The large government bond issuance was attributable to the government financing for the Strong Thailand Projects, as well as the Bank of Thailand's bonds as part of the sterilization process.

The improved economic conditions and financial positions of the corporate sector led to a reduction in the risk premiums as reflected by a continuous decline in corporate bond spread.

Nevertheless, the uncertainties regarding the U.S. economic recovery and the sovereign debt problem in the European countries, vis-a-vis the robust economic growth in the emerging market economies, led to differences in economic growth, inflationary pressure and monetary policy between the major industrialized countries and the emerging economies. Therefore, capital flows going forward are expected to remain highly volatile.

## 5.3 Banking System Performance

Profits of the commercial banking system increased from the previous year in line with expansions of credits and deposits. Overall, the financial position of the commercial banks remained strong.

The banking system registered a total operating profit of 213.3 billion baht, increasing by 15.1 percent from the previous year. In particular, the Net Interest Margin (NIM) stood at 2.8 percent, close to the previous year. In addition, after deducting taxes and provision expenses from total operating profit, the banking system recorded a net profit of 123.0 billion baht, which translated into a 34.5 percent growth from the previous year. As a result, return on assets (ROA) increased from 0.9 percent to 1.1 percent.

Net interest income also increased from the previous year. This was due to the greater reduction in the deposit rates than the lending rates, resulting in a larger decline in the effective deposit rates relative to the effective lending rates.

Non-interest income of the banking system also improved from the previous year, edging up by 16.0 percent, mainly as a result of higher income from fees and services in response to the adjusted banking strategies. In addition, profits were also derived from investments in securities and foreign exchanges while non-interest expenses grew by 7.8 percent, partly due to higher personnel expenses.

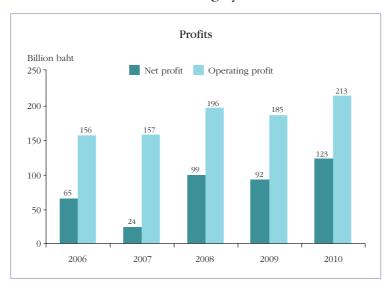
The overall financial position of the banking system remained resilient. The banking system's capital base strengthened as a result of profit and capital increase, and thereby, the ratios of capital to risk-weighted assets (BIS ratio) in 2010 rose to 16.2 percent, with the ratio of Tier-1 capital of 12.5 percent, exceeding the international standards by a substantial amount.

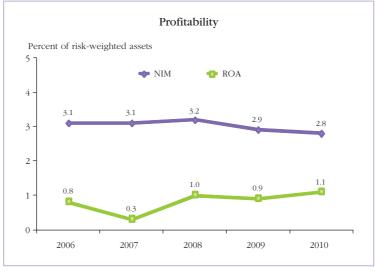
The ratios of gross non-performing loans (gross NPLs) to total loans of the banking system declined to

Financial position of the commercial banks remained strong.

3.6 percent at the end of 2010. In particular, the gross NPLs amounted to 312.6 billion baht, decreasing by 63.5 billion baht from 2009. This was due to a reduction in NPLs of both corporate and consumer loans. Moreover, the delinquency ratio (overdue loans between one to three months) also declined despite a robust credit growth on the back of economic expansion. These improvements would contribute to the stability of the banking system going forward.

Performance and Important Financial Indicators of the Banking System





Source: Bank of Thailand



## Performance of the Banking System

Billion baht	2009	2010 <sup>p</sup>	$\Delta\%$
1. Interest income	404.3	415.1	2.6
1.1 Credit	311.1	307.0	-1.3
1.2 Interbank and money market items	20.8	26.0	24.9
1.3 Leasing and financial rent contract	26.7	29.2	9.5
1.4 Financial investments	45.7	52.8	15.6
2. Interest expense	114.2	99.8	-12.6
2.1 Deposit	78.2	58.3	-25.4
2.2 Interbank and money market items	7.9	12.8	63.1
2.3 Borrowings	28.2	28.7	1.7
2.4 Fees and charges	0.0	0.0	1,300.0
3. Net interest income	290.1	315.2	8.6
(3) = (1) - (2)			
4. Non-interest income	135.0	156.6	16.0
5. Operating expense	239.7	258.5	7.8
6. Operating profits	185.4	213.3	15.1
(6) = (3) + (4) - (5)			
7. Loss debt, doubtful of loss debt and loss			
from debt restructuring	56.4	44.1	-21.9
8. Taxes and special items	36.8	46.2	25.7
9. Net profits (9) = (6) - (7) - (8)	92.2	123.0	34.5

Note: The banking system comprises of 32 commercial banks, including 17 local banks and 15 foreign bank branches

P = Preliminary data

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

Source: Bank of Thailand

# 6. Assessment of Thailand's **Economic Stability**

Thailand's economic and financial stability remained satisfactory. Nevertheless, a rising trend in production costs and tightened labor market would constitute inflationary pressure going forward.

#### 6.1.1 Price Stability and Inflationary Pressure

An increase in production costs and robust economic growth resulted in accelerated inflation from the previous year. Going forward, these factors are expected to remain contributing to inflationary pressure.

Inflationary pressure continued to build up markedly.

Headline and core inflation accelerated from the previous year by 3.3 and 1.0 percent, respectively. This was attributed to rising energy prices in line with the global oil price. In addition, reduced domestic and global supply of agricultural products from unusual weather conditions, together with rising domestic demand on the back of the economic recovery, all resulted in an increase in prices of agricultural products and raw foods.

Although recent growth developments led to an increase in demand pressure, the pass-through of higher production costs to prices of goods and services remained limited due to political uncertainties, flood, as well as the government's request for producers to withhold price increases in order to maintain consumers' purchasing power. As a result, the pass-through of higher production costs into core inflation was only partial.

The acceleration of inflation was also a result of additional factors including the termination of the government's subsidy on water charges in April 2010, which increased the cost in water expenditures as well as the disappearing deflationary effects of the 15-year free education program after 1-year implementation.

Going forward, a more pronounced inflationary pressure is expected from the gradual pass-through of production costs to prices withheld from the previous year and a higher cost pressure from rising commodity prices following the global economic expansion. Furthermore, robust economic growth from strong fundamentals within the country would facilitate a higher pass-through of production costs to prices in the period ahead.

Price Indices
(Percentage change from the same period last year)

	Weight			2010			
	(percent	)2009	Year	Q1	Q2	Q3 Q4	
Headline Consumer Price	100.0	-0.9	3.3	3.8	3.3	3.3 2.8	
Index							
- Core Consumer Price Index	75.5	0.3	1.0	0.4	0.9	1.2 1.2	
- Raw food	14.6	5.6	10.3	8.2	9.2	13.8 10.2	
- Energy	9.9	-13.1	9.7	26.3	10.9	1.5 3.2	
Producer Price Index	100.0	-3.8	9.4	12.0	9.3	10.3 6.3	
- Agricultural products	9.5	5.8	22.1	21.8	16.4	38.7 14.2	
- Mining products	2.4	-10.9	3.0	11.3	3.1	-1.8 -0.2	
- Manufactured products	88.1	-5.6	6.5	9.7	7.6	4.4 4.5	

Source: Trade and Economic Indices Bureau, Ministry of Commerce

#### 6.1.2 Labor Market Stability

Labor market tightened due to a robust employment growth following the strong economic condition. Thus, firms experienced higher difficulty in recruiting new workers, which put an upward pressure on wages.

Employment expanded by 0.9 percent in response to a strong economic condition, characterized by a more competitive environment for labor recruitment across economic sectors. Employment in trade and service sectors registered a growth rate of 3.1 percent and 2.9 percent, respectively. However, employment in the manufacturing sector contracted despite a strong production growth in the export-oriented sectors such as electronics and vehicles. This was partly due to a

Labor market continued to experience a tight labor supply.

shift in labor from the manufacturing sector to trade, service, and agricultural sectors, as well as more labor becoming self-employed.

**Employment Conditions** 

			2010					
Δ%	2009	2010	H1	H2	Q1	Q2	Q3	Q4
Employment	1.9	0.9	1.0	0.8	2.6	-0.5	0.8	0.7
Agriculture	0.0	-1.0	-3.1	0.8	1.8	-7.4	-1.2	2.9
Non-agriculture	3.1	2.1	3.4	0.7	3.0	3.8	2.3	-0.8
Manufacturing	-1.5	-0.5	0.7	-1.6	-0.4	1.7	-2.2	-1.1
Construction	4.0	2.3	5.3	-1.3	0.7	9.9	1.9	-4.4
Trade	5.1	3.1	4.0	2.3	2.9	5.1	4.1	0.5
Service	4.7	2.9	4.3	1.6	5.8	2.8	4.0	-0.8

Source: National Statistic Office

Various Indicators of labor market conditions pointed to labor shortage problems.

Tight labor market condition worsened in 2010, reflected by a rise in the ratio of vacancy to unemployment rate from 5.7 percent in 2009 to 10.5 percent in 2010. Unemployment rate dropped to 0.9 percent since the third quarter of 2010. Moreover, the long-term unemployment rate reduced from 1.1 percent in 2009 to 0.08 percent in 2010, indicating a shorter search time for the majority of unemployed persons. The BOT's business survey<sup>6/</sup> also found a larger number of firms experiencing difficulty in recruitment, reflected by the level of recruitment difficulty index, which was lower than 50 throughout 2010.

 $<sup>^{6\!/}</sup>$  Business Sentiment Index surveyed by the Bank of Thailand

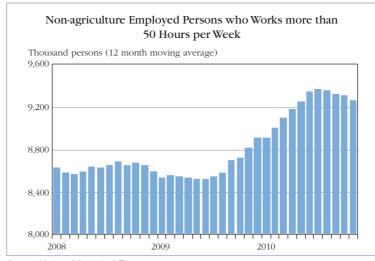
#### **Labor Market Indicators**

					20	010		
Major indicators	2009	2010	H1	H2	Q1	Q2	Q3	Q4
Unemployment								
(Thousand persons)	572.3	402.2	468.9	335.5	431.7	506.1	341.0	329.9
Unemployment rate (%)	1.5	1.0	1.2	0.9	1.1	1.3	0.9	0.8
Underemployed persons								
(Thousand persons)	604.9	520.8	560.0	481.7	547.9	572.1	516.5	446.8
Underemployment rate (%	6) 1.6	1.3	1.5	1.2	1.4	1.5	1.3	1.1
Long-run unemployment*								
(Thousand persons)	42.7	29.8	39.6	19.9	44.5	34.7	20.4	19.4
Long-run unemployment								
rate (%)	1.11	0.08	0.10	0.1	0.12	0.09	0.05	0.05
Vacancy/Unemployment								
rate (%)	5.7	10.5	9.1	12.0	11.1	7.1	11.9	12.0
Recruitment difficulty								
Index	55.6	42.4	43.7	41.0	44.4	43.1	41.5	40.5

 ${}^*\!Long\!-\!run\ unemployment\ refers\ to\ person\ being\ unemployed\ for\ more\ than\ 1\ year$ Source: National Statistic Office

# Scarce labor led to higher working hours and wages.

Labor shortage problems prompted firms to extend working hours, as indicated by a continuous increase in the number of non-agricultural labor with working hours more than 50 hours per week throughout 2010 and the number of labor within this group stood much higher than the pre-crisis period. This led to an increase in wages on both agricultural and non-agricultural sectors. Thus, the overall average earnings in 2010 rose by 6.5 percent to 9,262.2 baht per month per person.



Source: National Statistic Office



Source: National Statistic Office

# 6.1.3 Stability of Other Sectors

Overall, there were no signs indicating an accumulation of financial imbalances in the Thai economic and financial system.

Apart from price stability, stability of other sectors such as corporate, household, and financial markets are also deemed crucial in assessing the overall balance of the economy.

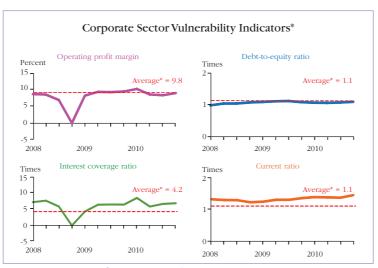
#### Corporate sector stability (non-financial institution)

The performance of non-financial institution companies listed on the Stock Exchange of Thailand continued to improve since the latter half of 2009. By the third quarter in 2010, the operating profit margins (OPM) and the interest coverage ratios (ICR) rose to 9.0 percent and 6.9 times, respectively, close to the average levels during the pre-crisis period in 2008.

The appreciation of the baht had limited impact on the performance of the export-oriented sectors due to their continuous business adjustments. Meanwhile, other business sectors benefited from a robust expansion of domestic demand. As a result, financial positions of the corporate sector remained strong.

Risk factors to non-financial corporate stability going forward include:

- Uncertainties regarding the economic recovery of the major industrialized countries.
- Higher cost of production, from both raw materials and wages.
- Political uncertainties that could undermine consumer and business sentiments.
- Fluctuation of the capital flows that may affect volatility of the Thai baht.



Note: \* Quarter average of 2000Q1 - 2007Q4 Source: Stock Exchange of Thailand, calculated by the Bank of Thailand Financial positions of the corporate sector remained strong.

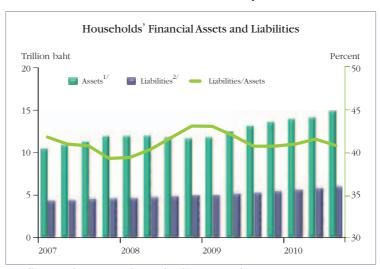
Households' income increased in line with economic recovery.

#### Household Sector Stability

Risks to households' income and employment remained low from continuous economic recovery, which led to higher demand for labor and rising wages. In turn, greater household income helped improve their debt servicing ability, reflected by a low NPL ratio of consumer loans. Nevertheless, interest rates which remained at a low level induced households to accumulate more debts as reflected by a robust expansion in personal loans, especially auto leasing and mortgages.

Looking ahead, ample liquidity and eased credit standards from the previous periods could lead to excessive indebtedness that may affect households' financial positions and debt servicing ability.

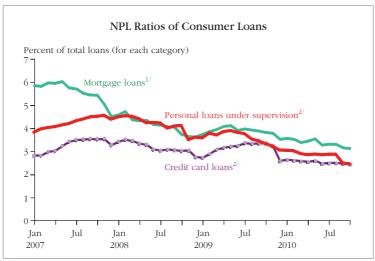
#### **Houshold Sector Vulnerability Indicators**



<sup>1/</sup> Financial institutions' deposits, bonds, equities and insurance

2' Total loans from financial institutions and non-banks

Source: Bank of Thailand's calculation



Note: 1/ Commercial bank loans

<sup>2</sup> Total loans from commercial banks and non-banks

Source: Bank of Thailand

#### **Government Sector Stability**

Government sector stability remained satisfactory but risks going forward have increased. Even though the public debt to GDP at the end of December 2010 stood at 42.4 percent, well below the threshold for debt sustainability of 60.0 percent, an disproportionate rise in current expenditures and long-term contingent liabilities with regard to government revenue could lead to an increase in public debt and affect the government's financing ability.

Public debt remained below the threshold for debt sustainability.

#### Real Estate Sector Stability

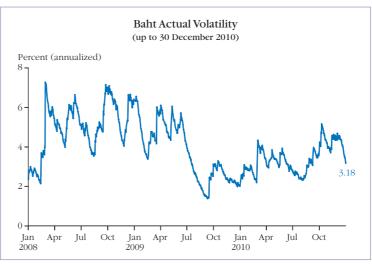
At present, there are no apparent signs of accumulated imbalances in the real estate sector. Adjustments of demand and supply were coherent, resulting in a modest increase in overall prices. Nevertheless, competition in mortgage lending became more intense, reflected by a rising proportion of mortgage lending with loan to value (LTV) ratio higher than 90 percent. As a result, the Financial Institutions Policy Committee (FIPC) announced a measure to discourage high LTV mortgage lending by increasing the associated risk-weighted assets applied to loans of property prices below 10 million baht. The measure took effect from 1 January 2011 onward for condominiums and will be applied from 1 January 2012 onward for low-rise housing.

There are no apparent signs of asset price bubble.

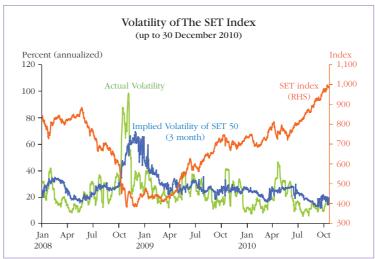
# Financial Market Stability

Volatility of the financial market in 2010 decreased on average.

Financial market stability improved from the previous year, both in the money and equity markets, reflected by lower volatilities of the baht-to-U.S. dollar exchange rate as well as the lower average volatility of the SET index compared with 2009. Nevertheless, volatility in such indicators increased during the last quarter of the year, in line with greater foreign inflows to the bond and equity markets.



Source: Bank of Thailand



Source: Stock Exchange of Thailand and Bloomberg

#### **Banking System Stability**

Banking system stability remained sound due to improvement in income and debt servicing ability of the business and household sectors which resulted in an improvement in loan quality. As a result, gross NPL and delinquent loans (loans with one to three month overdue) to total loans at the end of 2010 decreased from the end of the previous year to 3.6 and 2.6 percent, respectively.

Loan quality improved, resulting in banking system stability.

Looking ahead, risks to asset quality and overall banking system stability include:

- Uncertainties regarding the recovery of the major industrialized economies, which may affect exports and the quality of loans extended to exporters.
- An upward trend of interest rates that would result in a higher cost of funding for commercial banks, as well as a decline in debt servicing ability of borrowers, particularly retail customers.
- Compliance of new standards, especially the Basel III and the International Financial Reporting Standards (IFRS), which may increase the cost of doing business for financial institutions.

# 6.2 External Stability

External stability of the Thai economy remained strong, reflected by a continued surplus of the current account and a high level of international reserves. Although the ratio of short-term external debt to total external debt increased, most of the external debt was low-risk in nature, such as the short-term borrowings by banks to cover higher corporate hedging activities during the period of baht appreciation, and granted of trade credits to support economic activities.

Other indicators, including the solvency indicators and liquidity indicators, pointed to a strong external stability. Even though the ratio of external debt to GDP and the ratio of outstanding external debt to export External stability remained satisfactory.

earnings somewhat increased, these ratios remained low compared to international benchmarks. Meanwhile, the ratio of international reserves to import value and to short-term debt remained high.

#### **External Stability Indicators**

					20	10 <sup>p</sup>	
	2008	2009	2010	Q1	Q2	Q3	Q4
Indicators of debt servicing ability							
Current account <sup>1/</sup> / GDP (%)	0.7	8.3	4.6	7.1	2.2	2.5	6.4
Debt / GDP <sup>2/</sup> (%)	31.4	28.8	33.8	29.5	29.6	32.3	34.0
Debt / XGS <sup>1/2/</sup> (%)	41.8	39.3	46.7	40.4	40.6	44.1	46.7
Debt service ratio (%)	8.2	7.5	4.6	5.6	4.9	4.0	3.5
Indicators of liquidity							
Gross reserves / ST debt	3.3	4.2	3.7	4.0	4.0	3.9	3.7
Gross reserves / Import	7.6	12.6	11.5	11.7	10.9	11.4	11.5
ST debt / Total debt (%)	44.2	44.0	48.2	45.1	45.8	46.7	48.2

Note:: 1/ Since October 2006, "Reinvested Earnings" has been recorded as part of direct investment in the financial account and its contra entry recorded as "Investment Income" in the current account. The series have been revised back to 2001.

Source: Bank of Thailand

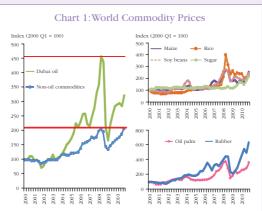
 $<sup>^{2\</sup>prime}$  The new series of the external debt to GDP was revised by adopting the World Bank's approach: using the averaged quarterly GDP for the last 3 years starting from the GDP  $of the \ quarter \ in \ question \ (while \ the \ previous \ approach \ was \ calculated \ by \ dividing \ the$ external debt outstanding of the quarter in question by the average GDP of the same year and the previous 2 years) P = Preliminary data

# Risk of a Commodity Crisis and Implication to Inflation

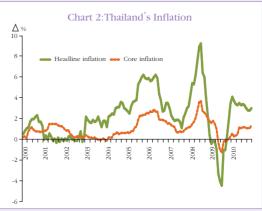
Since the global economy began to recover from the latest financial crisis, commodity prices began to rise, especially for oil and agricultural prices, which represented a large share in the consumer price index baskets among developing countries. This development poses important threats to inflation and the recovery momentum for both the global and Thai economies in 2010 - 2011, and raises a question whether the economy can withstand strong surges in commodity prices as experienced during the 2007 - 2008 period.

#### What happened before the financial crisis?

Since the year 2000, the Asian economies, particularly China and India, grew and exerted greater influences on international trade, which contributed much benefit to the global economic growth and inflation as a result of lower production costs. However, their continued economic expansions led to several changes in the economic structure; higher national income led to stronger consumption demand for economic resources such as oil and agricultural products. Demands for agricultural products were affected directly by growing population as well as indirectly by higher demand for energy crops. In addition, investors began to use commodity as an asset class for portfolio diversification. These demand pressures, together with other factors such as supply constraints, risks from occurrences of natural disasters and political conflicts in oil producing countries, all



Source: IMF, Bloomberg, calculated by the Bank of Thailand



Source: Ministry of Commerce

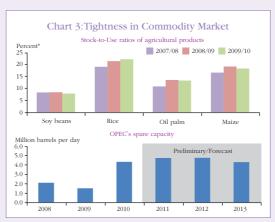
exacerbated the volatility in commodity prices. This situation tended to persist unless the structure of demand and supply became more balanced.

Prices of other commodities such as metal also accelerated. However, these prices have little impact on inflation due to their relatively smaller share in the consumer price index basket. In addition, the indirect impact from the pass-through of production costs into goods prices in the basket was minimal.

As an outcome of aforementioned development, the commodity prices accelerated substantially during 2007 - 2008, with the Dubai oil price reaching the highest record of 141.88 U.S. dollars per barrel on 15 July 2008. Meanwhile, the International Monetary Fund (IMF)'s non-fuel commodity price index also rose significantly with prices of rubber, oil palm, soy bean, rice, maize and sugar being the main drivers. (Chart 1) The global inflation therefore increased markedly, especially for developing countries<sup>2/</sup> where inflation increased from 6.5 percent in 2007 to 9.2 percent in 2008. For Thailand, the headline inflation accelerated from 2.3 to 5.5 percent during the same period, with the highest level registering at 9.2 percent in July 2008. This surge in the headline inflation also passed through to core inflation, which increased by 3.7 percent in the same month. (Chart 2)

#### Current condition and outlook for commodity prices

Improvements in the global economic prospect, particularly the Asian economies, have once again called for a close monitoring of commodity prices given the similar situation to the one in 2008. The difference was that recoveries in advanced economies have not fully recovered while the Chinese economy began to show signs of financial vulnerabilities. Thus, the risk to global economic growth remained, which slightly lowered demand pressure on commodities, especially on oil.



\*Stock-to-Use = Ending stock / (Total Use) x 100, 2008/09 and 2009/10 are forecasts Source: USDA, EIA calculated by Bank of Thailand

Nevertheless, the aforementioned supply constraints and the return of investors into commodity markets, as well as occurrences of flood in farming areas in many countries, all caused agricultural prices to rise markedly. However, tightness in supplies of both oil and agricultural products was considered to be lower than the pre-crisis period, as reflected by relatively higher stock-to-use ratios of agricultural products and OPEC spare capacity. (Chart 3) As a result, the overall pressure toward a wide-spread commodity price crisis is expected to be limited. Nonetheless, this issue requires a close monitoring especially as the global economic recovery begins to strengthen.

#### Implication to Thailand's inflation

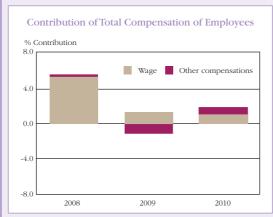
Going forward, Thailand's inflation is expected to accelerate from both oil and agricultural prices, with a higher pass-through of prices into other goods and services in the core consumer price index basket. Given producers having been bearing these cost burdens for some time while Thailand's economic fundamentals remaining strong, the monetary policy has an important role to prevent rising inflation expectation that could lead to a wage-price spiral scenario, as persistently high inflation rates would undermine long-term economic stability.

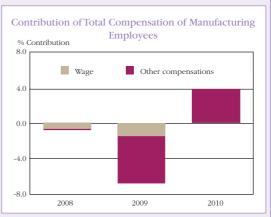
<sup>&</sup>lt;sup>2/</sup> Inflation of 150 emerging and developing countries from the IMF

# Employment Conditions under the Economic Recovery and the Increase in Minimum Wages

Strong economic recovery in 2010 resulted in higher demand for labor which reduced the unemployment rate to a low level. Throughout the year 2010, producers in various sectors faced with labor shortages due to various reasons as followed:

- A structural demographic problem resulted in insufficient expansions of labor supply relative to increasing demand for labor. This was attributed to a declining population growth rate from 0.8 percent in 2005 to 0.6 percent in 2010. Going forwards, labor shortage problems are likely to become more severe as the country is moving towards an aging society, with a continuous decline in the labor force participation rate.
- A qualification mismatch between the current available labor force and market demand still existed. While the manufacturing sector required production operators and skilled labor, Thai education still put emphasis on tertiary level or university education more than vocational education. As a result, the unemployment rate of the university graduated group was higher than the other groups.
- A change in labors' behavior resulted from disemployment during the economic crisis in 2008. As a result, some workers became selfemployed while others entered the workforce in the agricultural sector, where real wage increased rapidly over the past several years from a surge in agricultural prices and the government's crop price and income guarantee scheme.





Note: Other compensation composed of the overtime, the bonus, the other incomes which are both in-cash and in-kind. Source: National Statistic Office

Labor shortage condition under the ongoing economic recovery was one of the factors contributing to the rise in labor income. Problems of labor shortages were reflected by a decrease in the share of underemployed person from 1.6 percent in 2009 to 1.1 percent in the last quarter of 2010 and an increase in overtime working hours per day from 1.3 hours in 2009 to 1.7 hours in 2010. In addition, firms especially in capital-intensive and export-oriented industries such as vehicles, electronics, and electrical appliances increased wages and other welfares such as OT and provision of accommodation in order to increase labor's working incentives. These developments led to a widespread increase in labor income in the manufacturing sector, reflected by a 3.9 percentage increase in the contribution of employee's compensation in manufacturing sector in 2010.

Meanwhile, wages of unskilled labor also increased following the wage-setting committee decision to raise minimum wages across the country by a range of 8 to 17 baht per day, varying across provinces, which translated into an average growth rate of 6.4 percent from the previous year. These increases in minimum wages were higher than the past adjustment which mainly based on inflation.

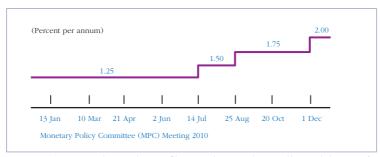
Minimum Wage Increase in 2011

Increasing wage from previous year	
8 baht	7 <b>Provinces</b> : Phayao, Si Sa Ket, Amnat Charoen, Nakhon Sawan, Phetchabun,
	Uthai Thani, Prachuap Khiri Khan
9 baht	24 Provinces: Nan, Surin, Tak, Maha SaraKham, Nakhon Phanom, Lampang,
	Chaiyaphum, Nong Bua Lam Phu, Chiang Rai, Buri Ram, Yasothon, Roi Et,
	Sakon Nakhon, Chai Nat, Suphan Buri, Lamphun, Trat, Samut Songkham,
	Ang Thong, Chiang Mai, Phra Nakhon Si Ayutthaya, Saraburi, Bangkok,
	Samut Prakan
10 baht	16 Provinces: Mae Hong Son, Uttaradit, Phitsanulok, Mukdahan, Kalasin,
	Khon Kaen, Kamphaeng Phet, Nong Khai, Nakhon Nayok, Loei, Sa Kaeo,
	Nakhon Ratchasima, Pathum Thani, Nakhon Pathom, Nonthaburi, Samut Sakhon
11 baht	6 Provinces: Pattani, Ubon Ratchathani, Narathiwat, Sing Buri, Phetchaburi,
	Rayong
12 baht	10 Provinces: Phrae, Phichit, Sukhothai, Udon Thani, Yala, Chanthaburi,
	Kanchanaburi, Lop Buri, Ranong, Chon Buri
13 baht	7 <b>Provinces</b> : Surat Thani, Chumphon, Trang, Ratchaburi, Prachin Buri, Phangnga,
	Chachoengsao
14 baht	3 Provinces: Phatthalung, Satun, Krabi
15 baht	2 Provinces: Nakhon Si Thammarat, Songkhla
17 baht	1 Province: Phuket
C N. C.C. C. C.J.	a maga on the minimum maga (No. 5) On December 12, 2010

Source: Notification of the wage on the minimum wage (No. 5) On December 13, 2010

# 7. Important Policies and Financial Measures

# **Interest Rate Policy**



Source: BOT News No. 2/2010, 9/2010, 16/2010, 22/2010, 28/2010, 34/2010, 48/2010 and 58/2010

- In the first 4 MPC meetings of 2010, the MPC maintained the policy interest rate at 1.25 percent per annum. The MPC judged that despite the rising trend of inflation and a continuous expansion of the Thai economy due to an improvement in the global recovery, uncertainties regarding the continuity of global economic recovery and domestic political unrest remained risks to the Thai economic growth.
- In the second half of the year, the MPC decided to gradually raise the policy interest rate by 3 times, totaling 0.75 percent per annum. The MPC noted that risks to global economic growth declined while the Asian economies expanded robustly. Moreover, the Thai economy continued to grow on the back of expansions in domestic and external demands. At the same time, inflation expectation rose following the surge in oil and commodity prices and pent-up pressure from delayed price adjustments of businesses.

# **Money Market Measures**

# 1. Transactions in Money Market

Measures	Main Points	Effective Date
Modification of BOT Financial Services  - Repeal existing regulations on transaction of the BOT debt securities and end-of-day liquidity management, including related notifications  - Dispatch new regulations regarding the end-of-day deposit facility and regulations on the BOT debt security	To reduce the complexity of monetary policy tools and to foster the development of liquidity management among market participants.	16 June 2010

Source: BOT circular No. FRD. (1Kor) Wor.3/2553 dated 13 May 2010

# 2. Foreign Exchange Controls

Measures	Main Points	Effective Date
1) Relaxation on foreign currency hedging transactions	To allow the participants with foreign currency hedging transactions, in baht or related monetary indices and with underlying trade and services, to cancel or not to extend the contracts with the same legal counterparts without the need to seek approval from competent officers.	2 February 2010
2) Relaxation of regulations on foreign exchange transactions	To increase the flexibility of Thai businesses in managing their foreign exchange risks and help reduce transaction costs.  1. Allow Thai companies, which have export earnings in foreign currency, to transfer funds from their foreign currency deposit accounts to counterparties in Thailand for payments of goods or services.	5 October 2010

Measures		Effective Date
	2. Relax submission requirement of foreign exchange transaction form for foreign exchange transaction below 50,000 U.S. dollars and reduce the supporting documents required for the aforementioned transaction to only a document regarding the purpose of transaction.	

Source: 1) BOT Circular No. ECD. (23) Wor.4/2553 dated 1 February 2010 2) BOT News No. 45/2010

#### 3. Credit Measures

Measures	Main Points	Effective Date
1) Justification for credit disapproval in written documents  2) Seeking cooperation to assist businesses adversely affected by the political unrest	The BOT seeks cooperation from financial institutions to justify to credit applicants in written document regarding the reasons for credit disapproval in order to establish the standard practice across the financial institutions system.  The BOT seeks cooperation from financial institutions and credit card providers in assisting businesses that were adversely affected by the political unrest in the following matters:  1. Provide assistance and support to affected debtors as necessary  2. Enable credit card operators to decrease the minimum payment rate for affected businesses to less than 10 percent of the outstanding amount as the operators deem necessary, until December 31, 2010.	1 April 2010

Measures	Main Points	Effective Date
3) Supervision on the Loan-to-Value ratio of commercial banks	However, businesses receiving such support must be located in the area of Ratchaprasong junction and Phan Fah Lee Las bridge. In addition, the credit card usage must be for business transaction only.  Specify the Loan to Value (LTV) ratio for mortgage loans with market price less than 10 million baht and assign the Risk Weight (RW) for the calculation of regulatory required capital of commercial banks as follows:  1. High-rise residence (e.g. condominium)  LTV < 90 percent, assigned RW = 35 percent  LTV > 90 percent, assigned RW = 75 percent  LTV > 90 percent, assigned RW = 75 percent  LTV < 95 percent  LTV < 95 percent, assigned RW = 35 percent  LTV > 95 percent, assigned RW = 35 percent  LTV < 95 percent, assigned RW = 75 percent  LTV > 95 percent, assigned RW = 75 percent  LTV > 95 percent, assigned RW = 75 percent  Exemption: Borrowers who are civil servants or state enterprise officers.	1 January 2011 for high-rise residence and 1 January 2012 for low-rise residence

Source: 1) BOT Circular No. PPD. (21) Wor. 71/2553 dated 20 January 2010 2) BOT Circular No. PPD. (21) Wor. 692/2553 dated 13 May 2010 3) BOT News No. 55/2010

# THE BANK OF THAILAND'S ACTIVITIES

# 1. Banknote Issuance and Management

#### 1.1 Cash management and banknote issuance

In 2010, the Bank of Thailand by the Banknote Operation Office received cash from commercial banks, specialized financial institutions and others totaling 2,278,182.0 million baht, an increase of 16.2 percent compared to the previous year's end. Cash paid out totaled 2,276,814.9 million baht, an increase of 11.4 percent. In sum, cash was received (net amount) 1,367.1 million baht in 2009.

In regard to assets transferred to the currency reserve account to increase note in circulation in 2010, assets transferred to the currency reserve account were in net amount, 90,000.0 million baht higher than those withdrawn from the currency reserve account resulting in an increase of currency reserve assets to 1,144,484.7 million baht, equivalent to 8.5 percent higher than previous year's end.

Unit: Million baht

Currency Reserves	2010	2009	Increase (Decrease)	Percent
Year-end currency reserves - Assets transferred to	1,144,484.7	1,054,484.7	90,000.0	8.5
currency reserve account - Assets withdrawn from	210,000.0	190,000.0	20,000.0	10.5
currency reserve account	120,000.0	90,000.0	30,000.0	33.3
<ul><li>Net assets transferred</li><li>(withdrawn)</li></ul>	90,000.0	100,000.0		

At the end of 2010, the currency reserves were valued at 1,144,484.7 million baht, equivalent to the value of the issued banknotes, and at that time the currency reserves consisted of the following assets:

- (1) Gold amounted to 22,371.9 million baht, or 2.0 percent
- (2) Foreign currencies amounted to 110,361.1 million baht, or 9.6 percent
- (3) Foreign securities amounted to 1,011,751.7 million baht, or 88.4 percent

#### 1.2 Note Printing Works (NPW)

#### Banknote

The total number of banknotes produced was 3,075.7 million notes, an increase of 11.6 percent compared to the previous year. The production volume was categorized according to denomination as follows:

1000-Baht	737.1 million notes
500-Baht	133.5 million notes
100-Baht	894.5 million notes
50-Baht	125.3 million notes
20-Baht	1,185.3 million notes

#### Non-banknote Security Products

The total number of revenue stamps produced and delivered to the Revenue Department was 63.0 million pieces.

#### Security Ink and Chemical Products

There were 305.8 tons of security ink and 158.2 tons of chemical produced, totaling 464.0 tons, an increase of 3.2 percent compared to the previous year.

#### Research and Development

In 2010, NPW carried out a total of 19 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. During the year, 9 projects were successfully completed.

#### 1.3 Banknote Issue Department (BID)

At year end, the number of banknotes in circulation was 4,145.0 million notes, an increase of 4.2 percent compared to the previous year. The value of banknotes in circulation was 1,144,484.7 million baht, an increase of 8.5 percent compared to 2009. This directly related to the economic growth during the year. The volume of banknotes in circulation, by denomination, is shown below:

#### Banknotes in Circulation at the End of 2010

Denomination (Baht)	500000	1000	500	100	60	50	20	10	5	1	0.50	BOT Note 60 Baht
Volume (million notes)	0.000233	889.6	227.5	982.4	11.3	256.0	1,256.7	334.2	39.1	121.2	18.9	8.1

In 2010, a total of 12,290 counterfeit banknotes, equivalent to 3.8 ppm of banknotes in circulation, were detected and seized. Compared to the previous year, there was an increase from 3.3 ppm, but this was still at a low level.

#### 1.4 Banknote Strategic Planning and Initiatives

#### 1.4.1 Banknote Excellence

#### (1) Clean Note Policy

Banknote Management Group (BMG) pushed vigorously for the utmost quality of banknotes in circulation. The withdrawal of worn-out and unfit low-denomination banknotes, 20-Baht and 50-Baht, from circulation was made in parallel with the accelerated disbursement of new notes into circulation, particularly in northeastern and central regions. Banknote Quality Index (BQI) was set out to measure the physical conditions of banknotes in circulation. The average BQI rose from 68 percent in 2009 to 70 percent in 2010.

#### (2) Central Cash Center for Financial Institutions

The establishment of the Central Cash Center has been initiated since 2008 under the collaboration between the Bank of Thailand and the Thai Bankers' Association. In 2010, the Bank of Thailand developed the Banknote Exchange System (BES), which supported the exchange of banknotes between the financial institutions' cash centers. Additionally, some of those cash centers were audited according to the newly established standards and performance criteria. These steps are part of the master plan that will be completed in 2012.

#### (3) Banknote Durability

BMG focused on extending the circulation lifetime of banknotes. In 2010, properties of the hybrid substrate were tested in the laboratory. Subsequently, some 20-baht banknotes are to be produced on the substrate and circulated in 2011.

#### (4) The New Series of Banknotes

The Series-16 banknotes were developed with enhanced security features. The Bank of Thailand Board approved the designs. In December 2011, the new 50-baht banknotes are set to be issued first. Other denominations of the new series are planned to be issued in the subsequent years.

#### (5) Commemorative Banknotes

In 2010, 10 million commemorative banknotes were issued to celebrate the 60<sup>th</sup> Anniversary of the Royal Wedding of Their Majesties King Bhumibol Adulyadej and Queen Sirikit and the 60<sup>th</sup> Anniversary of the Coronation. BMG is at the stage of preparing for the issuance of another batch of commemorative banknotes to mark the auspicious occasion of His Majesty the King's 7<sup>th</sup> Cycle (84<sup>th</sup>) Birthday Anniversary on December 5, 2011.

#### 1.4.2 Operational Excellence

#### (1) Strategic Planning

BMG continued the implementation of Balanced Scorecard with four perspectives (stakeholders, finance, internal process, and learning & growth) as a framework for executing strategies and monitoring performance. The indicators for Corporate Scorecard and Business Unit were agreed upon and applied. Meanwhile, the Personal Scorecard indicators deployment began in some departments.

#### (2) International Standard Attainment

After being awarded additional certification by the Management System Certification Institute (MASCI) on 12 September 2008, BMG successfully completed two surveillance audits and retained ISO 9001:2000 certification in 2009. In 2010, BMG coordinated the preliminary audit of the Integrated Management System (IMS: ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007). Corrective actions and improvements were made in various areas. Certification of the IMS is expected in the first half of 2011.

#### (3) Risk Management

In alignment with the BOT policies, BMG applied the risk management framework to its operational process from production to distribution of banknotes. Control Self-Assessment (CSA) was implemented within BMG to assure adequacy of internal controls and to identify opportunities for improvement in a dynamic environment. Fire emergency plan was tested and practiced. BMG also prepared for other contingency situations, such as bird flu, unrest, and external threats.

#### 1.4.3 Communication Excellence

BMG developed proactive communication strategies that encouraged the public to recognize the importance of verifying the authenticity of banknotes in parallel with the employment of tailored educational programs against counterfeiting threats.

Another project named "Rak Thanabat Thai" (Thai Banknote Care) was launched to educate the public on how to handle banknotes appropriately for the longer life span of banknotes and the ease of identifying security features with naked eyes. Slogan and logo contest was held to attract public involvement. In September 2010, the award presentation ceremony and fully-equipped Thai banknote exhibition were arranged in the Thai Banknote Fair event at Queen Sirikit National Convention Center. The award-winning logo and slogan are to be used extensively in upcoming public relations campaigns.

# 2. Reserve Management and Operations

BOT's objective in managing reserve is to preserve country's wealth in foreign currency. During the year 2010, 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 factors that affect asset price movements, such as economic and financial market developments including policy responses to resolve the economic and financial crises by the governments of the countries where the Bank invests in. This serves to assist the assessment of both short and long-term exchange rates and interest rates trends of the major currencies and debt markets that have created opportunities in achieving higher returns and lowering financial exposure.

In 2010, major portfolios under the management of the BOT include Liquidity Portfolio, Asian Fund Portfolio and Investment Portfolios. In addition, quantitative models and derivative instruments such as bond futures and short-term interest rate futures were utilized to maximize the reserves management efficiency.

# 3. 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). Simultaneously, the Bank of Thailand seeks to promote financial market development in order to enhance the efficiency and effectiveness of market mechanism and monetary policy transmission in the long run. The monetary policy implementation is conducted via different types of monetary instruments.

In 2010, regional economies experienced a phenomenal level of capital inflows as the developed countries adopted quantitative-easing monetary policy. During this period, there were massive capital inflows in both bond and stock markets; therefore, the Bank of Thailand needed to increase its absorption capacity as well as to adjust the instrument maturity structure so as to efficiently manage liquidity and facilitate gradual adjustment of the financial markets. The absorption instruments include the issuance of Bank of Thailand bonds and bills, bilateral repurchase transactions, and foreign exchange swap transactions. To streamline the efficient use of monetary operations, the Bank of Thailand has terminated

one liquidity absorption facility, namely the debt security window, and replaced it with the deposit facility.

#### 3.1 Bank of Thailand Bonds and Bills

The issuance of Bank of Thailand bonds and bills remains the principal absorption instrument. In 2010, the Bank of Thailand increased the bond issuance to absorb mounting liquidity surplus in the system and help meet investors' demand after the closure of the Bank of Thailand debt security window on 16 June 2010. Moreover, the Bank of Thailand attempted to lengthen the maturity profile of the Bank of Thailand bonds in order to establish a more appropriate structure of the absorption tools.

In planning the issuance of the Bank of Thailand bonds and bills, the Bank of Thailand holds regular discussions with market participants and Primary Dealers as well as coordinates with the government regarding its bond auction schedule. This is to ensure that there are steady public sector bond auctions, and that the bond supply is in line with market demand. This year, the Bank of Thailand raised the issuance of the Bank of Thailand bills during the periods of volatile capital inflows and low supply of Treasury bills as a result of government cash surplus and hence high level of Treasury balance. Since August 2010, the Bank of Thailand increased the frequency of the 3-year floating rate bond auctions from one every quarter to every two months in order to boost transaction liquidity in the secondary bond market as well as to promote the use of Bangkok Interbank Offered Rate (BIBOR) as a reference rate for interbank transactions.

#### 3.2 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, 14-day and 1-month tenors are conducted at variable rates to provide financial institutions with longer-term liquidity management options. Normally, the BRP transactions are carried out every morning<sup>7/</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.

 $<sup>^{7/}</sup>$  On days where there is an MPC meeting, the repurchase window is open in the afternoon (after the MPC decision announcement).

In 2010, the Bank of Thailand assessed the performance of the bilateral repo primary dealers and reduced the number of primary dealers from 11 to 10 financial institutions. This resulted in a better functioning of PDs as liquidity adjustment intermediaries, thus enhancing the efficacy of monetary policy transmission. This year, the Bank of Thailand continued to increase the securities borrowing transactions in order to boost the absorption capacity at longer maturities<sup>8/</sup> which match the needs of financial institutions.

#### 3.3 Bank of Thailand Debt Security Window

Prior to June 2010, the Bank of Thailand debt security window was used as a supplementary liquidity absorption tool. It was a channel through which member financial institutions with excess liquidity can submit their bids for short-term central bank debt securities towards the end of market hours. Since 2009, however, the Bank of Thailand had attempted to discourage overutilization of this facility by accepting bids at rates below the policy rate, which resulted in a dramatic drop in the outstanding size of financial institutions' investment through this window while activities in the uncollateralized interbank market and the private repurchase market increased significantly from 2008.

On 16 June 2010, the Bank of Thailand terminated the Bank of Thailand debt security window in order to proceed with the policy to encourage liquidity adjustment amongst market players and to streamline the liquidity absorption framework, which further helps enhance the effectiveness of monetary policy signalling.

#### 3.4 Foreign Exchange Swap

At end-2010, the Bank of Thailand's net forward position stood approximately at 17.0 billion US dollars, reflecting the role of FX swap transactions as an additional effective absorption tool. The Bank of Thailand has used this instrument in a fairly flexible manner, depending broadly on market conditions and needs. For instance, the Bank of Thailand conducted more FX swap transactions during the end of 2010 in order to accommodate higher hedging demand from both exporters and foreign investment funds.

In addition to the open market operation (OMO) instruments mentioned above, the Bank of Thailand also provides a collateralised 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>8/</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.

On 16 June 2010, the Bank of Thailand modified its overnight borrowing facility, from the sale of central bank debt securities to an overnight deposit standing facility in order to synchronize with the termination of the Bank of Thailand debt security window. For the first two months (16 June - 10 August 2010) following the introduction of the Overnight Deposit Standing Facility, the Bank of Thailand temporarily set the interest rate paid on the facility at the policy rate minus 25 basis points per annum to help contain the volatility of money market interest rates and assist financial institutions adjustment during the transition period. From 11 August 2010 onwards, the interest paid on this facility is the policy rate minus 50 basis points.

# 4. Financial Markets Development

In 2010, the Bank of Thailand has carried on its role in developing the financial markets to accomplish the tasks set out the action plans since 2009.

#### 4.1 Capital Market Development

The Bank of Thailand has taken role in the nation's 5 years capital market development plan from 2010 to 2014. Main responsibility has been in bond market development to ensure the outcome as the plan targeted. In sum, the progress of the plan in 2010 was in accordance with its original timeline.

# 4.2 Private Repo Market Development

In 2010 the Bank of Thailand has further broadened the participation of end investors including asset management companies, insurance companies, stateowned enterprises and major corporations. Besides from getting the Private Repo transaction guidelines of different groups of investors standardized by coordinating with their respective regulators, we also initiated and sponsored the introductions of the Thai Master Agreement for Repo transaction and the Thai language GMRA manual. These two documents are aimed to boost market participants' understanding regarding legal arrangements of the transaction and will be ready for use around mid 2011.

#### 4.3 Promoting the Use of BIBOR as a Short-term Reference Rate

The Bank of Thailand continued an active role in promoting the Bangkok Interbank Offered Rate (BIBOR) as a short-term reference interest rate in the Thai financial markets this year. Accordingly, the BIBOR has replaced the Average Fixed Deposit Rate previously referenced by the Ministry of Finance in its bank borrowings. Thailand Futures Exchange (TFEX) has also launched 3-month BIBOR futures in November 2010. Meanwhile, BOT allowed commercial banks to do repo transactions using BIBOR floating rate bonds in their Held to Maturity (HTM)

portfolios to improve the bonds liquidity. Thai Bond Market Association (TBMA) has also agreed to fine-tune its price calculation page and reference page to facilitate these transactions. BIBOR is set to gain greater publicity as from the 4 January 2011 onwards BOT would introduce BIBOR on the first page of its website. Detailed data customized to meet users' needs would also be provided. Furthermore, the Bank of Thailand has put up a plan to promote BIBOR as Thailand's short-term reference rate that is practical and highly liquid.

#### 4.4 Supporting the Ministry of Finance's plan to Issue Inflation-Linked Bond

The Bank of Thailand has taken many steps in a process to support the Ministry of Finance in the launch of Inflation-Linked Bond. These include the permission for commercial banks to undertake Inflation-Linked Bond transactions, developing a model to estimate real coupon, determining trading convention, pricing formula, as well as relevant inflation data for investors' reference. The Bank of Thailand cooperated with Public Debt Management Office in the official announcement of the launch of this product to Primary Dealers and potential investors. Moreover, the Bank of Thailand worked with TBMA on the preparation of systems for the bond auction, price and yield calculation, as well as BOT repotransaction

#### 4.5 Developing interest rate hedging instruments

Thailand Futures Exchange (TFEX) launched three interest rate hedging instruments this year; namely 5-year bond futures, 3-month BIBOR futures, and 6-month THBFIX futures. The Bank of Thailand permitted Non-Residents to trade bond futures, while advised TFEX of position limits appropriate for each type of these futures. In support of these new instruments, the Bank of Thailand has requested Primary Dealers to provide reference bond prices for bond futures, and encouraged the extension of BIBOR transactions to 3 months to match BIBOR futures.

# 5. Acting as the banker and the securities registrar to the government

#### 5.1 Accepting deposits from the government and government agencies

At the end of 2010, balance in the treasury reserve account and balance in the public organizations' accounts held with the Bank of Thailand stood at 299,405.9 million baht and 21,267.3 million baht, an increase of 87.7 and 235.6 percent, respectively, compared to the previous year's end.

# 5.2 Securities registrar of the government

# 5.2.1 Securities outstanding, issuance, and redemption

Unit : Million baht

	Outstar (as of 31-	· ·	Issuance	Redemption	Outstar (as of 31-l	C
Types of securities	Number o	f Value	Value	Value	Number of issues	Value
Government Bonds	97	2,155,562.4*	511,508.7	143,847.6	85	2,523,219.9
State Owned						
Enterprise Bonds	341	372,182.9	30,658.0	61,280.5	317	341,560.4
Bank of Thailand						
Bonds	83	1,789,212.5	9,435,270.0	8,843,196.0	90	2,381,286.5
Financial Institution	ns					
Development Fur	nd					
Bonds	5	154,445.2	-	76,000.0	2	78,445.2
Treasury Bills	43	206,540.0	485,000.0	619,830.0	43	71,710.0
Total	569	4,677,943.0	10,462,436.7	9,744,154.1	537	5,396,222.0

Note: \*Including 3 issues of government bonds issued in foreign currencies, converted into Thai baht using the exchange rate at the beginning of the year. As a result, the outstanding as of January 1, 2010 decreased by 3.59 million baht compared to that as of December 31, 2009.

# 5.2.2 Securities outstanding classified by groups of holders as of December 31, 2010

Unit: Million baht

Groups of holders	Value
Bank of Thailand	74,031.1
Depository institutions	1,706,974.5
Financial institutions not elsewhere classified	981,958.8
Non-financial institutions	64,234.4
Central government	135,011.7
Local government	515.5
Public non-financial institutions	44,305.0
Households and non-profit institutions	
serving households	709,551.8
Non-residents	54,156.4
TSD (Sub-book of Broker/Custodian)	1,625,482.8
Total	5,396,222.0

#### 5.2.3 Coupon payments

In 2010, the number of transactions of coupon payments equaled 947,522 an increase of 33.5 percent compared to the previous year, while the payment amount equaled 165,252.2 million baht, an increase of 9.5 percent compared to the previous year.

Unit: Million baht

	Coupon	Coupon payments in 2010			payments	in 2009
	Number	Number		Number	Number	
Types of securities	of	of	Value	of	of	Value
	issues	transaction	s	issues	transaction	ıs
Government Bonds	180	801,862	117,484.6	190	522,005	103,492.5
State Owned Enterprise Bonds	669	6,584	17,290.4	682	7,311	18,697.8
Bank of Thailand Bonds	58	116,862	24,548.4	46	116,225	20,969.1
Financial Institutions						
Development Fund Bonds	8	22,214	5,928.8	10	64,208	7,749.5
Industrial Finance Corporation						
of Thailand Debentures	-	-	-	1	21	25.3
Total	915	947,522	165,252.2	929	709,770	150,934.2

#### 5.2.4 Changes in record of ownership of debt securities

In 2010, debt securities ownership transfers amounted to 6,665 transactions, an increase of 29.3 percent compared to the previous year, while the transferred value totaled 20,335.6 million baht, a decrease of 51.7 percent compared to the previous year. Transfers of debt securities placed as collateral amounted to 2,956 transactions, a decrease of 5.8 percent from the previous year, while the transferred value totaled 27,814.1 million baht, a decrease of 54.7 percent from the previous year.

#### 5.2.5 Collecting fee on debt securities management

In 2010, fee collected on debt securities management decreased both in terms of number of issues and value by 3.0 and 15.9 percent, respectively, compared to the previous year.

Unit: Million baht

	2010		200	9
Types of securities	Number of issues	Value	Number of issues	Value
Government Bonds	137	419.8	131	474.1
State Owned Enterprise Bonds	321	11.1	340	12.0
Financial Institutions Development				
Funds Bonds (savings bonds)	2	23.6	2	23.6
Treasury bills	153	48.5	159	88.6
Total	613	503.0	632	598.3

# 5.2.6 Remitting tax withheld from coupon payments

In 2010, tax withheld from coupon payments and remitted to the Revenue Department (by the BOT head office only) amounted to 846,513 transactions, a rise of 47.3 percent from the previous year, while the remitted value totaled 4,600.6 million baht, an increase of 9.9 percent compared to the previous year.

Unit: Million baht

	Tax remittar	ice 2010	Tax remittance 2009		
Withholding tax	Number of transactions	Value	Number of transactions	Value	
Corporate income tax	16,690	920.0	14,498	797.7	
Personal income tax	829,823	3,680.6	560,150	3,387.9	
Total	846,513	4,600.6	574,648	4,185.6	

#### 5.2.7 Deposits and withdrawals of debt securities

In 2010, deposits and withdrawals of debt securities totaled 9,986 transactions, a rise of 20.2 percent compared to the previous year. Deposit transactions increased by 75.8 percent, while withdrawal transactions rose by 9.4 percent.

Unit: Million baht

Accounts which	2010	2010		9
securities are deposited to/withdrawn from	Number of transactions	Value	Number of transactions	Value
Securities deposit to accounts				
Accounts held with TSD	2,356	748,929.2	1,331	407,327.7
RP accounts	2	350.0	4	185.0
ILF accounts	7	2,377.5	10	5,724.0
Total	2,365	751,656.7	1,345	413,236.7

Unit: Million baht

Accounts which	2010		200	)9
securities are deposited to/withdrawn from	Number of transactions	Value	Number of transactions	Value
Securities withdrawal from according	unts			
Accounts held with TSD	7,549	1,652,794.2	6,867	1,696,055.5
RP accounts	15	12,638.0	33	13,942.0
ILF accounts	57	25,408.3	64	32,298.3
Total	7,621	1,690,840.5	6,964	1,742,295.8
Grand Total	9,986	2,442,497.2	8,309	2,155,532.5

# 6. Acting as the banker to financial institutions

#### 6.1 Accepting deposits from banks and financial institutions

Balance in banks' accounts held with the Bank of Thailand at the end of 2010 increased by 52.5 percent compared to the previous year's end, while the balance in the financial institutions' accounts held with the Bank of Thailand decreased by 22.9 percent compared to the previous year's end.

Unit: Million baht

Account Balance	2010	2009	Increase (Decrease)	Percent
Banks	83,626.3	54,839.1	28,787.2	52.5
Financial institutions	83.6	108.5	(24.9)	(22.9)

#### 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 liquidity problems during unusual circumstances. In such situations, the Bank of Thailand would extend collateralized loans to financial institutions within the guidelines allowed by law.

The Bank of Thailand has put in place a contingency plan to expand the list of eligible collateral and prepared to specify the terms and conditions of lending under liquidity stress. The preparation for such financial assistance also included communication with financial institutions to coordinate complementary arrangements on their part and thus ensure that sufficient liquidity can be provided in a timely manner.

During recent period, however, financial institutions in Thailand have not experienced any liquidity shortage.

# 7. Financial Institution Regulation and Supervisory Policy

# 7.1 Financial Institutions Supervisory Policies

The Bank of Thailand (BOT) has the responsibility to supervise financial institutions (FIs) in order to ensure the stability of the financial institution system and to sustain economic growth. The supervisory policy is based on the principles of risk-based supervision and consolidated supervision to assess risk management and corporate governance and to act in compliance with relevant laws and regulations. Furthermore, the present financial institution supervision is also considering consumer protection with regard to unfair treatment and to ensure that every customer can access to financial services at reasonable charge.

The BOT conducts on-site examination based on FIs' composite rating and financial performance. FIs are constantly monitored and regulated to safeguard against any financial instability and put in place prompt and effective measures to preserve the soundness of the financial institutions.

The BOT conducts on-site examination on the following institutions:

- 7.1.1 Thai commercial banks, retail banks, subsidiaries of foreign banks, finance companies, credit foncier companies, specialized financial institutions, state own and specialized assets management companies, and credit bureau company at least once a year.
- 7.1.2 The foreign banks' branches at least once a year except those that have good composite rating shall be examined every other year.
- 7.1.3 The private assets management companies and Non-banks operating credit card businesses and personal loan at least once in every three years.

In 2010, the BOT's supervisory policy focused on key areas namely the preparation for the implementations of FIs' Internal Capital Adequacy Assessment Process (ICAAP), stress test process, corporate governance of senior managements, financial services for large-sized customers, consumer credits processes, and operational risk management especially internal controls of branches in order to mitigate the FIs' reputational risk. Moreover, the BOT also observed the vulnerabilities of world economy on FIs' financial performances and capitals.

#### 7.2 Financial Institutions On-site Examination

#### 7.2.1 Financial Conditions, Performance and Risk Management

- (1) On-site examination at the commercial banks emphasized assessment on FIs' existing capital adequacy under Basel II and future capital requirement based on their business expansion plan, competitive capacities, financial performances, and efficient risk management in the areas of strategic risk, credit risk, market risk, liquidity risk and operational risk. The BOT also assessed corporate governance of senior management, compliance of related law and regulations, and the efficiency of risk management system. Moreover, preparation processes to implement ICAAP were also carried out to capture the minimum capital adequacy under Pillar 1 and other important risks not captured under Pillar 1 in order to provide cushion under normal situation or under crisis. FIs must put in place sound and practical ICAAP's policies and procedures and apply it on a consolidated basis.
- (2) On-site examination at the finance companies and credit foncier companies focused on normal business operations, and financial performances including the adequacy of provisions to absorb potential losses as well as practices in compliance with the laws.
- (3) Similar process of risk-based examination was performed at the Specialized Financial Institutions<sup>9/</sup>. The results of examination were sent to the Ministry of Finance for consideration with recommendation to carry out appropriate actions.
- (4) In examining asset management companies, the focus was on the quality of the management related to the purchase and transfer of assets.
- (5) On-site examination of non-banks operating credit card businesses and personal loans would focus on their compliances with the BOT's regulations on consumer's protection and any unfair treatment to their customers. The BOT also closely monitored illegal non-banks that did not have legal and proper licenses through field trip surveys and coordinating with police officers to take legal actions against those illegal businesses.

#### 7.2.2 Specialized examinations

#### (1) Assessment of Capital calculation and Stress Test

The BOT examined and validated the credibility of FIs' capital calculation internal models under Basel II by focusing on Internal Ratings Based Approach

<sup>9/</sup> The Specialized Financial Institutions are Bank for Agriculture and Agricultural Cooperatives, Export-Import Bank of Thailand, The Government Savings Bank, The Government Housing Bank, Small and Medium Enterprise Development Bank of Thailand, Islamic Bank of Thailand, Secondary Mortgage Corporation, Small Business Credit Guarantee Corporation.

#### (2) Examination on the Information Technology System

The BOT assessed the efficiency and the effectiveness of FIs' information technology (IT) systems focusing on their governance, security, reliability and readiness of the systems as well as the system capacities to meet customer needs and requirements especially core banking system on deposit, loan, treasury, and payment functions.

#### **7.2.3 Summary**

In 2010, the BOT examined financial conditions and performances as well as risk management systems a total of 54 FIs. The examinations revealed that most FIs' composite ratings were satisfactory, the operating performances were profitable, the regulatory capitals were sound, and the risk management relating to strategic risk, credit risk, market risk and liquidity risk have improved, except for operational risk management of some commercial banks that needed improvement on their internal control systems.

The numbers of FIs examined by t	he BOT	in 2010
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Financial Institutions	Numbers of FIs
Thai Commercial Banks / Retail Banks	15
Foreign Bank Branches / Subsidiaries	13
Finance and Credit Foncier Companies	4
Specialized Financial Institutions	8
Asset Management Companies	8
Non-banks operating credit card businesses and personal loan	6
Total54	

#### 7.3 Financial Institutions Monitoring and Analysis

7.3.1 Off-site examiners are responsible for monitoring and analysing the financial condition and performance based on supervisory review approach combining with regulatory review by assessing the soundness of each FI both present and future as well as the financial system as a whole including risk management on consolidated basis. Analytical reports are issued quarterly for Thai commercial banks, retail banks, foreign bank branches, finance companies and credit foncier companies and semi-annually for specialized financial institutions.

In 2010, a total of 40	FIs were monitored	and analysed.
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#### Numbers of FIs and frequency of analysis

Financial Institutions	Frequency	Numbers of FIs
Thai Commercial Banks / Retail Banks	Quarterly	16
Foreign Bank Branches / Subsidiaries	Quarterly	16
Finance and Credit Foncier Companies	Quarterly	6
Specialized Financial Institutions	Semi-annually	8
Total		46

- 7.3.2 The BOT monitored FIs' financial conditions, business operations and liquidity management that might be affected from various incidents, such as the European financial crisis, domestic political demonstration and natural disaster.
- 7.3.3 Analysis also focused on the credit process of FIs lending to key economic sectors that might have significant impact on the economic stability and growth such as housing and real estate loan, SMEs and large corporate loans.
  - 7.3.4 Changes in deposit and lending interest rates of FIs were monitored.
- 7.3.5 The BOT analysed early warning systems of FIs to anticipate problems and to take up prompt remedial actions.

#### 7.4 Financial Institution Applications

The BOT granted approval to FIs and responded to inquiries a total of 3,601 cases. Consideration of the BOT reflected on the risk, corporate governance, and financial status of FIs. Approval criterias were amended in accordance with the Financial Institution Business Act, B.E. 2551 and financial system development. The approved applications consisted of:

- (1) appointment of directors and executives: 352 individuals;
- (2) single lending and related lending limits: 36 cases;
- (3) capital fund calculation under Basel II: 33 cases;
- (4) permission for a FI to hold shares In another FI and permission in principle of the merger and acquisition of FI: 2 cases;
- (5) proposal to the Finance Minister to allow the non-Thai nationality to hold shares exceeding 49 percent of total shares sold: 2 cases;
- (6) permission for the establishment and alteration of financial group's structure in accordance with consolidated supervision regulation: 21 cases;

- (7) permission to undertake derivative products: 185 applications;
- (8) permission for the commercial banks to open 306 branches and close 3 branches:
- (9) permission to have hybrid capital instruments as tier 1 capital and hybrid debt instruments as tier 2 capital: 14 cases;
- (10) permission for an individual to hold shares over 10 percent of total shares sold in any financial institution: 10 cases;

#### 7.5 Solving customers' complaints

In 2010, the BOT coordinated with FIs and non-banks to resolve customers' complaints on the financial services of FIs. Most complaints were on debt restructuring or debt rehabilitation plan including FIs' improper debt collection procedures. There were a total of 4,873 complaints, of which 4,553 complaints or about 93 percent of the total were solved. In addition, the BOT has also responded to inquiries and educated the public on financial services and protection against fraudulent activities.

#### 7.6 Supervision Efficiency Enhancement

During the year, the key supervision and analysis developments were as follows:

#### 7.6.1 Enhancing examiners skill

- (1) Training for examiners covered aspects relating to examination, supervision, and analysis from basic to advanced level enabling the examiners to efficiently supervise and adapt to international regulatory standards. In 2010, there were 19 courses: 6 standard courses and 13 special courses.
- (2) Training, seminars, and on-site visits were organized, both domestic and overseas, to broaden the examiners' skills and knowledge. Professional guest speakers were invited from various regulating agencies, both local and international.

#### 7.6.2 Standardized supervision manuals

The BOT put emphasis on developing supervision skills of the examiners in performing their supervisory tasks in the standardized manner by revising supervision manuals in line with international standards and BOT's notifications as well as any development in the FIs system. The supervision manuals composed of financial operating performance manual, consolidated supervision manual, trade finance manual, and risk management supervision manuals - strategic risk, credit risk, market risk, and liquidity risk.

#### 7.6.3 Financial Institution Examination System Development

The BOT developed system to record data on the out of court settlement of FIs and executives that were in violation of the law including dispute disposition of FIs and Non-banks. Furthermore, the BOT has also written process flows for the users' manuals and worked on data conversion into the new system.

#### 7.7 Setting up "Personal Loan Club"

The BOT supported banks and non-banks with license granting personal loan to set up "Personal Loan Club" as a center to exchange information and knowledge, enhance business operations, and promote public understanding and cooperation among members.

#### 7.8 Meetings

In 2010, BOT held several meetings including presentation on the overall banking industry examination results in 2009 and the focus in 2010, amended criterias on credit review, and loss data information under Basel II. Other meetings involved external auditors and internal auditors as well as Central Point of Contact (CPC) relationships function which coordinated between BOT's staff and compliance unit of commercial banks to exchange ideas on important supervisory issues and audit program.

#### 7.9 Training and Seminar

#### 7.9.1 Coordinate with other organizations as follows:

- (1) Financial Stability Institute (FSI) and Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) on the topic of "FSI-EMEAP Regional Seminar on Stress Testing"
- (2) That institute of Director (IOD) on "Financial Institutions Governance Program (FGP)"

#### 7.9.2 Providing training courses to financial institutions staff and other organizations staff as follows:

- (1) Executive training courses in "Business continuity management" and "5 Key risk managements, namely strategic risk management, credit risk management, market risk management, liquidity risk management and operational risk management" for the Bank for Agriculture and Agriculture Cooperatives
- (2) Arranging session in "Credit process quality examination" for the Bank & Financial Institutions Internal Auditors Club
- (3) Introducing technical training course on "Credit risk examination" for the Small and Medium Enterprise Development Bank of Thailand

- (4) Lecturing on "IT risk management" for Association of Development Thai Bank and Financial Institutions
- (5) Providing training course in "Financial system stability" for the Central Bank of Nepal
- (6) Lecturing on "Banking Sector Reform in the next five years" for Chiangmai University
- (7) Organizing Training on the topic of "Thai commercial banks' problems" for the Royal Thai Army War College

#### 8. Operation of Payment Systems

#### 8.1 Interbank Cheque Clearing

In 2010, total volume of cheques cleared in Bangkok and metropolitan areas together with cheques cleared under the Inter Provincial Cheque Clearing (B/C-3D) and the Intra Provincial Cheque Clearing were 75.11 million items, which, in term of value, amounted to 33,777.7 billion baht. The volume and value of cheques cleared increased by 0.3 percent and 0.5 percent respectively from the previous year. Meanwhile, the average value of cheque items remained close to previous year's value at 450,000 baht.

## Volume and Value of Cheques Cleared, Returned Cheques, and Returned Cheques with Insufficient Fund Nationwide Interbank Cheque Clearing Year 2010

		Volume (item)			Value (Billion baht)			
	2010	2009	% change	2010	2009	% change		
Cheques cleared Value of cheques	75,114,255	74,892,340	0.3	33,777.7	33,593.1	0.5		
cleared per item				0.00045	0.00045			
Returned Cheques	1,305,292	1,447,391	-9.8	204.2	188.3	8.4		
	(1.7)	(1.9)		(0.6)	(0.6)			
Returned Cheques with	ı							
insufficient fund	877,479	985,143	-10.9	100.2	97.8	2.5		
	(1.2)	(1.3)		(0.3)	(0.3)			

Remark: ( ) Represents the proportion to cheques cleared Sourec: Payment Systems Department, Bank of Thailand

The volume of returned cheques in 2010 was 1.31 million items, valued at 204.2 billion baht. The volume of returned cheques decreased by 9.8 percent while the value of returned cheques increased by 8.4 percent from the previous year. In term of volume, the proportion of returned cheques to total cheques cleared was 1.7 percent, declining slightly from the previous year. However, the value of returned cheques to total cheques cleared remained at the previous year's level at 0.6 percent.

Returned cheques due to insufficient fund were totaled at 0.88 million items and 100.2 billion baht in 2010. The volume of returned cheques due to insufficient fund decreased by 10.9 percent from the previous year while the value increased by 2.5 percent from the previous year. In terms of volume, the proportion of insufficient fund returned cheques to total cheques cleared was at 1.2 percent, declining slightly from previous year, while in term of value, the ratio remained close to the previous year's level at 0.3 percent.

#### 8.2 BAHTNET

#### (1) BAHTNET Statistics

At the end of 2010, there were 66 institutions involved in the BAHTNET system including 17 Thai commercial banks, 15 foreign commercial banks, 11 finance companies and securities companies, 14 specialized financial institutions, government agencies and other institutions, and 9 BOT divisions.

The volume of funds transfer through the BAHTNET system in 2010 was 2,323,258 transactions increasing from 2,004,954 transactions in 2009 by 15.9 percent while the value was 654.62 trillion baht rising from 489.62 trillion baht of the previous year by 33.7 percent. The increase in volume of funds transfer transactions resulted from the increase in volume of third party funds transfer transactions. Meanwhile, the increase in value was a result of the increasing values of interbank funds transfers, particularly the transactions involving the BOT's implementation of monetary policies as well as measures supporting the development of money market and bond market.

#### (2) Risk Management for BAHTNET

The BOT has prescribed a risk management measure for multilateral net settlement in the BAHTNET system, called Securities Requirement for Settlement (SRS) with an aim to reduce the risks arising from the BAHTNET's net settlement transactions. The main concept of the measure is to require the BAHTNET users to maintain securities as collateral for net settlement in the BAHTNET, with the value of no less than what the BOT requires.

In 2010, the BOT arranged meetings with the BAHTNET Advisory Group and the BAHTNET users including external institutions which act as the settlement agents, i.e. the **Thailand Clearing House Co.,Ltd.** and the National ITMX Co., Ltd. The main objective of the meetings is to discuss the issues related to the risk management measure as follows:

- 1) Discussion on the improvement of the measure concept in order to be more suitable and conform to the needs of BAHTNET users, especially for managing settlement risk and other risks that may occur in the payment systems and financial institution systems.
- 2) Discussion on the BAHTNET users' suggestions regarding the rules and procedure in case of insufficient liquidity and collateral for settlement.
- 3) Research and discussion on the guideline of risk management measure for net settlement in other countries.
  - 4) Preparation of notifications and procedure related to the measure.

In 2011, the BOT will establish a working group on SRS (SRS working group) comprised of the representatives from the Thai Bankers' Association, the Association of International Banks and specialized banks. The key responsibility of the SRS working group is to provide consultations and suggestions on the measure as well as related rules and procedure so as to reach the mutual conclusions and agreements by all parties.

#### 8.3 Operation during the political unrest in May 2010

During the political unrest in Bangkok that became increasingly severe in May 2010, the government declared 17 and 18 May 2010 as the national holidays in order to control the situation. Nonetheless, financial institutions were still open as normal. Interbank payment services provided by the BOT; such as, BAHTNET system which supports interbank high-value fund transfer transactions as well as cheque clearing system which facilitates business transactions and payments of general public, were operated at the back-up site to continue the business and financial transactions of the country.

Because the situation was not recovered afterward, the Government announced additional three days, from 19 - 21 May 2010, as the public holidays effective only in the Bangkok metropolitan area for the safety of the residents. In accordance with that, the BOT announced the bank holidays on 20 - 21 May 2010 for all financial institutions across the country. However, BAHTNET system and current account depository system remained open to accommodate cash withdrawal transactions of commercial banks through Banknote Ordering System in order that the commercial banks can manage to have sufficient cash available to customers during such situations.

The BOT is aware of the importance of the contingency arrangement, particularly in the case of sedition. The BOT, therefore, prepares operational systems, staffs, operational procedures as well as the coordination with participants and other involved parties. This includes the operational preparation of the backup site to avoid negative impact to the payment systems of the country as well as liquidity of the financial institutions. As a result, the BOT and the member banks performed effectively to provide services smoothly to the customers during the disorder situation in May 2010.

#### 9. Exchange Control

9.1 Issuance of Notifications and Notices, related to exchange control regulations

In 2010, 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 Treasury Centers (No.2) dated 14 May 2010 and Notification of the Competent Officer on Rules and Practices Regarding Treasury Centers dated 11 June 2010 to relax qualification requirement of applicants for treasury center license and regulations regarding corporate treasury centers to allow companies in Thailand more flexibility in managing their foreign currencies.
- (2) Notification of the Ministry of Finance on Exchange Control (No. 4) dated 16 September 2010 to raise the threshold amount of export proceeds at or beyond which is required to be brought into Thailand from 20,000 U.S. dollars to 50,000 U.S. dollars or its equivalent.
- (3) Notification of the Ministry of Finance on Directions of the Minister to Authorized Agents (No. 8) dated 16 September 2010 and Notification of the Competent Officer on Rules and Practices Regarding Exchange Control (No. 20) dated 5 October 2010 to relax regulations on capital outflows and foreign exchange transactions as follows:
- 1) to allow resident companies to invest abroad in the form of direct investment or lend to affiliated companies abroad without restriction, and lend to non-affiliated companies up to 50 million U.S. dollars or its equivalent per year;
- 2) to increase the amount limit for purchase of immovable properties abroad up to 10 million U.S. dollars or its equivalent per year;
- 3) to raise the outstanding balance limits of foreign currency deposit accounts deposited with funds exchanged from commercial banks;

- 4) to allow Thai companies having proceeds of exports and services in foreign currency to transfer the funds from their foreign currency deposit accounts to counterparties in Thailand for payment of goods and services;
  - 5) to relax supporting document and reporting requirements.

#### 9.2 Inspection on proceeds of exports

In 2010, total export value stood at 194,122.2 million U.S. dollars, expanding by 27.4 percent from the previous year. The export proceeds totaled 182,428.2 million U.S. dollars, an increase of 30.4 percent from the previous year. The proceeds were either in Baht from NRBA or in foreign currencies which were either deposited in the foreign currency accounts or exchanged into Baht. The proceeds were also used for loan repayments to authorized financial institutions, or for payment of obligations to nonresidents. Total export proceeds accounted for 94.0 percent of the total export value, which the difference resulted from netting transactions and exported goods that are exempted from acquiring foreign currencies.

Unit: Million U.S. dollars

Values	2010 <sup>E/</sup>	2009
1. Exports <sup>1/</sup>	194,122.2	152,422.2
Change (percent)	27.4	-14.3
2. Foreign currency received from exports	182,428.2	139,916.4
Change (percent)	30.4	-18.0

Note:  $\frac{1}{E}$  Total value of export (Source : Customs Department)

#### 9.3 Volume of Foreign Exchange Transactions

In 2010, the purchase and sale of foreign currencies from customers amounted to 411,491.2 and 425,234.7 million U.S. dollars, growing by 26.9 and 25.0 percent from the previous year, respectively. Total sale volume exceeded purchase volume by 13,743.5 million U.S. dollars, contributed by import 5,792.2 million U.S. dollars and others 7,951.2 million U.S. dollars.

Unit : Million U.S. dollars

	2010 <sup>E/</sup>	2009	% Change
Purchase	411,491.2	324,138.5	26.9
Export	122,260.0	95,465.9	28.1
Other	289,231.2	228,672.5	26.5
Sale	425,234.7	340,057.8	25.0
Import	128,052.2	94,033.5	36.2
Other	297,182.5	246,024.3	20.8
Net Purchase and (Sale)	(13,743.5)	(15.919.3)	(13.7)
Foreign Trade	(5,792.2)	1,432.4	N.A.
Other	(7,951.2)	(17,351.7)	(54.2)

Note: E/ Estimated data

Source: Based on Data set received from authorized financial institutions

#### 9.4 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 2010<sup>E/</sup>

		Change from	Purchase/Remi Volume	ttance	Sale/Remitta Volume	ince
Туре	No.	Previous Year	Million U.S. Dollar	Δ%	Million U.S. Dollar	Δ%
Authorized Money Changer	915	51	638.37	20.80	639.19	21.10
Money Transfer Agency	1,226	-4	179.25	-3.55	30.14	4.99
Authorized Company	0	-1	0	0	0	0

Note:  $\Delta$ % Represents percentage change from the same period last year. <sup>E/</sup> Estimated data

## 10. Oversight under related laws

#### 10.1 Oversight on E-money

The BOT oversees non-bank e-money service providers under the Ministerial Notification of Ministry of Finance: Business for which Permissions must be obtained according to Clause 5 of Announcement No. 58 of the National Executive Council (Business of Electronic Money Card) dated October 4, 2004. At current, there are 6 non-bank e-money service providers with the licenses. In 2010, most of non-bank e-money service providers comply with the prescribed rules and regulations of the business except one provider which fails to comply with the rules set forth in the BOT Notification on maintaining cash received in advance from the customers not less than cash deposit at the commercial banks or specialized financial institutions at anytime. This case has already been taken under legal proceeding. Furthermore, the BOT also mandates one non-bank e-money service provider to address its financial soundness problem due to continuous loss which may consequently affect its business and customers. The BOT has already reported this particular case to the Ministry of Finance.

#### 10.2 Oversight on Electronic payment

According to the Royal Decree Regulating on Electronic Payment Service Business, B.E. 2551, the BOT oversees and regulates electronic payment service providers which are categorized as 3 levels; List A to notify, List B to register, and List C to obtain a license prior to the commencement of such business operation.

In 2010, the BOT's oversight of the electronic payment service providers according to the Royal Decree are as follows:

- (1) Approve applications for the notice for the List A and List B electronic payment service providers and submit the applications for official approval from the Electronic Transaction Commission (ETC) for those who apply for being the electronic payment service providers under the List C category. In 2010, under the BOT consideration, 8 electronic payment service providers who apply for license under List C already granted approvals. By the end of 2010, there are 6 electronic payment service providers under List B for certificate of registration and 109 approved licenses of 71 electronic payment service providers under List C (32 Commercial Banks and 39 non-financial institutions). There is no electronic payment service provider entitled under List A category.
- (2) Monitor all electronic payment service providers to ensure their compliance with the Royal Decree and related Notifications, and report regularly to the ETC.
- (3) Coordinate with the Sub-Committee of Legislation Infrastructure, a working group under the ETC, to provide legal opinions for the draft regulations concerning administrative fine for the electronic payment service providers.

Furthermore, the Anti-Money Laundering Act B.E. 2552 (third edition) which has been effective since 19 November 2009 requires non-bank e-money card service providers under the Ministerial Notification of Ministry of Finance and electronic payment service providers under the Royal Decree Regulating on Electronic Payment Service Business to comply with the Anti-Money Laundering Act and Ministerial Regulations such as reporting transactions to the Anti-Money laundering Office (AMLO), imposing procedure on Know Your Customer (KYC) and Customer Due Diligence (CDD).

The BOT, as the e-Money overseer, has coordinated with AMLO to provide opinions for draft Ministerial Regulations and prepare draft Memorandum of Understanding (MOU) between AMLO and the BOT concerning roles and authority over the supervision of Anti-Money Laundering and Countering Financing of Terrorism-AML/CFT. The MOU will be shortly signed up by the BOT and AMLO.

## 11. Other important activities

11.1 Bank of Thailand's participation in International Organizations and
International Fora

In 2010, the global economy continued to recover from the financial crisis, albeit at different speeds across regions. Advanced economies, whose recovery

has progressed gradually, still required accommodative monetary policy. With a faster recovery than in advanced economies, emerging market economies have begun to normalize their monetary policy. Differences in speed of economic recovery and the divergence in policy directions resulted in large inflows of capital into developing economies. Indeed, the issues on capital flows were most widely discussed at the international fora especially how to deal with capital flow volatility, the role of macro-prudential policy in promoting financial stability, and the new Basel III framework to prevent future financial crisis.

As for the international monetary system, the role of emerging market countries was strengthened through further governance reform of the International Monetary Fund. The IMF explored the avenues of cooperation with emerging market countries through the Global Financial Safety Net program. At the regional level, Asian countries continued to focus on improving the CMIM framework, with emphasis on enhancing surveillance. Moreover, ASEAN countries undertook many important steps towards the formation of ASEAN Economic Community.

#### (1) Bank for International Settlements: BIS

Senior executives of the Bank of Thailand participated in the BIS Bimonthly meetings throughout the year to exchange views with other central banks on developments in the global economy and financial markets. The themes of these meetings centered on challenges to major emerging market economies in implementing policy to respond to large capital inflows from quantitative easing and slower growth in advanced countries. The role of macro-prudential policy was also discussed in relation to the promotion of financial stability together with price stability.

#### (2) The Executives' Meeting of East Asia-Pacific Central Banks: EMEAP

Discussions at EMEAP meetings at various levels, including meetings of the Monetary and Financial Stability Committee, focused on challenges in postcrisis policy implementation. The Working Group on Financial Markets aimed to create a mechanism to prevent and manage crises, such as tools to provide liquidity to the market. It also continued to work on how to develop financial markets to deal with volatile capital flows. The Working Group on Banking Supervision, which was co-chaired by Thailand and Japan, concentrated their consultation on the improvement in regulatory and supervisory standards. The Working Group on Payments and Settlements Systems worked towards more standardized and harmonized payments systems in the region.

#### (3) International Monetary Fund: IMF

In the aftermath of the latest financial crisis, huge recourse from many economies to the IMF led it to boost its resources. There was also a need for the IMF to reform governance to reflect greater role of emerging market countries in the international financial architecture. In 2010, the Board of Governors of the IMF approved resolutions to (1) double the quota from 238 billion SDR to 477 billion SDR, or about 735 billion U.S. dollars to meet higher demand for the financial resource during the financial crisis, and (2) reallocate two Executive Director positions from advanced European countries to dynamic emerging countries. These reforms aimed to reflect greater importance of the emerging markets in the global economy. In addition, multi-country constituencies would be given an additional Alternate Executive Director. The Bank of Thailand advocated such reforms in which Thailand quota share will be increased from 0.60 to 0.67 percent. The South East Asian Voting Group (SEAVG), in which Thailand is a member, would also be allocated an additional Alternative Executive Director position.

The IMF also proceeded with the proposal of the G20 to initiate a Global Financial Safety Net by making its financing facilities more flexible, and better serve the need of member countries. The Flexible Credit Line (FCL) was amended and the Precautionary Credit Line (PCL) was established. The IMF also considered strengthening ties with regional liquidity arrangements, such as CMIM, through various means, such as the co-financing of regional initiatives.

#### (4) ASEAN+3

In 2010, the ASEAN+3 focused on multilateralization of the Chiang Mai Initiative. The Chiang Mai Initiative Multilateralization (CMIM) became effective on March 24, 2010 with a total size of 120 billion U.S. dollars. The contribution from Thailand stands at 4.552 billion U.S. dollars. In the case of short-term liquidity problems or balance-of-payments difficulties, Thailand would be allowed to request assistance for U.S. dollar liquidity up to 2.5 times of its contribution. Furthermore, the ASEAN+3 Macroeconomic and Research Office, or AMRO, was established to independently evaluate economic and financial conditions in the region. Its operation is expected to commence in the first half of 2011.

ASEAN+3 countries continued to cooperate in the development of regional bond market through the Asian Bond Market Initiative (ABMI). The ABMI aims to promote local currency-denominated bond issuance and to develop bond market infrastructure in member countries. In 2010, a credit guarantee and investment facility was set up. Greater private sector engagement was encouraged for the ABMI process, particularly in the areas of harmonization of regulatory standards and the integration of the regional payments system.

#### (5) Association of Southeast Asian Nations: ASEAN

With the commencement of the ASEAN Economic Community (AEC) in 2015 fast approaching, ASEAN member countries continued to focus on preparing the region in moving towards the AEC, though deeper and broader economic integration. Under the AEC Blueprint, the Bank of Thailand is responsible for overseeing the liberalization of the capital account and the banking sector. Capital account liberalization needs to be undertaken in the context of huge and volatile capital flows in the global financial system, while banking sector liberalization must pay due regard to ensuring stability of each country's banking systems. Collaboration on capital market development led to the creation of a systematic framework for tracking bond market development in the region, while a framework for linking ASEAN equity markets is expected to be completed by 2012.

A new working committee on Payments and Settlement Systems (WC-PSS) was created, co-chaired by the Bank of Thailand and Bank Indonesia with the aim of developing regional payments systems to serve the ASEAN Economic Community. Furthermore, the ASEAN Swap Arrangement, or ASA, was renewed to November 2011.

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

The current 5-year strategic plan which mandated SEACEN to become a premier regional training center ends in April 2011. In designing a new plan, SEACEN conducted a survey with various stakeholders, whereby there was agreement that SEACEN should continue to gear towards becoming a premier regional training center by leveraging on external resources for both training and research.

The People's Bank of China formally applied for SEACEN membership in October 2010. The PBC's participation is expected to contribute significantly to SEACEN, given China's global economic weight and its important regional role, which would help add important perspective to SEACEN and its work.

#### 11.2.1 Information Technology Usage Supporting

In 2010, the Bank of Thailand has 45 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 415 million baht. At the end of the year, 11 projects were completed. A brief summary of each strategic program is provided as following.

#### Program 1: Data & Statistics Management Excellence

The significant projects in this area are BOT Data Dissemination (BOT-DD) and Financial Institution Monitoring and Analysis System (MAS). BOT-DD, a 3-year strategic project starting from 2007 and will be completed in 2011, objects to utilize a better usage of the information and effectively accommodate usage for the executives and main users in BOT. MAS aims to improve efficiency of gathering, storing, processing data from monitored institutions, both their current status and risks, so the BOT can formulate the financial institution development and resolution policies that can respond to various situations in the timely fashion.

Projects completed in 2010 are the Data Management System (DMS) Enhancement 2009, Non-Bank Supervision and examination Systems enhancement, and Treasury Center Monitoring and Analysis System.

#### Program 2: Financial Market Excellence

In 2010, this program remains to focus on developing information system exclusively for analysis and decision-making. Projects under this program are Financial Market Monitoring and Analysis (FMMA), Integrated Risk Information System Phase II (IRIS II). There are also projects that focus on supporting new instrument transactions such as Security Lending Phase I and Contingency Liquidity Condition System.

Another vital project in this program is the Dealing Room System Upgrade project. This project focuses on upgrading the Finance Kit software to newer version and target to complete in 2011.

#### Program 3: Payment Excellence

In 2010, the most significant project in this area is the Imaged Cheque Clearing and Archive System (ICAS) which aims to develop interbank cheque clearing system. Now it is in a process of IWT testing by Banking Institutes and plans to deploy in Bangkok and metropolitan areas in 2011 and extend to cover all areas in the country in 2012.

There are 3 new projects start in this year; Bank of Thailand-Electronic Financial Services (BOT-EFS), Banknote Management System (BMS) Enhancement and Banknote Exchange System (BES). BOT-EFS and BMS enhancement focus on upgrading standing systems and infrastructures to an up to date technologies for more reliable and effectiveness. BES focuses on increasing banknote exchange channels and effectiveness of the system, also decreasing processes and cost of processing.

#### 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 and upgrading version from SAP R/3 which is end of support to SAP ECC6. This project targets to complete in 2011.

There are 3 projects starting this year; SAP Business Information Warehouse Upgrade (SAP-BW), Treasury Accounting System (TAS) Enhancement and e-Planning and Budgeting project. SAP-BW objects to adjust BW data to consolidate to SAP ECC6 and provide more analysis reports. TAS Enhancement project focus on enhancing TAS to support new accounting policy on money market treasury reserve transactions. All IT-related projects in HR area, there are deferred due to BOT Transformation policy.

#### Program 6: IT Services Excellence

The significant project in this area is IT Infrastructure Improvement 2010 and Active Directory Restructuring. IT Infrastructure Improvement aims to improve Server Management system, Storage Area Network system, Remote Access, Wireless LAN and IP phone system of region offices.

Active Directory Restructuring objects to reorganize BOT Active Directory for more efficient, up to date technology and able to directly synchronize data from SAP system.

#### Program 7: Content management excellence

A significant project in this area is the BOT Document and Records Management (BOT-DRM) project, which is a long-term project from 2007 to 2011. The application finished development in 2009 and has been continuously deploying in BOT and already finished 35 departments. BOT-WIKI project supports online knowledge management, and BOT-Subscription Management project finished in 2010 and bank-wide used in 2011.

Projects that support financial institution supervision are Financial Institutions Examination Information System and Information System of Financial Institutions in Violation of Laws. Both projects finished and have been using since late 2010.

#### 11.2.2 Data Management

In 2010, the BOT collected and compiled several sets of statistics, and disseminated these with related analyses. The credibility of the statistics was assured through compliance with international statistical guidelines, and the data was complete and adequate to support the formulation of monetary policy, as well as being of use to all participants and stakeholders in the economy. Several improvements in data management were achieved during the year and the most important of these are listed below.

## (1) Data quality enhancements aimed at compliance with international standards

- 1) The Balance of Payments is a statistical statement that summarizes economic transactions between residents and nonresidents. Preparations for adoption of the International Monetary Fund's Balance of Payments and International Investment Position Manual, 6<sup>th</sup> Edition (BPM6) have continued from the previous year, with data coverage being extended to items such as financial and other services. The new data series are scheduled for dissemination in 2011.
- 2) The Monetary and Financial Statistics cover assets and liabilities of financial intermediaries, as suggested in the IMF's Monetary and Financial Statistics Manual (MFSM2000). In 2010, the coverage has been extended to include the Deposit Protection Agency (DPA), securities companies and pawn shops.
- 3) The International Investment Position (IIP) is the balance sheet of external financial assets, liabilities, and the net position, and is currently disseminated on an annual basis. In 2010, the survey form was redesigned to enhance data collection so as to accommodate the BOT's further foreign exchange deregulations, as well as the IMF's initiatives to encourage member countries to disseminate quarterly IIP statistics.
- 4) International trade credits consist of claims and liabilities associated with the direct extension of credit by suppliers of goods or services. A survey of exporters and importers has been carried out by the BOT since 2005. The results were disseminated in September 2010.
- 5) Real sector statistics. In 2010, improvements were made to real sector statistics and indices so as to increase their reliability and to better reflect the manufacturing subsector as follows:
- The Business Sentiment Index (BSI): The sample size was increased to better reflect each manufacturing subsector, in particular the services sector.
- Survey of accommodations: The sample size was increased to enhance the coverage and to better reflect the represented regions. New indicators such as advance reservations, average room rates, etc. were added to the survey.
- The Labour Productivity Index: This index is a measure of output per employed person, reflecting labour efficiency, and is compiled on a quarterly basis.

#### (2) Statistical collaboration with other agencies

- 1) In order to avoid redundancy and reduce the reporting burden, the BOT, in collaboration with other statistical and government agencies designated as official compilers of related statistics, have agreed upon the exchange of data through a memorandum of understanding (MOU), as follows:
- The Manufacturing Production Index and Capacity Utilization Ratio, including data on volume of production and domestic sales: the BOT ceased compilation and has been using the series compiled by the Office of Industrial Economics of the Ministry of Industry since August 2010.
- The Agricultural Production Index and the Agricultural Price Index, including data on the volume and prices of major agricultural products: the BOT ceased compilation and will be using the series compiled by the Office of Agricultural Economics of the Ministry of Agriculture and Cooperatives from January 2011 onwards.
- 2) The multilateral memorandum of understanding between 5 agencies, the BOT, the Securities Exchange Commission (SEC), the Public Debt Management Office (PDMO), the Stock Exchange of Thailand (SET) and the Thai Bond Market Association (TBMA), was signed in December 2010 in order to establish the Thailand Financial Instruments Information Center (TFIIC). This serves as an inter-agency centralized database, covering both a central registry and transactional data for equity securities, debt securities and financial derivatives. The TFIIC is scheduled to be launched in 2011, with the SET being responsible for maintaining the central registry and the BOT responsible for maintaining the transactional database.

#### (3) Dissemination of statistics and related analyses to the public

- 1) The time of dissemination of exchange rates on the BOT Website was brought forward from 10.00 a.m. of the following day to 18.00 p.m. of the same day.
- 2) Dissemination of analyses on the BOT Website. (e.g., articles on surveys of international trade credits and improvements to the BSI)
- 3) Increased coverage of fees on financial services disseminated on the BOT website to accommodate cross-institution comparison.
- 4) Information exchange and feedback facilities for financial institutions as part of the Data Provisioning Project under Financial Master Plan II, starting July 2010.
- 5) Organization of a "Statistics Symposium" on the occasion of the Data Management Department's 10<sup>th</sup> anniversary so as to publicize statistical work

done by the BOT, to exchange ideas and knowhow, and to reinforce understanding and awareness among compilers and users.

#### (4) A more user-friendly and flexible in-house IT system

- 1) Development of the BOT data dissemination system (BOTdd) so as to support the analytical needs of top management and BOT staff.
- 2) Enhancements to the Data Management System (DMS) in response to changes in supervision regulations.
- 3) Improvements to the reporting about treasury centers so as to accommodate the increasing number of treasury centers and the related data requirements.

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

On June 3, 2008, the Bank of Thailand (BOT) announced a 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 2010, out of the total credit line approved by the BOT to financial institutions of 24,845.6 million baht, total loans outstanding as at end of 2010 registered 12,464.1 million baht, a decline of 29.8 percent from the end of 2009. Total loans disbursement in 2010 amounted to 58,726.1 million baht, a decrease of 22.1 percent from the previous year. Details are as follows:

BOT's Financial Assistance to Priority Economic Sectors in 2010

Unit : Million baht

	20	10	.0 2009			Change		
Program	Accumulative Value (1)	Outstanding at year-end (2)	Accumulative Value (3)	Outstanding at year-end (4)	g Accun	increas nulative due %	e, -decrea e Outsta at yea (2) - (4)	nding
1. Regular Lending Program								
- Lending to SMEs	1,807.3	173.8	14,697.1	780.2	-12,889.8	-87.7	-606.4	-77.7
2. Emergency Lending Progr	rams							
2.1 Lending to Entrepren	neurs Affected b	y Violence in	the Three Sout	hern				
Border Provinces	47,785.3	12,242.5	49,343.0	15,316.4	-1,557.7	-3.2	-3,073.9	-20.1
2.2 Lending to Entrepren	eurs in Songkh	la and						
Satoon Provinces	8,446.4	37.8	10,383.7	1,418.9	-1,937.3	-18.7	-1,381.1	-97.3
2.3 Lending to SMEs Affected by the Appreciation								
of the Baht	687.1	10.0	987.7	228.5	-300.6	-30.4	-218.5	-95.6
Total	58,726.1	12,464.1	75,411.5	17,744.0	-16,685.4	-22.1	-5,279.9	-29.8

#### 12. Bank of Thailand Regional Office

#### 12.1.1 Economic Analysis

#### (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; assesses the impacts of various economic issues and government measures on the Northern Region's economy; and develops key economic indicators; as well as conducts survey on business liquidity and exchanges 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.

## (2) Analyzing and monitoring border trade and economic conditions of neighboring countries

The NRO conducts studies, surveys, monitors and analyzes economic conditions of Myanmar and the Southern China, border trade activities and follows 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.

#### (3) Conducting a study and research

In 2010, 2 research projects were conducted by NRO as follows: (1) Demand and alternatives of grass-root people in using financial services: a case study of Northern region (2) Impacts of ASEAN Free Trade Agreement on agricultural products in Thailand: a case study of Thai rice.

#### 12.1.2 Business and Financial Analysis

#### (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 local-administrative-organization fiscal balance; to encourage greater access to finance for SMEs and to enhance understandings of foreign exchange risk management by co-organizing seminars with related private sectors and commercial banks in major provinces.

#### (2) Foreign Exchange Monitoring

- 1) Authorized money changers At the end of November 2010, total foreign currencies purchased and sold by 83 authorized money changers amounted to 72.62 million U.S. dollars and 72.33 million U.S. dollars, respectively, increasing from the previous year by 44.79 percent and 44.21 percent, respectively.
- 2) Money transfer agencies The number of money transfer totals 243 agencies which comprises of 4 companies under Central group and 239 offices under Thailand Post Co.,Ltd. At the end of November 2010, total outward transfer amounted to 1.21 million U.S. dollars, increasing from the previous year by 17.59 percent and total inward transfer amounted to 18.75 million U.S. dollars, decreasing from the previous year by 6.12 percent.

#### (3) Analyzing and Monitoring Financial Health

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

#### 12.1.3 Banking Business Facilities

#### (1) Funds Deposit and Funds Withdrawal

In 2010, the amount of fund deposited to and withdrawn from current accounts at Headquarter were 4,161.6 million baht and 4,189.2 million baht which both decreased from the previous year by 4.6 percent.

#### (2) Financial Assistance to Priority Economic Sectors

Regarding the BOT regulations on financial assistance for small and medium entrepreneurs (SMEs) suffered by baht appreciation, the financial assistance of 368.8 million baht was provided to 132 businesses in the Northern region. At the end of 2010 the outstanding amount was 26.2 million baht.

#### (3) Government Bonds Agent

At the end of 2010, the number of government bondholders totaled 39,167 persons with a total holding of 45,129.13 million baht. Of this, the number of bondholders who required transaction services totaled 2,490 persons. The value of bond distribution was 4,961.57 million baht, totaling 8,840 persons while the value of bond redemption was 77,966 million baht, totaling 2,913 persons.

#### (4) Cheque Clearing

In 2010, the volume of provincial processed cheques by clearing houses in Northern region was 3.1 million issues with vale of 564,650.3 million baht, close to that of last year in term of volume but increased by 9.6 percent in term of value. The value of returned cheques was 6,747.5 million baht. The ratio of returned cheques to processed cheques was 11.5 percent in term of value.

#### (5) Others

The other responsibility includes representing the Bank of Thailand's policies to public through a wide range of media such as television and radio broadcast, publications, electronic media.

#### 12.2.1 Economic Analysis

#### (1) Analyzing and monitoring economic conditions of the Northeastern Region

The major responsibilities include analyzing, monitoring, assessing and forecasting major economic sectors of the Northeastern Region's economic development as part of monthly macroeconomic assessments to support the monetary policy implementation. In this process, the Office monitors, analyzes and publishes monthly commodity reports, including rice, cassava, sugar cane, and rubber tree as well as biofuels issues. The reports study price and production trends of main crops and commodities that affect regional macroeconomic performance. The Office also develops tools, econometric models and key economic indicators of the Northeastern Region's economy. In 2010, the Office

#### (2) Conducting the Economic/Business Information Exchange Program

The NEO holds a series of discussion with individual businesses and governmental organizations under the Economic/Business Information Exchange Program between the Bank of Thailand and Business Sector to gain deep insights on the current state of the business conditions, combined with quantitative data for the Northeastern Region's economic assessments. In 2010, the Office organized discussions with 172 business contacts in both private and public sectors; for examples, the Joint Standing Committee on public and private sectors to solve economic problems, Provincial Federation of Industries, Provincial Chambers of Commerce, Northeastern Region's Bankers Association, Specialized Financial Institutes (SFIs) and Khon Kaen University. The main topics of discussions in 2010 included the impacts of floods on the Northeastern economy, impacts of baht appreciation on agricultural commodity prices and farm income, effects of increased interest rates on private sector, and impacts of measures relating loan to value ratio on the real estate sector.

# (3) Analyzing, monitoring and assessing border trade and economic and financial conditions of neighboring countries

The NEO conducts studies, surveys, monitors, and assessments of economic and financial conditions of neighboring countries - - Lao PDR, Cambodia, and Vietnam - - and the Northeastern Thailand's border trade activities with these countries. The Office produces monthly, quarterly and annual reports on border trade. In addition, the NEO develops, promotes and monitors bilateral collaborations on cross-border payments to facilitate border trade between Thailand and the neighboring countries. In 2010, Thai commercial banks launched countrywide Bath-Kip and Baht-Riel exchange services.

#### (4) Conducting a study and research

In 2010, the NEO conducted ten economic studies that were published in local newspapers: (1) Strong Thailand projects: part 1 and 2; (2) Ta Man analyzed causes and effects of drought; (3) X-rayed bank loan guarantee in the Northeastern Region; (4) Trends of sugar consumption in Thailand; (5) Thai rice situations in 2010; (6) Ethanol: the real fuel: part 1 and 2; (7) Sticky rice at the historical record price; (8) How do exchange rates affect farmers?; (9) Problems of labour shortage in the Northeastern Region; and (10) Modern agricultural machinery and future of Thai farmers. Two research projects were conducted as

follows: (1) Demand and choices for financial services of the grass roots in the Northeastern Region; and (2) The impacts of the ASEAN Free Trade Area (FTA) on Thailand's agricultural products: case studies of rice, rubber tree, sugar cane, cassava, shrimp and oil palm.

#### (5) Meetings/seminars/workshops/collaborations with neighboring countries

- 1) The NEO organized regional economic condition assessments in collaboration with the Office of the Northeast Economic and Social Office and the government economic planning agencies in Khon Kaen and held a workshop on the Forecast of Gross Regional Products (GRP) of the Northeastern Region for the year 2010, totaling 14 meetings.
- 2) The NEO held discussion for exchanging views and promoting networks with public and private sectors, totaling 121 meetings. Examples were a meeting with the Office of the Rubber Replanting Aid Fund in the Northeastern Region and a visit to Khon Kaen Sugar Industry Public Company. The NEO's staff was invited to give talks and lectures for 19 meetings and seminars.
- 3) The NEO held a special academic seminar on Thai Economy under the Volatile and Challenging World in the occasion of the NEO's 42<sup>nd</sup> anniversary and organized two seminars on the topics of Baht Appreciation: Crisis or Opportunities for Thai Businesses and the Impacts of ASEAN Free Trade Area (AFTA) on Agricultural Sector.
- 4) The NEO's staff participated in the bilateral meetings between the BOT- the Bank of the Lao PDR (BOL) on 5 June 2010 in Champasak, Lao PDR and the BOT- the National Bank of Cambodia (NBC) on 31 July 2010 in Siam Reap, Cambodia.
- 5) In accordance with the Memorandum of Understandings (MOUs) between the BOT and the Bank of Lao PDR (BOL) and the National Bank of Cambodia (NBC), In 2010, the NEO on behalf of the Bank of Thailand (BOT) provided two training courses for the BOL's staff held at the BOL and two training courses for the NBC's staff held at the NBC and organized five study visits in Thailand for each BOL and NBC. The NEO held a study visit in Thailand for staff from the State Bank of Vietnam (SBV). Moreover, the NEO monitored educational performances of three students from the BOL and NBC who received scholarships from the BOT.
- 6) Thai delegations from the Bank of Thailand headed by the Assistant Governor visited the Thai Embassy in Hanoi and the Thai Consular in Ho Chi Minh City and had discussion with the SBV and related organizations of Vietnam to exchange views and ideas for promoting close relationship and strengthening

collaboration between the two central banks. The NEO also organized sport activities to promote friendship between the BOT and the BOL PDR.

#### 12.2.2 Business and Financial Analysis

# (1) Monitoring and supervising financial institutions and personal loan business under the BOT's supervision

The NEO is responsible for collating information, monitoring and supervising Personal Loan Business in the Northeastern Region as follows:

- 1) The NEO conducts surveys and collects information of unregulated personal loan business operators and the database is developed for supporting police officers in tackling unlicensed personal loan activities.
- 2) The NEO deals with customer complaints against financial service firms, solves customers' problems and provides financial services consultation to people in the Northeastern region. In 2010, the Office handled 58 complaint cases. Of this, 36 cases were resolved at the NEO and 22 cases were passed on to the Credit Coordination Centre (CCC).
- 3) The NEO held 17 exhibitions and seminars on financial services and literacy and risk of financial fraud for educational institutions, government and private sectors.
- 4) The Office set up financial and property business database, focusing on prime provinces to support analytical work of the Economic and Financial Analysis Division of the NEO, financial institutions and public and private sectors.

#### (2) Foreign exchange monitoring

- 1) The NEO supervised and monitored foreign exchange providers to conduct business in accordance with the law and regulations. In 2010, the total foreign currencies purchased and sold by 22 authorized money changers amounted to 32.5 million baht. The total inbound and outbound money transfers provided by 308 international money transfer firms totaled 1,715.9 and 60.5 million baht respectively.
- 2) The NEO assisted the potential entrepreneurs to apply for the authorized licenses. In 2010, four of them were granted authorized licenses as money changers.

#### 12.2.3 Banking Business Facilities

# (1) Financial assistance to priority economic sector and government bonds agent

At end of 2010, the total outstanding loans to the priority economic sector secured by financial institutions' promissory notes stood at 35.25 million

baht. The number of government and state enterprises bondholders totaled 33,958 persons with a total holding of 36,607.1 million baht.

#### (2) Banking activities and cheque clearing

In 2010, the total current account deposits transactions registered 1,039, with the value of 3,313.3 million baht. The total withdrawal transactions accounted for 317, totaling 3,331.8 million baht. The total volume of taken-in cheques for processing was 3,306.9 thousand transactions with the amount of 744,680.4 million baht. Of this, the total number of returned cheques was 38.9 thousand transactions with the value of 6,694.7 million baht.

#### 12.3.1 Economic Analysis

#### (1) Monitoring and Analyzing Economic conditions

The SRO has monitored and analyzed economic situation in the Southern Region to support the Monetary Policy Group's monthly macroeconomic meeting. For this purpose, the Regional Economy Division reported the development of major commodities and assessed the impacts of major incidents such as political instability, foreign exchange rate movements, as well as weather conditions - on the economy. Moreover, the division exchanged view with the private sector on business conditions in the Southern areas as well as their perception on BOT's policy under the Business Information Exchange Program. In order to shared Economics Knowledge and the Bank of Thailand's Role to the public, a number of activities were organized. These included the annual symposium, seminars, lecture and workshop for other government agencies and economic lecturers as well as economic and banking competitive forum.

#### (2) Conducting studies and research

In 2010, 6 studies were conducted by the SRO as follows:

- 1) Demand for and Access to Financial Services of Low-Income People: A Case study of the Southern Region.
- 2) The Impact of AFTA on Agricultural Products: Rice, Rubber, Sugar, Cassava, Palm oil and Shrimp.
  - 3) The Major Factors Affecting Rubber Price.
  - 4) Real Estate Conditions in the Southern Region.
- 5) Real Estate Investment and Impact of Loan to Value Ratio (LTV) in Songkla Phuket and Surathani Province.

#### 6) Financial Cost Management of SMEs.

## (3) Monitoring and Analyzing the economic conditions of neighboring countries and border trade

The SRO has monitored and analyzed the economic and border trade issues of Malaysia, especially Klantan and Tranganu, and Indonesia. Border trade conditions were reported on a monthly basis.

#### 12.3.2 Business and Financial Analysis

#### (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) Personal Complain Center

In 2010, the SRO made response to personal complain on financial services totaled 64 cases.

#### (3) Exchange Control

Regulated authorized money changers and money transfer agents. At the end of 2010, the number of authorized money changers regulated by the SRO totaled 378 units. The purchase and sales of foreign currencies from and to customers amounted to 92.3 million U.S. dollars and 92.4 million U.S. dollars, respectively. The number of authorized money transfer agents amounted to 208 units. The value of money transferred in and out were 11.2 million U.S. dollars and 3.2 million U.S. dollars, respectively.

#### (4) Conducting the financail literacy education for Saving Group

In 2010, SRO arranged the financal eduction on topics of risk management and Internal Control in Chumporn, Ranong, Trang and Songkhla. Moreover, we also held the financal eduction project in Trange province focused on computer accounting program literacy.

#### 12.3.3 Banking Business Facilities

#### (1) Funds Deposit and Funds Withdrawal

In 2010, the transactions of funds deposited to the SRO's current account were 1,859 items, worth 43,076.2. Meanwhile, those of funds withdrawn were 1,306 items with a value of 45,305.5 million baht.

#### (2) Cheque Clearing

In 2010, the volume of the provincial processed cheques by 18 clearing houses in the Southern Region was 3.83 million issues, worth 732.5 billion baht. The volume of returned cheques was 66,243 items with a value of 6,533.6 million baht. The ratio of returned cheques to processed cheques was 1.73 percent by volume and 0.89 percent by value, respectively.

#### (3) Financial Assistance to Priority Economic Sectors

At the end of 2010, the outstanding of loan provided by the Southern Regional Office, under the Financial Assistance for Small and Medium Enterprise (SME) Scheme, amounted to 6,275.3 million baht. Of this, 6,252.5 million baht was a loan provided under the 3-Southern-border-province Scheme and Songkhla-Satul Province Scheme. The latter was due on December 31, 2010 and to be repaid on January 4, 2011.

#### (4) Bond Agent

At the end of 2010, the number of government and Bank of Thailand bondholders registered at Southern Region office totaled 32,722 persons with a total holding of 33,549 items, worth 30,973.7 million baht. The interest payment transactions accounted for 61,808 items with a value of 1,268.9 million baht. The number of new bond distribution totaled 8,591 bondholders, amounted to 4,566.1 million baht. The volume of bond redemption was 1,900 items with the value of 998.8 million baht. In addition, bondholders updating their record totaled 2,518 items with value of 2,390.1 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, as Chairman, Khun Pornthip Jala, member of the Bank of Thailand Board, and Mrs. Tanya Sirivedhin, external member, as members of the Committee, with the Senior Director of the Internal Audit Department as Secretary.

The Committee's objective is to function as an effective mechanism of the Bank of Thailand Board to ensure good corporate governance, effective and prudent risk management, internal control, and internal auditing processes, aimed at assisting management in directing the Bank of Thailand (BOT)'s operations towards achieving its set objectives by performing the duties and responsibilities as prescribed in the Audit Committee Charter and also as assigned by the Bank of Thailand Board.

During 2010 the Committee convened 14 meetings, including, as deemed necessary and appropriate, meetings with the Governor on two occasions, one meeting at a regional office and two meetings with the external auditors from the Office of the Auditor General of Thailand.

The Committee received excellent co-operation from management and relevant departments. From the meetings, appropriate actions were taken on a continual basis.

The Committee's deliberations and actions may be summarized as follows:

#### 1. Financial Statements

The Committee reviewed financial processes and reports under the responsibility of the BOT (financial reports of the BOT, the Currency Reserve and the Banknote Operations) to reasonably assure their fair representation and reliability, appropriate accounting policy and adequate disclosure in accordance with generally accepted accounting standards and related laws.

The Committee is of the opinion that the overall process for the preparation of accounting records and financial statements of the BOT is subject to effective and strict internal control. The financial statements accurately represent the BOT's financial position and results of operations and sufficiently reliable in accordance with generally accepted accounting principles, practices for Central Banks, as well as comply with relevant laws. The disclosure of related financial information is adequate and appropriate.

#### 2. Internal Control and Auditing

With support from the Internal Audit Department (IAD), the Committee reviewed and made recommendations on the processes in core functions of BOT, namely international reserves management, operations which support the BOT's three policy committees, and financial reporting. The Committee also reviewed the audit reports under the audit plans and made additional recommendations to promote independence, efficiency and continual effectiveness of internal audit.

The Committee is of the opinion that the overall internal control system and internal audit process of the BOT were appropriate, sufficient and efficient, and has been moving in a positive direction.

#### 3. Risk Management

Recognizing the importance of the management supervisory role of the Bank of Thailand Board over risk management the Committee recommended that to the Bank of Thailand Board establish an organization level Risk Management Committee to act as the Board's mechanism in supervising overall risk management at the enterprise level of the BOT.

#### 4. Oversight and Support of the Work of Internal Auditors

The Committee approved the annual audit plan, working plan and budget, gave recommendation on the appointment of Chief Audit Executive of the IAD to the Bank of Thailand Board and considered the annual performance appraisal of Chief Audit Executive together with the Governor. The Committee also encouraged appropriate coordination among the BOT's management, external auditors and the IAD.

#### 5. Meetings with External Auditors

The Committee had two meetings with the external auditors, one of them without the presence of the management of the BOT, to acknowledge comments and recommendations of the external auditors on accounting practices and the BOT's financial statement preparation, including any issues related to auditing, internal control and the independence of external auditors. The Committee also agreed on the annual audit fee to be submitted for approval by the Bank of Thailand Board.

#### 6. Reporting of the Audit Committee Performance

The Committee is required to present an Audit Committee performance report to the Bank of Thailand Board and the Minister of Finance, on a quarterly basis, in accordance with BOT Act B.E. 2485 section 55 as amended in B.E. 2551.

#### 7. Evaluation of the Audit Committee performance

The Committee conducted self assessment covering the composition of the Committee, meetings, result of performance and relationship between management and external auditors, consistent with best practices and the Bank of Thailand Audit Committee Charter.

The results indicated that the scope and results of performance is consistent with best practices and the Bank of Thailand Audit Committee Charter, thereby strengthening good governance of BOT. The result of the self assessment was submitted to the Bank of Thailand Board for information and to receive additional recommendations.

#### Summary of the Audit Committee's Opinion

In an effort to fulfill its objectives, the Committee committed itself to fully using its knowledge, capabilities and expertise, through providing independent and impartial suggestions to the Bank of Thailand Board, BOT management and staff while impartially taking into consideration the interest of all stakeholders.

Overall the Committee believes that the Bank of Thailand Board, the Bank management and staff are committed to exercising their professional skills to achieve BOT's objectives with transparency and good corporate governance, as well as ensuring appropriate risk management and internal control systems, which should ensure confidence of stakeholders.

18. Willisombarn

(Mr. Nontaphon Nimsomboon) Chairman, Audit Committee Bank of Thailand 20 January 2011

# 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, 2010 and 2009, the Profit and Loss Account, the Statements of Changes in Capital and the Statement of Cash Flows for each year then ended of the Bank of Thailand. The Bank of Thailand's management is responsible for the correctness and completeness of information presented in these financial statements. Our responsibility is to express an audit 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, 2010 and 2009, the results of operations, and the cash flows for each year then ended of the Bank of Thailand, in accordance with generally accepted accounting principles.

Without qualifying opinion to the above financial statements, we draw attention to Note 3 to the financial statements regarding changes in accounting policies. The Bank of Thailand changed its accounting policies to be in conformity with other central banks' practices which are the specific accounting practices for central bank business.

(signed)

(Ms. Poungchan Laosutiwong)
Director Of Audit Office

(signed)

(Ms. Klinpaka Mangkornkaew) Auditor In-charge

Office of the Auditor General March 14, 2011 As of December 31, 2010 and 2009

Unit: Baht

Unit . Dant				
	Notes	2010	2009	
ASSETS				
Cash and Deposits	4	555,206,071,069	572,992,027,621	
Reserve Tranche and Holdings				
of Special Drawing Rights	5	56,511,037,550	62,837,294,715	
Investments	6	3,007,458,517,906	2,439,808,385,295	
Loans	7	12,464,078,400	17,743,984,500	
Premises and Equipment, net	8	6,114,543,455	5,724,219,427	
Other Assets	9	131,247,487,151	118,705,411,147	
Total Assets		3,769,001,735,531	3,217,811,322,705	
LIABILITIES AND EQUITY				
Deposits	10	548,431,082,652	229,985,786,963	
Allocations of Special Drawing Rights	11	45,051,316,081	50,741,604,559	
Securities Sold under Repurchase Agreeme	ents 12	337,900,000,000	380,100,000,000	
Debt Securities Issued				
by the Bank of Thailand	13	3,140,007,386,728	2,531,360,086,303	
Other Liabilities	14	129,440,665,468	107,381,947,944	
Total Liabilities		4,200,830,450,929	3,299,569,425,769	
Equity				
Initial Capital		20,000,000	20,000,000	
Statutory Appropriation	15	27,307,931,128	27,307,931,128	
Reserve for Stabilization of Profit				
Payable to the Government	16	624,075,747	624,075,747	
Assets and Liabilities				
Revaluation Reserve	17	(260,211,300,705)	(27,613,881,688)	
Accumulated Losses	18	(82,096,228,251)	(74,434,716,470)	
Net Loss for the Year		(117,473,193,317)	(7,661,511,781)	
Total Equity		(431,828,715,398)	(81,758,103,064)	
Total Liabilities and Equity		3,769,001,735,531	3,217,811,322,705	

The accompanying notes form part of these financial statements.

(Mr. Prasarn Trairatvorakul) Governor

(Mrs. Sarida Sangchant) Director, Accounting Department

# Bank of Thailand Profit and Loss Account

For the Year Ended December 31, 2010 and 2009

Unit: Baht

	Notes	2010	2009		
Revenues					
Interest Income		42,598,531,011	38,099,131,150		
Commission		585,740,488	677,314,845		
Others	19	10,711,122,263	27,861,694,119		
Total Revenues		53,895,393,762	66,638,140,114		
Expenses					
Interest Expense		62,709,287,459	50,200,673,388		
Net Losses on Foreign Exchange		103,805,931,616	18,874,293,226		
Personnel Expenses		3,510,070,450	3,401,896,637		
Others		1,343,297,554	1,822,788,644		
Total Expenses		171,368,587,079	74,299,651,895		
Net Loss		(117,473,193,317)	(7,661,511,781)		

# Bank of Thailand Statement of Changes in Equity

For the Year Ended December 31, 2010 and 2009

Unit : Baht Reserve for Assets and Stabilization of Liabilities Profit Payable to Revaluation Accumulated Net Profit (Loss) Appropriation the Government Capital Reserve for the Year Total Losses Balance as of January 1, 2009 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) 624,075,747 (27,613,881,688) (74,434,716,470) (7,661,511,781) (81,758,103,064) Balance as of December 31, 2009 20,000,000 27,307,931,128 Changes during the Year Net Loss transferred to Accumulated Losses (7,661,511,781) 7,661,511,781 Unrealized losses on Assets (232,597,419,017) and Liabilities Revaluation (232,597,419,017) (117,473,193,317) (117,473,193,317) Balance as of December 31, 2010 624,075,747 (260,211,300,705) (82,096,228,251) (117,473,193,317) (431,828,715,398) 20,000,000 27,307,931,128

# Bank of Thailand Statement of Cash Flows

For the Year Ended December 31, 2010 and 2009

Unit: Baht

		UIIIt . Daiit
Notes	2010	2009
Cash Flow from Operating Activities		
Net Loss	(117,473,193,317)	(7,661,511,781)
Adjustments to Reconcile Net Loss		
to Net Cash Flow from Operating Activities:		
Depreciation and Amortization Expenses	454,962,323	516,720,785
Gain on Disposal of Premises		
and Equipment	(5,730,956)	(2,746,854)
(Gain) Loss from Net Asset Value Changes		
of Investments Managed by External		
Fund Managers	283,510,359	(6,828,711,590)
Interest Income	(42,598,531,011)	(38,099,131,150)
Interest Expense	62,709,287,459	50,200,673,388
Loss from Non-cash Foreign Assets		
and Liabilities Cost Averaging	70,990,185,604	29,534,297,206
Gain from Decreasing in Provision for		
Contingent Losses on Forward		
Contracts under Resale Agreements	(157,114,984)	(178,960,585)
Net (Increase) Decrease in		
Accrued Revenues	95,488,077	(233,174,502)
Net Increase (Decrease) in		
Accrued Expenses	811,470	(9,584,957)
Net Increase in Prepaid Expenses	(1,385,816)	(1,702,627)
Cash Received (Paid) on Operation	(25,701,710,792)	27,236,167,333
Cash Received on Interest Income	48,228,061,947	44,377,229,739
Cash Paid on Interest Expense	(43,775,468,371)	(35,579,660,219)
Net Profit (Loss) from Operation before		
Changing in Operating Assets/Liabilities	(21,249,117,216)	36,033,736,853
(Increase) Decrease in Operating Assets		
Foreign Deposits	(76,015,016,079)	114,637,318,999
Reserve Tranche and Holdings of Special		
Drawing Rights	(25,955,441)	(46,146,084,320)
Loans	5,279,906,100	4,651,702,000
Other Assets	1,702,976,763	(613,568,857)

# Bank of Thailand **Statement of Cash Flows**

For the Year Ended December 31, 2010 and 2009

Unit: Baht

		Unit : Bant
Notes	2010	2009
Increase (Decrease) in Operating Liabilities		
Deposits	318,445,206,987	94,884,083,761
Securities Sold under Repurchase Agreements	(42,200,000,000)	47,858,477,019
Debt Securities Issued by the Bank of Thailand	591,692,879,353	560,504,867,975
Other Liabilities	(6,276,202,489)	(4,216,363,863)
Net Cash Flow from Operating Activities	771,354,677,978	807,594,169,567
Cash Flow from Investing Activities		
Net (Increase) Decrease in Investments in		
Domestic Securities	55,021,510,049	(43,321,688,218)
Net Increase in Investments in Foreign Securities	(860,392,618,218)	(775,576,173,860)
Net Increase in Premises and Equipment	(757,643,645)	(180,930,619)
Net Cash Flow used in Investing Activities	(806,128,751,814)	(819,078,792,697)
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	(1,043,348,173)	467,115,183
Net Increase (Decrease) in Cash and Cash Equivalents	(35,817,422,009)	34,974,978,593
Cash and Cash Equivalents at the		
Beginning of the Year	84,473,109,972	49,498,131,379
Cash and Cash Equivalents at the		
End of the Year 4	48,655,687,963	84,473,109,972

# BANK OF THAILAND NOTES TO FINANCIAL STATEMENTS

#### FOR THE YEAR ENDED DECEMBER 31, 2010 AND 2009

#### 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 as amended, 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 Note 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 unless otherwise disclosed. 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 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 weighted average cost of each foreign currency, and presented in the Assets and Liabilities Revaluation Reserve under the equity section.

Gains or losses from foreign currency transactions are recognized in the Profit and Loss Account when the position of each foreign currency is decreased. Whenever the position of any foreign currency increases during the day, the cost of such foreign currency is calculated using the weighted average cost method and used as the cost of the same foreign currency sold on the same day. At the end of each day, if all daily transactions of a particular foreign currency result in the net positive position or the net inflow, the daily weighted average cost of the net inflow as such shall be added to the previous day's holding to produce a new weighted average cost. In case of the net negative position or the net outflow, gains or losses from foreign currency transactions shall be calculated using the weighted average cost of the preceding day.

#### 2.4 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.

#### 2.5 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 year-end, until 2007, the contracts were revalued by comparing the year-end exchange rates with the contracted rates. The provision was fully provided for the contracts resulted in contingent losses.

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 value and the changes in the fair value are presented in the Assets and Liabilities Revaluation Reserve under the equity section.

#### 2.6 Foreign Exchange Swap Contracts

Foreign exchange swap contracts are used for the purpose of liquidity and international reserves management. Foreign exchange swap is an agreement to simultaneously exchange one currency against another with two different value dates. The outstanding of claims and obligations are revalued to baht at the exchange rates prevailing on the balance sheet date and net value changes are presented in the balance sheet. Unrealized gains and losses from revaluation of the outstanding obligations are presented in the Assets and Liabilities Revaluation Reserve under the equity section. The difference between the spot and forward exchange rates shall be treated as interest income or interest expense on a time proportion basis by the straight-line method.

#### 2.7 Futures Contracts

Futures contracts are used to hedge risk arising from the interest rate or bond price fluctuation and are presented at fair value. Unrealized gains and losses from changes in the fair value are presented in the Assets and Liabilities Revaluation Reserve under the equity section and are recognized in the Profit and Loss Account when the settlement of the variation margin takes place.

#### 2.8 Gold

To preserve the value of international reserves, gold is held for the purpose of risk diversification of the reserve management and is presented 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.

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

#### 2.9 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.

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

#### 2.10 Loans

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

#### 2.11 Premises and Equipment

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

Buildings and equipment are capitalized when their useful lives are over one year. The depreciation is calculated using 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 Note Issuance Business and the FIDF is allocated to each unit according to an asset usage proportion basis.

#### 2.12 Intangible Assets

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

#### 2.13 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" and the amount of obligations to return debt securities are presented in "Other Liabilities".

#### 2.14 Pension Fund and Provident Fund

#### 2.14.1 Pension Fund

The BOT's Rules and Regulations for Pension Fund B.E. 2539 as amended, 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.

#### 2.14.2Provident Fund

The BOT's Rules and Regulations for Provident Fund B.E. 2539 as amended, states 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 as expense in the Profit and Loss Account.

#### 3. Changes in Accounting Policies

In 2010, the BOT changed its accounting policies for providing more appropriate presentation of its financial position and accommodating its performance as a central bank. The BOT had studied the accounting practices of other leading central banks including some of regional central banks, to ensure that these accounting policies would be more appropriate for the BOT. The changes are set out below.

3.1 The accounting treatment of foreign exchange swap was changed from recognizing gains or losses from foreign currency transactions on the date of settlement to recognizing the difference between the spot and forward exchange

rates as interest income or interest expense on a time proportion basis by the straight-line method.

- 3.2 The calculation basis for the cost of foreign currency sold was changed from the weighted average cost method to the modified weighted average cost method with a daily-netting concept. At the end of the day, if the net position of any particular foreign currency is negative, the weighted average cost of the preceding day of such currency will be used.
- 3.3 The presentation of the assets managed by external fund managers was changed from presenting the total value of managed assets under "Investments" and recognizing changes in net asset value in the Profit and Loss Account to presenting the value of individual managed assets in accordance with the assets managed by the BOT.

In preparing the financial statements for the year 2010, it is impracticable for the BOT to adjust the cumulative effects of changes in accounting policies (as mentioned in Notes 3.1-3.3) to the opening balance of equity of the current period. The BOT therefore has applied the prospective approach to comply with the Thai Accounting Standard 8: Accounting Policies, Changes in Accounting Estimates and Errors (revised volume 2009). Had the accounting policies been changed since 2009, the effects of the adjustments would have caused net profit to increase by B27,366.6 million, assets to decrease by B13,555.4 million, liabilities to decrease by B13,673.5 million and equity to increase by B118.1 million.

#### 4. Cash and Deposits

	Unit : Million bah 2010 2009	
Cash and Cash Equivalents		
Cash	29,967.2	48,600.6
Domestic Deposits	5.2	17.3
Foreign Deposits (Demand Deposits)	18,683.3	35,855.2
Total Cash and Cash Equivalents	48,655.7	84,473.1
Foreign Deposits		
(Time Deposits and Special Deposits)	506,550.4	488,518.9
Total	555,206.1	572,992.0

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

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

	Unit : Million bal 2010 2009	
Quota Subscribed to International		
Monetary Fund (IMF)	50,234.7	56,579.6
<u>Less:</u> IMF Current Account No.1	(13,895.6)	(20,065.9)
Non-Negotiable with Non-Interest Bearing		
Promissory Notes Payable to IMF	(24,959.9)	(24,481.7)
Reserve Tranche	11,379.2	12,032.0
Holdings of Special Drawing Rights	45,131.8	50,805.3
Total	56,511.0	62,837.3

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 9 (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 14 (Other Liabilities).

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

#### 6. Investments

	Unit : Million bal	
	2010	2009
Domestic Securities		
Cost after amortization of premiums		
or discounts	282,741.8	340,036.8
Foreign Securities		
Cost after amortization of premiums		
or discounts	2,704,737.5	2,085,599.4
Plus: Unrealized gains from price and foreign		
exchange rate revaluation of investments	19,979.2	14,172.2
	2,724,716.7	2,099,771.6
Total	3,007,458.5	2,439,808.4

7. Loans		
	Unit : M	illion baht
	2010	2009
Programs guaranteed by the Ministry of Finance	2,546.1	2,546.1
Programs collateralized with entrepreneur promissory		
notes endorsed for the BOT by financial institutions	9,918.0	15,197.9
Total	12,464.1	17,744.0

As of December 31, 2010, 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.

#### 8. Premises and Equipment, net

			Unit	: Million baht
	Balance	Changing is	n Book Value	Balance
	Dec 31, 2009	Increase	Decrease	Dec 31, 2010
Land	2,464.8	11.0	-	2,475.8
Buildings	3,529.8	17.0	-	3,546.8
Temporary Buildings				
and Improvements	235.0	35.9	-	270.9
Equipment	2,173.0	126.3	(44.2)	2,255.1
Assets under Construction	on 164.0	727.2	(141.8)	749.4_
Total	8,566.6	917.4	(186.0)	9,298.0
<u>Less</u> : Accumulated Depart	reciation			
Buildings	(1,539.1)	(142.1)	-	(1,681.2)
Temporary Buildings				
and Improvements	s (211.5)	(13.6)	-	(225.1)
Equipment	(1,091.8)	(217.4)	32.0	(1,277.2)
Total	(2,842.4)	(373.1)	32.0	(3,183.5)
Premises and				
Equipment, net	5,724.2	544.3	(154.0)	6,114.5
Depreciation for the year	400.0			373.1

The BOT signed the Memorandum of Understanding (MOU) with the Securities and Exchange Commission (SEC) on partial space utilization in the Surawongse building for 10 years. Later, the SEC officially informed the BOT of early termination of the MOU effective from October 1, 2010. The BOT is at present considering revoking the MOU. Furthermore, the Note Issuance Business transferred its land amount of B11.0 million to the BOT, which regarded to the discontinuity of the Note Printing Work and the Lampang Banknote Operations Center amount of B10.4 million and B0.6 million, respectively.

#### 9. Other Assets

	Unit: M	Iillion baht
	2010	2009
Quota Subscribed to IMF - Baht	38,855.5	44,547.6
Assets from Derivatives Revaluation	163.5	16,909.9
Claim on Debt Securities under Repurchase Agreement	69,937.0	37,940.7
Investment in Other Organizations	1,526.8	1,718.9
Staff Loans	2,767.6	2,783.0
Intangible Assets	112.0	176.8
Accrued Income	14,130.1	12,327.9
Others	3,755.0	2,300.6
Total	131,247.5	118,705.4

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

			Unit	: Million baht
	Balance	Changing in	Book Value	Balance
	Dec 31, 2009	Increase	Decrease	Dec 31, 2010
Computer Software				
and Systems	757.1	17.1	-	774.2
Less: Accumulated				
Amortization	(580.3)	(81.9)		(662.2)
Intangible Assets, net	176.8_	(64.8)		112.0
Amortization for the year	ır 116.6			81.9

10. Deposits	
	Unit : Million baht
	2010 2009
Non Interest-Bearing Deposits	
Government	321,401.6 167,179.3
Financial Institutions	83,709.9 54,947.6
Others	3,252.67,858.9
	408,364.1 229,985.8
Interest-Bearing Deposits	140,067.0
Total	<u>548,431.1</u> <u>229,985.8</u>

In 2010, the interest-bearing deposits facility was introduced as part of the BOT's standing facilities used to maintain market interest rates within the interest rate corridors and to improve liquidity adjustment of money market players. This is expected to help better transmission of monetary policy and financial markets development.

#### 11. Allocations of Special Drawing Rights

The IMF's member countries are allocated special drawing rights in proportion to their subscriptions to the IMF. As of December 31, 2010, the BOT was allocated the balance of SDR970.3 million, an equivalent of B45,051.3 million.

#### 12. Securities Sold under Repurchase Agreements

The outstanding balance as of December 31, 2010 and 2009 was B337,900.0 million and B380,100.0 million, respectively, which was totally the securities sold under repurchase agreements in the domestic market.

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

	Unit : Million ba	
	2010	2009
Bank of Thailand Bonds		
Remaining Maturity:		
- 1 year or less	1,612,819.7	1,167,543.9
- over 1 year	762,937.7	618,470.6
Less: Held by the BOT		(2,582.4)
	2,375,757.4	1,783,432.1
Other BOT Debt Securities		
(remaining maturity less than 1 year)	764,250.0	747,928.0
Total	3,140,007.4	2,531,360.1

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 2010, the interest paid presented as a part of interest expense, amount of B42,128.7 million was paid on the BOT bonds and B13,260.9 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.

#### 14. Other Liabilities

	Unit: M	Iillion baht
	2010	2009
IMF Current Accounts No. 1 and 2	13,895.8	20,066.2
Promissory Notes Payable to IMF	24,959.9	24,481.7
Liabilities from Derivatives Revaluation	508.9	14,589.8
Net Liabilities from Foreign Exchange		
Swap Revaluation	7,250.2	-
Obligations to return Debt Securities	69,937.0	37,940.7
Liabilities from Forward Contracts under		
Resale Agreements	1,629.0	1,875.0
Accrued Expenses	9,478.7	7,449.3
Others	1,781.2	979.2
Total	129,440.7	107,381.9

#### 15. 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.

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

As of December 31, 2010, the outstanding balance of the Reserve for Stabilization of Profit Payable to the Government was B624.1 million. This reserve 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.

#### 17. Assets and Liabilities Revaluation Reserve

	Unit : M	Iillion baht
	2010	2009
Unrealized Losses from Foreign		
Exchange Revaluation of Assets and Liabilities	(278,677.2)	(42,625.7)
Unrealized Gains from Price Revaluation		
of Investments	19,926.2	13,909.9
Unrealized Gains (Losses) from Revaluation		
of Derivatives	(345.4)	2,305.7
Unrealized Losses from Revaluation		
of Forward Contracts under Resale Agreements	(1,114.9)	(1,203.8)
Total	(260,211.3)	(27,613.9)

Subject to Section 13(2) of Chapter 3 of the Bank of Thailand Act, B.E. 2485 as amended, the Assets and Liabilities Revaluation Reserve is established to accumulate gains and losses derived from the revaluation of the BOT's assets and liabilities.

#### 18. Accumulated Losses

In 2010, the amount of net loss for the year 2009, of B7,661.5 million was transferred to the Accumulated Losses, therefore the balance as of December 31, 2010 was B82,096.2 million. Movements of the Accumulated Losses are set out in the Statement of Changes in Equity.

#### 19. Other Revenues

	Unit : M	illion baht
	2010	2009
Gains from Disposal of Investments	10,576.7	21,232.1
Gains from Investments Managed by		
External Fund Managers	-	6,471.8
Others	134.4	157.8
Total	10,711.1	27,861.7

#### 20. Commitments and Contingencies

As of December 31, 2010, the outstanding 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 USD2,601.0 million, due in 2011.

#### 20.1.2 Cross Currency Forward Contracts

The BOT had net position of outstanding cross currency forward contracts to buy EUR362.9 million, CAD73.2 million, GBP6.0 million, SGD59.6 million and to sell AUD133.8 million, USD49.7 million, JPY32,396.9 million, KRW21,556.4 million, MYR73.8 million, due in 2011.

#### 20.1.3 Forward Contracts under Resale Agreements

The BOT had the obligations under Resale Agreements to sell JPY10,625.9 million, due in 2011 - 2020.

The fair values of such forward contracts are presented in Note 9 (Other Assets) or Note 14 (Other Liabilities).

#### 20.2 Foreign Exchange Swap Contracts

As of December 31, 2010, the BOT had outstanding obligations under foreign exchange swap to buy USD27,319.8 million, GBP1,256.1 million, AUD3,026.0 million and to sell EUR2,154.6 million, CAD765.1 million, JPY966,087.8 million, due in 2011.

The net outstanding of such foreign exchange swap contracts are presented in Note 14 (Other Liabilities).

#### 20.3 Futures Contracts

As of December 31, 2010, the BOT had outstanding obligations under futures contracts to sell USD80.0 million, due in 2011.

#### 20.4 Debt Securities Borrowing

As of December 31, 2010, the outstanding obligations to return borrowed debt securities and obligations from issuing BOT debt securities as collateral, due in 2011, was B125,378.4 million. Borrowed debt securities sold under repurchase agreements are presented in Note 9 (Other Assets) and Note 14 (Other Liabilities) at the amount of B69,937.0 million.

# 20.5 ASEAN Swap Arrangement and Chiang Mai Initiative Multilateralisation Agreement

The BOT is a party to the ASEAN Swap Arrangement (ASA), an arrangement to provide short-term foreign exchange liquidity support among the 10 ASEAN member countries with a total amount of USD2,000.0 million. Under this two-year arrangement, expiring on November 16, 2011, the BOT is obliged to contribute up to USD300.0 million and may receive assistance of up to USD600.0 million.

In addition, under the Chiang Mai Initiative, the BOT together with the Ministry of Finance of Thailand are parties in the Chiang Mai Initiative Multilateralisation Agreement (CMIM agreement), an arrangement to provide liquidity support through currency swap transactions among the ASEAN+3 countries (comprising the 10 ASEAN member countries, China, Japan and South Korea). The CMIM agreement, with a total size of USD120,000.0 million, became effective on March 24, 2010 and is subject to revision every 5 years. Under the CMIM agreement, parties to the agreement may request to swap its local currency for the US dollar. In this regard, the BOT is committed to contribute, on a pro rata basis, up to USD4,552.0 million and may request up to 2.5 times of the contribution, or USD11,380.0 million. On a separate note, the three-year Bilateral Swap Agreement (BSA) between the BOT and the Bank of Japan expired on November 8, 2010 and had not been renewed.

In 2010, neither the BOT nor its counterparties activated any of the above mentioned arrangements.

#### 20.6 Commitments with the International Monetary Fund (IMF)

#### 20.6.1 The Acceptance of Quota Increase

In accepting the quota increase allocated by the IMF, the BOT is obliged to subscribe to an additional SDR358.6 million. It is expected that the IMF will request its members for full payment in 2011. Twenty five percent of the additional allocation will be paid in SDRs or foreign currency, while the rest will be paid in local currency.

#### 20.6.2 New Arrangement to Borrow (NAB)

The BOT is also a party to the IMF's New Arrangement to Borrow (NAB), a supplementary source of funds when the quota resources prove insufficient. The total size of the NAB is SDR367,467.4 million, and the BOT, with consent from the Finance Minister, has agreed to contribute up to SDR340.0 million to the NAB.

#### 20.7 Lawsuits

As of December 31, 2010, the BOT, in the normal course of business, was taken legal actions at the amount of the claims totalling B5,622.8 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 significant 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 staffs 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 fulfill their financial obligations with the BOT. It includes the risk of deterioration in the value of securities from the downgrades of issue or issuer credit ratings.

The BOT controls credit risk by using the following approaches:

- (1) Minimum Credit Rating, set for counterparties and issuers to limit the credit value-at-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.

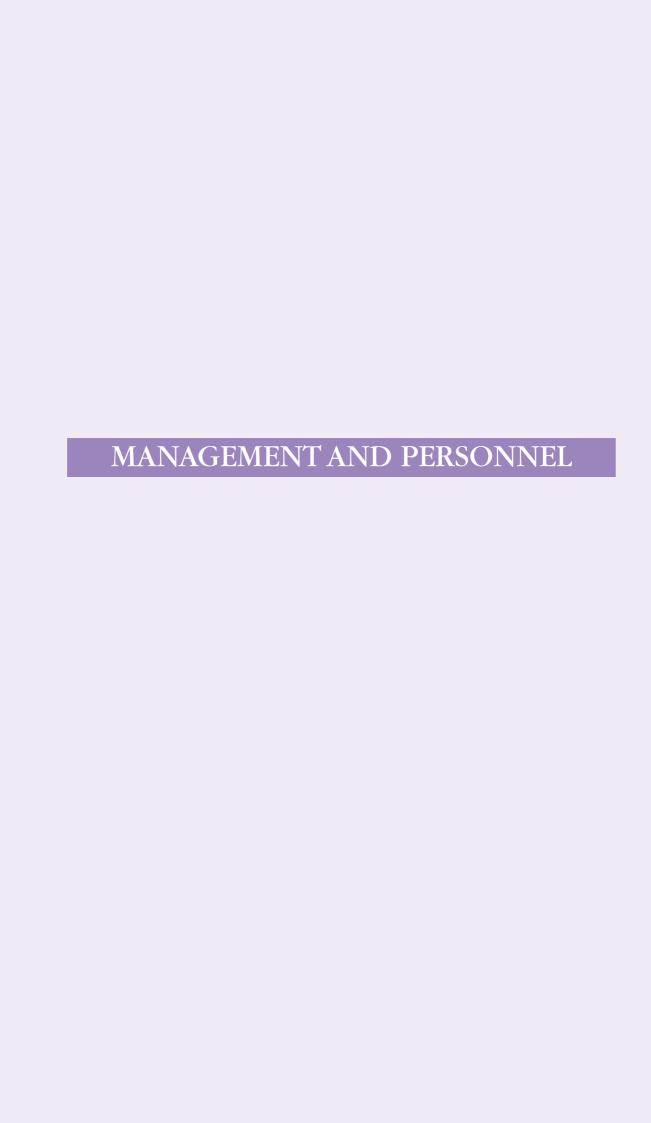
#### 21.2 Operational Risk Management

The BOT has developed the Business Continuity Plan (BCP) against business disruption under various scenarios including disaster, political unrest/riot and pandemic influenza.

During March and April 2010, there was political unrest which affected the normal operations of the BOT and financial institutions. The BOT implemented its current BCP and was able to continue key business operations accordingly. There are some experiences and lessons learned from the situation that will be brought into its BCP revision plan. The BOT also prepares to coordinate with the financial institutions in reviewing their BCPs to ensure that the plans are aligned and become more effective.

#### 22. Financial Restatements

Financial statements for the year ended December 31, 2009 have been restated in line with the presentation of financial statements for the year 2010 without causing any effect on the Profit and Loss Account.



# Strategic Plans and Corporate Governance

#### 1. Strategic Plan

After conducting an annual review of the key concerns that may affect the BOT's operations including uncertainty over global economic recovery, domestic political issues, THB volatility and impact of massive foreign capital inflow, the BOT set out 9 strategic objectives for the year 2010. These objectives are deemed appropriate for the current environments in ensuring financial stability, effective functioning of financial system as well as internal improvement in HR management and public communication. This encompassed 5 areas which are Monetary Stability, Financial Institutions Stability, Payment System Stability, Human Resources Management, and Communications. These strategic objectives were translated into various corresponding strategies and initiatives. Overall, the strategic executions achieved the desired outcomes. The details are as follows;

#### 1.1 Monetary Stability

Strategic Objective 1. To conduct appropriate monetary policy that is responsive to the economic conditions. To become Thailand's knowledge hub in economics and finance, capable of delivering economic and financial markets assessment and recommendations to the government and the private sectors to help resolve or avert potential crisis in a timely manner

With a view to deliver sharp and clear policy recommendations, the BOT focused on enhancing in-depth economic analysis, developing analytical framework of major policies, completing databases and upgrading key information systems. As for the financial markets development, the BOT participate in development of new instruments to facilitate interest rate hedging, revised exchange control regulations to accommodate F/X risk management, as well as facilitated enhancing liquidity and introduced new investment for risk management purposes.

#### 1.2 Financial Institutions Stability

Strategic Objective 2. To ensure the stability and efficiency of the Thai financial system, resilient to the volatilities in the financial sector, structural changes in the financial landscape, and the global economic and financial crisis

In order to comply with international operating standards, the BOT issued handbooks and held communication sessions on the appropriate implementation framework, revised regulations in line with the changing business models and practices of financial institutions, assisted developing joint database of financial institutions' operational risks, as well as studied on the approaches and developed

the training courses to promote good governance among financial institutions' management.

Strategic Objective 3. To ensure that the BOT's staff has expertise in financial institutions examination with the capability of monitoring all types of risks to the system, preparing for the changes in the financial landscape, as well as maintaining the credibility of the BOT's financial institutions policy formulation process in accordance with the international best practices

BOT actively train financial institutions examiner to ensure they are on par with the evolving international best practices and the growing specialization. In addition, the BOT seek to enhance efficiency of financial institution analysis and assessment systems.

Strategic Objective 4. To ensure that policies and processes are in place to guide the financial institutions and non-banks to treat their customers fairly, and the stringent actions are taken against non-conforming institutions

The BOT supervised banks and non-banks to ensure that they treat their customers fairly, and supported the police in arresting and taking legal action against unlicensed non-banks. In addition, the BOT published printed PR media to educate the consumer on personal loans.

Strategic Objective 5. To accommodate the private sectors, particularly medium and retail businesses, to conveniently access lending facilities and debt-restructuring services

The BOT assigned more roles and responsibilities to the Center for Credit Resolution Coordination in accepting consumer's complaints on getting loan refusal or receiving problems from financial services utilization, as well as in following up the progress of financial institutions' complaint resolutions.

#### 1.3 Payment System Stability

Strategic Objective 6. To systematize Thailand's payment fees supervision which is acceptable for both users and providers so as to promote reasonable fee structure that support public utilisation and development of effective and secure payment means

The BOT set up Working Group on Costs and Fees of Commercial Banks' Payment Services comprised of the BOT management, and the representatives from service providers, consumers, and academia to serve as a discussion forum for the revision of financial services fees. The Working Group had agreed to gradually reduce money transfer fee and inter-bank ATM cash withdrawal fee by 2<sup>nd</sup> quarter of 2010.

#### 1.4 Human Resources Management

Strategic Objective 7. To ensure that the staff is willing to commit full potential and dedicated to the BOT

The BOT set up HR Working Groups to make recommendations on human resources management policy in six dimensions entailing driving performance on multiple track, development & growth potential, strategic resource allocation, leadership transformation, enhancing quality of work life, and HR communication.

#### 1.5 Communication

Strategic Objective 8. To effectively and efficiently communicate the BOT's roles to the public

The BOT developed the comprehensive and far-reaching strategic communications to the public, which included the utilization of on-air communication channel to get more public coverage.

Strategic Objective 9. To ensure that the staff fully understands and actively contributes to the successful implementation of the BOT's policies

Regarding internal communication, the BOT added more communication channels, and enhanced communication efficiency by reviewing the content of the messages to ensure clear explanation, openness, and mutual understanding. This is necessary in order to ensure that staff understand, accept, and cooperate with internal policies and measures.

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

In 2010, the BOT has applied a new strategy management system- Balanced Scorecard (BSC)- to incorporate the BOT's goal and strategic implementation in the same direction. In addition, the Office of Corporate Strategy (OCS) has been established to coordinate and support tasks within the organization. As a compact and flexible unit, the OCS will drive our corporate strategies efficiently and effectively.

The BOT and leading educational institutions in Thailand surveyed several potential organizations and studied the approaches on work improvement in terms of organization development and human resources. The survey results have been applied in problem identification and solution development. The objectives were to enhance effective work process and encourage employee performance. In addition, the BOT Transformation project has been firstly launched to drive the reengineering of human resources management.

The rules and regulations have been improved to reduce barriers and ensure working efficiency. Some functions have been combined to increase flexibility,

resolve silo problems and reduce work duplication. The improvement will successfully broaden our employee perspectives.

Moreover, the BOT has focused on the quality of life and work life balance of employees with more flexible policies; for example, Teleworking (work at home), Compressed Workweeks (longer hours and less working days) and the Living Room@ BOT. The good atmosphere at work will encourage the BOT's employees more love and commitment to the organization. The pilot project was conducted by the Monetary Policy Group for Teleworking, and the Ink Production Section for Compressed Workweeks. The Living Room @ BOT was established at the fifth floor of the Head Office to enhance employees having choices to manage their work schedule more practicably and conveniently.

The major improvement conducted in 2010 can be summarized as follows;

#### 2.1 Financial Institutions Stability

The BOT reorganized the functions of financial institutions stability to enhance policy and supervision works.

- 2.1.1 Financial Institutions Policy Group: The new Payment Systems Policy Department has been established, to carry out payment systems policy and strategy works. In addition, the BOT redesigned the functions of Prudential Policy Department by dividing into the Risk Management Policy Office and Financial Institutions Business and Accounting Policy Office in order to strengthen the capability and quality of determining financial institutions policy.
- 2.1.2 Supervision Group: The Internal Capital Adequacy Assessment Process (ICAAP) Development Division, Credit Information Supervision Division, and e-Payment Applications Team have been established. The purposes are to enhance the efficiency and the effectiveness of the financial institutions supervision and examination including payment systems, customer protection and credit coordination center, as well as to support the BOT's strategic objectives, Financial Sector Master Plan Phase II and related Acts.

#### 2.2 Monetary Stability

- 2.2.1 Financial Markets and Reserve Management Department was redesigned in order to implement the monetary policy and monitor the financial markets more closely.
- (1) Foreign Exchange Division was set up in Financial Markets Office to monitor the movement of Thai baht and also foreign currency markets more intensely.
- (2) Reserve Management Office was divided to two divisions: Asset Management Division and Foreign Exchange and Money Market Management

Division. This is to support the extension of investment in assets and gold, and financial instruments for reserve management in accordance with the Bank of Thailand Act amended in B.E. 2551, including different management and accounting measures of long term and investment fund.

- (3) The Representative Office in Beijing, People's Republic of China was first set up to follow up economic, financial and investment circumstances in People's Republic of China more thoroughly and in line with the trend of expanding investment in this region.
- 2.2.2 The BOT's roles and responsibilities of the Financial Risk Management and Operations Department have been expanded to support collateral of financial institutions' assets in accordance with section 41 and 42 of the Bank of Thailand Act amended in B.E. 2551.

#### 2.3 Corporate Support Services

- 2.3.1 To strengthen and integrate the overall supervisory functions of the BOT, all payment accounting systems have been combined i.e. development and administrations of the Payment System such as BAHTNET and deposits and debt instruments. The new department is a part of the Information Technology Group.
- 2.3.2 The Office of Corporate Strategy (OCS) has been set up. The OCS's main responsibilities are to coordinating, enhancing and driving business as usual of each groups to ensure the conformity with the BOT's strategies.

#### 3. Superintendence and Risk Management

#### 3.1 Superintendence

Bank of Thailand Act B.E. 2485 as amended by the Bank of Thailand Act (No. 4) B.E. 2551 stipulated the main duties of the Bank of Thailand and responsibilities of the Bank of Thailand Board in generally supervise the affairs of the Bank of Thailand in maintaining monetary stability, financial institutions system stability and payment system stability, as well as operation and budget plan and assets management. Moreover, the implementation of monetary policy, financial institutions policy and payment system are to be under policy committees namely, "Monetary Policy Committee", "Financial Institutions Policy Committee" and "Payment Systems Committee", respectively.

To facilitate policy coordination and harmonization of responsibility in implementing policies of BOT's policy committees, a system of joint cooperation between policy committees is to be set up such as Subcommittee on Financial Stability.

To be an effective mechanism for supervising businesses, risk management, as well as internal audit, in order to assist BOT management in attaining the set objectives, the Audit Committee was set up, which under the amended BOT Act, by appointment of the BOT Board.

Moreover, BOT is in the process of setting up "Enterprise Risk Management Committee" to supervise the risk management system of the BOT, thereby enhancing good governance.

#### 3.2 Financial Risk Management

Financial risk management at the Bank of Thailand (BOT) covers financial risks arising from three main operations: the management of international 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 fulfill 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 international reserves, including investment objectives of international reserve 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 other operations such 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 international reserves management to the Top Management Committee and the BOT Board for approval. The Subcommittee is also authorized to undertake duties within its entrusted authority.
- (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 Sub-committee is also authorized to undertake duties within its entrusted authority.

The Financial Risk Management and Operations Department is responsible for carrying out the risk policy implementations as set out by the committees. In order to ensure segregation of duties as well as check and balance, the Financial Risk Management and Operations Department is segregated from the Financial Markets and Reserve Management Department, which performs the front office duty, and reports directly to Deputy Governor (Monetary Stability).

The Financial Risk Management and Operations Department evaluates, oversees and monitors the management of international reserves via the straightthrough-processing system, Finance Kit (FK). In addition to its compliance, access and audit trail systems, FK can measure risks in real-time. The BOT has also in place the Integrated Risk Information System 1 (IRIS1), which provides executives with information on position and risk of international reserves.

In 2010, the BOT started a project to upgrade its FK system to a new version, namely, the Wall Street Suite (WSS) system, in quest of updated functionalities and broader coverage of financial instruments. The upgrade project is expected to be completed within 2011. The BOT also began to develop the Integrated Risk Information System 2 (IRIS2), a web-based system which provides executives with integrated information about BOT's financial costs and risks associated with monetary policy implementation, including balance sheet risk that it may create.

The BOT annually reviews benchmark of international reserve portfolio to ensure that its risk and return correspond to investment objectives. The reviews in recent years have seen the composition of international reserve become more diversified.

In addition, in 2010 the BOT appointed a working group of experts from various departments to evaluate and review its financial risk management framework and practice. Overall, the working group has the view that the current financial risk management process is appropriate. It also makes recommendations that would further enhance the financial risk management framework. This assessment is part of a process to ensure prudence and good governance of the financial risk management at the BOT.

#### 3.3 Operational Risk Management

#### 3.3.1 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 2010, 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.

#### 3.3.2 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 2010, 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 implemented by launching prevention measures and a response plan against the pandemic (H1N1)2009 that occurred during the year 2009. In 2010, the BOT has conducted the table-top exercises for the first responder departments within the BOT in order to ensure that key people know their roles and responsibilities and to revise the plans accordingly. The overall result was satisfactory.

## Human Resource Management

#### 1. Workforce Status

According to the Bank of Thailand's Organizational Regulations (2004), the Bank of Thailand (BOT) has utilized a distributive process to provide the appropriate amount of workforce and reported the total number of manpower to the Board of Committee on an annual basis. The purpose is to set the suitable organizational structure and size which efficiently and effectively serves BOT strategies with flexibility and responsive manners.

The organization's suitable size was achieved by the reorganization of its manpower framework by distributing personnel appropriately, the application of Information Technology, adjustment of procedures or processes, and reducing unnecessary tasks and outsourcing the non-core jobs; these approaches serve the Bank of Thailand's strategies.

As at December 31, 2010, the Bank of Thailand employed 3,836 personnel, 74 people (1.9%) less compared to the previous year. This is due to the turnover of 113 personnel: 75 people on regulatory retirement, 26 people resigned, 3 people took early retirement, and 8 people passed away. Of this workforce totaling 3,836 people, 1,760 are male and 2,076 are female, the ratio is 46:54. There are 65 employees with Doctorate Degrees (2%), 1,480 with Master Degrees (39%), and 1,731 with Bachelor Degrees (45%).

#### 2. Human Resource Management

Employees are the most important resource; the Bank of Thailand has planned its Human Resource strategy as follows:

- (1) All Human Resource Management systems including objectives that involve the Bank of Thailand mission and the performance evaluation and motivation strategies will allow employee to have clear directions and meet the Bank's objectives. The Bank of Thailand has used a Balance Scorecard (BSC) in the planning of strategies and operations to drive forwards the Bank's policies.
- (2) Systems to recruit and select personnel from inside and outside the Bank of Thailand, the search for scholar students, succession plans for executive positions, and overall human resource planning will create a balance between employees and the Bank of Thailand in many aspects allowing the Bank to continuously have qualified personnel working in various important positions.
- (3) Systems to develop personnel towards Executive level, leadership training, and an increase in knowledge and skills of the employees are necessary for the Bank of Thailand to look forward by having highly qualified and dedicated employees to help drive the economy smoothly amidst any instability. In other words, to develop qualifications considered essential in the Bank's personnel, such as "Upstanding, Visionary, Approachable and Helpful". Bank of Thailand employees must have principles, be righteous and honest, and be visionary in order to understand the reality of the world and be ready to work with others inside and outside of the organization.

# The Bank of Thailand Board

As of 31 December 2010

Chairman M.R. Chatu Mongol Sonakul

Deputy-Chairman Mr. Prasarn Trairatvorakul Member Mrs. Atchana Waiquamdee

Mr. Krirk Vanikkul Mrs. Suchada Kirakul

Mr. Arkhom Termpittayapaisith

Mr. Naris Chaiyasoot Mr. Kanit Sangsubhan Mr. Nontaphon Nimsomboon Mr. Borwornsak Uwanno

Khun Pornthip Jala

Mr. Siri Ganjarerndee

# Executives of The Bank of Thailand As of 31 December 2010

Governor	Mr. Prasarn Trairatvorakul
Deputy Governor, Monetary Stability	Mrs.Atchana Waiquamdee
Deputy Governor, Financial Institutions Stability	Mr. Krirk Vanikkul
Deputy Governor, Corporate Support Services	Mrs. Suchada Kirakul
and Banknote Management	
Assistant Governor, Monetary Policy Group	Mr. Paiboon Kittisrikangwan
Assistant Governor, Financial Markets Operations Group	Mrs. Pongpen Ruengvirayudh
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	Mrs.Atchana Waiquamdee
Assistant Governor, Monetary Policy Group	Mr. Paiboon Kittisrikangwan
Senior Director, Domestic Economy Department	Mr. Mathee Supapongse
Director, Monetary Policy Department	Mr. Amporn Sangmanee
Director, International Economics Department	Mr. Chirathep Senivongs Na Ayudhya
Director, Economic Research Department	Mrs. Roong Mallikamas
Director, Office of Macroeconomic Policy and Analysis	Mr. Songtum Pinto
Assistant Governor, Financial Markets Operations Group	Mrs. Pongpen Ruengvirayudh
Senior Director, Financial Markets and	Miss Wongwatoo Potirat
Reserve Management Department	
Director, Financial Markets Office	Mr. Singhachai Boonyayotin
Director, Reserve Management Office	Mrs. Alisara Mahasandana
Director, Exchange Control and Credits Department	Miss Vachira Arromdee
Director, Financial Risk Management and Operations	Mr. Jaturong Jantarangs
Department	
Overseas Representative Offices	
Chief, New York Representative Office	Mr. Wikran Nakasiri
Chief, London Representative Office	Miss Prisadee Jindahra

Deputy Governor, Financial Institutions Stability	Mr. Krirk Vanikkul
Assistant Governor, Financial Institutions Policy Group	Miss Pimpa Thawarayut
Senior Director, Financial Institutions	Miss Nawaporn Maharagkaga
	Miss Nawapotti Manaragkaga
Strategy Department	Mr. Parisun Chantanahom
Director, Financial Analysis and International	Mr. Pansun Chantananom
Strategy Office	(17
Senior Director, Prudential Policy Department	(Vacant)
Director, Risk Management Policy Office	Mr. Somboon Chitphentom
Assistant Governor, Supervision Group	Mr. Sorasit Soontornkes
Senior Director, Financial Institutions Monitoring	Mrs. Chantavarn Sucharitakul
and Analysis Department	
Senior Director, Onsite Examination Department 1	Mrs. Salinee Wangtal
Senior Director, Onsite Examination Department 2	Mrs. Ruchukorn Siriyodhin
Director, Planning and Development Department	Mrs. Thanyanit Niyomkarn
Director, Financial Institution Applications Department	Mr. Anupap Kuvinichkul
Director, Specialized Financial Institutions	Mr. Padoongsak Tiensuwan
and Non-bank Examination Department	
Director, Risk Management and Information	Mrs. Nawaron Dejsuvan
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System Examination Department	,
Deputy Governor, Corporate Support Services	Mrs. Suchada Kirakul
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Deputy Governor, Corporate Support Services	·
Deputy Governor, Corporate Support Services and Banknote Management	Mrs. Suchada Kirakul
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong  Mr. Somchai Setakornnukul
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong  Mr. Somchai Setakornnukul  Mr. Titanun Mallikamas
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong  Mr. Somchai Setakornnukul  Mr. Titanun Mallikamas  Mr. Ronadol Numnonda
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong  Mr. Somchai Setakornnukul  Mr. Titanun Mallikamas  Mr. Ronadol Numnonda  Mr. Krisda Nilkositya
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong  Mr. Somchai Setakornnukul  Mr. Titanun Mallikamas  Mr. Ronadol Numnonda  Mr. Krisda Nilkositya  Mrs. Sarida Sangchant
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department Director, Strategic Services Department Director, Organization Development Department	Mr. Vichan Amorojanavong Mr. Somchai Setakornnukul Mr. Titanun Mallikamas Mr. Ronadol Numnonda Mr. Krisda Nilkositya Mrs. Sarida Sangchant Miss Matana Waitayakomol Mrs. Piengta Dattanonda
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department Director, Strategic Services Department Director, Organization Development Department  Assistant Governor, Information Technology Group	Mr. Vichan Amorojanavong Mr. Somchai Setakornnukul Mr. Titanun Mallikamas Mr. Ronadol Numnonda Mr. Krisda Nilkositya Mrs. Sarida Sangchant Miss Matana Waitayakomol Mrs. Piengta Dattanonda Mr. Chim Tantiyaswasdikul
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department Director, Strategic Services Department Director, Organization Development Department  Assistant Governor, Information Technology Group Senior Director, Payment Systems Department	Mr. Vichan Amorojanavong Mr. Somchai Setakornnukul Mr. Titanun Mallikamas Mr. Ronadol Numnonda Mr. Krisda Nilkositya Mrs. Sarida Sangchant Miss Matana Waitayakomol Mrs. Piengta Dattanonda  Mr. Chim Tantiyaswasdikul Miss Charinya Kaewmanee
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department Director, Strategic Services Department Director, Organization Development Department  Assistant Governor, Information Technology Group Senior Director, Payment Systems Department Director, Payment Systems Policy and Oversight Office	Mr. Vichan Amorojanavong Mr. Somchai Setakornnukul Mr. Titanun Mallikamas Mr. Ronadol Numnonda Mr. Krisda Nilkositya Mrs. Sarida Sangchant Miss Matana Waitayakomol Mrs. Piengta Dattanonda  Mr. Chim Tantiyaswasdikul Miss Charinya Kaewmanee Mr. Ronasak Ruengvirayudh
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department Director, Strategic Services Department Director, Organization Development Department  Assistant Governor, Information Technology Group Senior Director, Payment Systems Department	Mr. Vichan Amorojanavong Mr. Somchai Setakornnukul Mr. Titanun Mallikamas Mr. Ronadol Numnonda Mr. Krisda Nilkositya Mrs. Sarida Sangchant Miss Matana Waitayakomol Mrs. Piengta Dattanonda  Mr. Chim Tantiyaswasdikul Miss Charinya Kaewmanee
Deputy Governor, Corporate Support Services and Banknote Management  Assistant Governor, Strategic Capabilities Group Senior Director, Human Resources Department Director, Human Resources Development Office Director, Human Resources Management Office Director, HR Shared Services Office Director, Accounting Department Director, Strategic Services Department Director, Organization Development Department  Assistant Governor, Information Technology Group Senior Director, Payment Systems Department Director, Payment Systems Policy and Oversight Office Director, Payment Systems Development	Mrs. Suchada Kirakul  Mr. Vichan Amorojanavong Mr. Somchai Setakornnukul Mr. Titanun Mallikamas Mr. Ronadol Numnonda Mr. Krisda Nilkositya Mrs. Sarida Sangchant Miss Matana Waitayakomol Mrs. Piengta Dattanonda  Mr. Chim Tantiyaswasdikul Miss Charinya Kaewmanee Mr. Ronasak Ruengvirayudh

Director, Statistics Office	Mrs. Pusadee Ganjarerndee
Director, Data Management Development	Miss Kannika Junsaengaram
and Planning Office	, and a second s
Senior Director, Information Technology Department	Miss Sibporn Thavornchan
Director, Business Integration	Mrs. Bhusadi Muhpayak
& Technical Management Office	
Director, Business Solution Delivery Office 1	Mrs. Pornvadee Tapasanan
Director, Business Solution Delivery Office 2	Mrs. Jintana Tinburanakul
Director, IT Operation Office	Mrs. Nawaporn Vachirakernkan
Assistant Governor, Operations Group	Mr. Nopporn Pramojaney
Senior Director, Northern Region Office	Mr. Satorn Topothai
Director, Northern Region Office	Mr. Prasopsuk Puangsakorn
Senior Director, Southern Region Office	Mr. Praneet Chotikirativech
Director, Southern Region Office	(Vacant)
Senior Director, Northeastern Region Office	Mr. Permsuk Sutthinoon
Director, Northeastern Region Office	Mr. Somsak Wongpanyathaworn
Director, Deposits and Debt Instruments Department	Mrs. Wimonrat Saoraya
Director, General Administration	Mrs. Nantinee Chatchayanusorn
and Procurement Department	
Director, Building Construction Projects	Mr. Montree Weerawong
Director, Building Construction Projects and Maintenance Department	
Director, Building Construction Projects	Mr. Montree Weerawong  Mr. Somchai Youngyoo
Director, Building Construction Projects and Maintenance Department	
Director, Building Construction Projects and Maintenance Department Director, Security Department	Mr. Somchai Youngyoo
Director, Building Construction Projects and Maintenance Department Director, Security Department  Assistant Governor, Banknote Management Group	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan
Director, Building Construction Projects and Maintenance Department Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol
Director, Building Construction Projects and Maintenance Department Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn
Director, Building Construction Projects and Maintenance Department Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development and Technical Support Office	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa  Mr. Wirat Kitipipat
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development and Technical Support Office Director, Banknote Strategic Planning Department	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa  Mr. Wirat Kitipipat  Mr. Woraporn Tangsaghasaksri
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development and Technical Support Office Director, Banknote Strategic Planning Department Director, Accounting and Supply Department Director, Human Resource Management and Development Department	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa  Mr. Wirat Kitipipat  Mr. Woraporn Tangsaghasaksri  Mr. Ruengsak Kittisarakul  Mr.Chanchai Buratavorn
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development and Technical Support Office Director, Banknote Strategic Planning Department Director, Accounting and Supply Department Director, Human Resource Management and Development Department  Assistant Governor, Management Assistance Group	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa  Mr. Wirat Kitipipat  Mr. Woraporn Tangsaghasaksri  Mr. Ruengsak Kittisarakul  Mr.Chanchai Buratavorn  Mr.Arkabusk Krairiksh
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development and Technical Support Office Director, Banknote Strategic Planning Department Director, Accounting and Supply Department Director, Human Resource Management and Development Department  Assistant Governor, Management Assistance Group Senior Director, Management Assistance Department	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa  Mr. Wirat Kitipipat  Mr. Woraporn Tangsaghasaksri  Mr. Ruengsak Kittisarakul  Mr.Chanchai Buratavorn  Mr.Arkabusk Krairiksh  Mrs. Wantana Hengsakul
Director, Building Construction Projects and Maintenance Department  Director, Security Department  Assistant Governor, Banknote Management Group Senior Director, Banknote Operation Department Director, Banknote Operation Office Senior Director, Note Printing Works Director, Production Office Director, Production Development and Technical Support Office Director, Banknote Strategic Planning Department Director, Accounting and Supply Department Director, Human Resource Management and Development Department  Assistant Governor, Management Assistance Group	Mr. Somchai Youngyoo  Mrs. Chittima Duriyaprapan  Mr. Anuchart Chotimongkol  Mrs. Jongruk Leerasetthakorn  Mr. Priyavat Chainuvat  Mrs. Suree Jeraratanasopa  Mr. Wirat Kitipipat  Mr. Woraporn Tangsaghasaksri  Mr. Ruengsak Kittisarakul  Mr.Chanchai Buratavorn  Mr.Arkabusk Krairiksh

Senior Director, Legal and Litigation Department

Director, Legal Office Director, Litigation Office

Director, Bank of Thailand Museum

(A) Director, Library and Archives

Mr. Chanchai Boonritchaisri

Mr. Pruettipong Srimachand

Mrs. Wannee Pornsomboonsiri

Mrs. Supawadee Punsri

Mrs. Supawadee Punsri

#### Assistant Governor, FIDF Management Group

Senior Director, Fund Operation Department

Director, Business Management Office

Director, Accounting Analysis and Administration Office Miss Utsanee Tachapoonpon

Director, Asset Management Office

Director, Legal and Asset Collection Office

#### Mrs.Tongurai Limpiti

Mrs.Povongtip Poramapojn

Miss Siriporn Eamrungroj

Mr. Nat Tapasanan

Mr. Weerachat Sribunma

Senior Director, Internal Audit Department

Director, Office of Business Audit

Director, Office of IT Audit

Mr. Niruth Raksaseree

Miss Panida Oonyawongse

Mrs. Niramon Asavamanee

#### (A) Acting Director

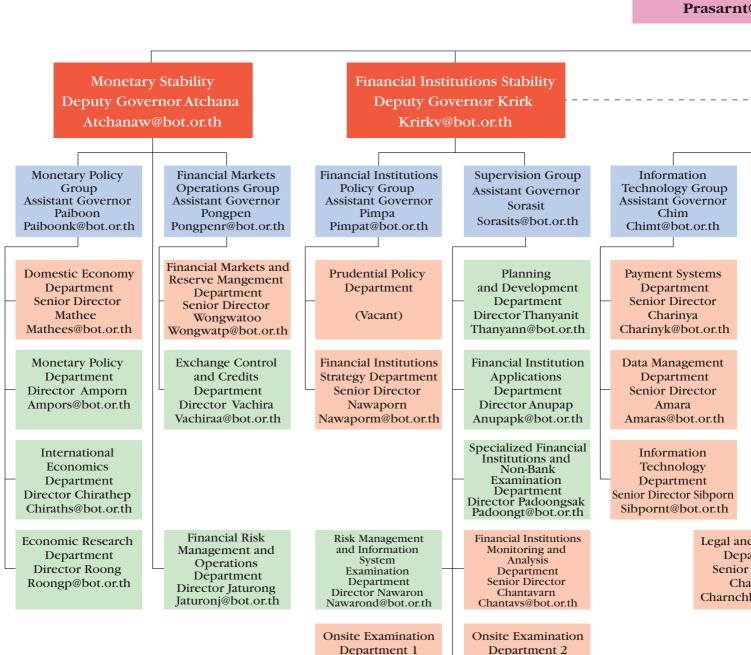
# BANK OF THAILAND'S ORGANIZATION CHART

# Bank of Thailand's

As of 31 Dec

The Bank of T

Gove Prasarn Tra



Senior Director

Salinee

Salineew@bot.or.th

Senior Director

Ruchukorn

Ruchukos@bot.or.th

# **Organization Chart**

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#### hailand Board

