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Mr. Virabongsa Ramangkura Chairman of the Bank of Thailand Board

#### Message from Chairman of the Bank of Thailand Board

During the past year, many central banks around the world have been easing their monetary policies in response to the global financial crisis. This has also caused difficulty in the operation of the Bank of Thailand (BOT). However, views and experiences in resolving such global financial turmoil of prominent international financial experts, including Managing Director of the International Monetary Fund (IMF), Finance Minister of the Republic of Germany, and Governor of the Reserve Bank of Australia, have provided a broader perspective for the BOT in implementing its policies. This will eventually contribute to a more efficient conduct of monetary policy that can support the dynamism of recent global economic condition.

On the financial position of the BOT, I have continuously expressed my concern on the balance sheet of the organization where negative changes were the result of the mandated operation of the Monetary Policy Committee (MPC) which is not under direct supervision of the BOT Board. After the consultation within the BOT Board, all members agreed to set up the "Working Group on the Bank of Thailand's Financial Position Improvement Plan" to conduct study and propose solution for the operational losses of the BOT. The BOT Board intends to use the result of the study of the Working Group as guidelines for the BOT to use to manage its financial position in the future. In addition, the BOT Board has approved various key operational measures which allow the BOT more flexibility to gain more benefits from its assets in order to reduce the amount of losses that can be done under the responsibility (within the power) of the BOT Board.

Meanwhile, the internal management of the BOT has improved as the organization has been restructured consistently. For instance, departments with similar roles and responsibilities have been merged to minimize duplication of work. Departmental functions have also been adjusted to efficiently reflect the current situation. Being an organization that has always been "readily adaptable" can eventually contribute for the BOT to continue its role as the monetary pillar of the country.

Finally, I would like to thank all BOT officials for your hard work during 2012. I hope that everyone will see continued contribution of the BOT which demonstrates the soul of the BOT staff who always devote their works for the interest of public at large.

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Mr. Prasarn Trairatvorakul Governor of the Bank of Thailand

# Message from the Governor of the Bank of Thailand

Thai economy remained stable and grew at a satisfactory rate in 2012 amidst slow economic recoveries in the industrial countries and volatilities in the global financial markets. The economy continued to be strong and resilient, well coped with key challenges both from capital flow volatilities and exports slowdown.

Adjustment by private sector and growth-supported policies by public authorities has been the key economic driver. In response to external shocks, government together with the BOT has been promoting Thai direct investment abroad as a means to reduce pressure from capital inflows while at the same time raising long-term competitiveness of businesses. Such policy was well responded, significantly raising the share of Thai direct investment abroad in 2012. In the context of country development, the government has set out concrete plans to invest in infrastructure projects with an aim to upgrade the country's potential as well as to distribute growth to provincial areas. Businesses have been quick to adjust accordingly, extending their investment to key provincial cities which will, in returns, help to create jobs and sustainable demands in the long-run. Such collaborating efforts in driving the economy will lead to key structural adjustments in the future.

Macroeconomic policies also helped to facilitate growth. In 2012, fiscal policies helped to boost domestic demands to offset for the reduction in export productions as Thai trading partners muddled through their recoveries. On the monetary policy front, interest rate remained accommodative, supporting economic growth.

Going forward, challenges for both the public and private sectors in 2013 lie in finding the right balance between economic development and financial stability. Thai economy should continue to show strong growth outlook and experience ongoing structural adjustments from last year. Such trends would contribute to the upgrade of Thai competitiveness, paved ways by private investment and further strengthened by public investment. Nevertheless, recent periods have witnessed increase in borrowings by all sectors to support the increase in consumption and investment, financing from both financial institutions and capital markets. Therefore, as much as the Thai economic prospects continued to be driven by investment, build-up of imbalances that could potentially undermine financial stability would render close attentions. In this context, key issues that the BOT will be focusing on in 2013 are: Monetary Stability Capital flows remained a key challenge coming from both the quantitative easing policies in the industrial economies and investment opportunities investors see in the Thai economy, in the forms of foreign direct investment as well as portfolio investment. As much as capital flows could contribute to the development of the financial system, they could also potentially lead to short-term volatilities and rapid baht appreciation. However, the BOT would closely monitor the capital flow situations and assess their potential impacts on the financial and economic system while having ready in hands the necessary instruments and appropriate contingency plans.

On the monetary policy front, the BOT would closely monitor the economic conditions to ensure that monetary policy is helping to create the right balances among saving, expenditure, and investment as well as balances between development and systemic risks.

**Financial Stability** Health of the banking system remained resilient. The BOT has also made sure that, with strong capital bases and loan loss provisions, banking system can support future economic growths and withstand any economic uncertainties. However, going forward, an increasing trend of investment could lead to overall higher debt burdens and could also result in higher concentration of credit risks among big corporate. In addition, household debt is likely to increase from rising wealth effect and accommodating financial environment. As such, the BOT will closely monitor the situation.

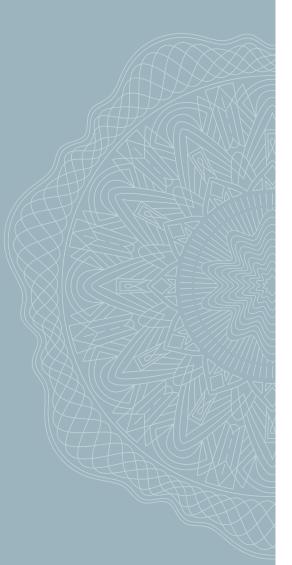
Payment System Financial service providers are currently well aware of the development in the payment system, especially the e-Payments which help to reduce the costs of running business as well as the costs to the economic and financial system as a whole. However, the payment system was inherent with operational risks especially from the integration of technologies. Therefore, the BOT pays close attention to both developing as well as regulating risks inherent to the payment system, particularly systemic risks resulting from failure in the payment infrastructure as well as risks to users.

In addition to preparing for short-term challenges, the BOT is committed to pursue its ongoing 5-year strategic plan which came into effect in 2012. With such implementation guidelines, the BOT can address the long-term challenges in a systematic manner.

In 2012, the BOT has given much emphasis on formulating common visions so that mutual understandings with other economic agencies would be in place and a unified strategy for driving the Thai economy could be created. Such common visions are framed into 4 driving forces: 1) facilitating connectivity between foreign and domestic economic/financial system 2) upgrading Thailand to become high value-added economy 3) promoting financial inclusion and 4) fostering economic and financial stability. In addition, the BOT has laid groundwork for steering the different strategies going forward.

In 2013, the BOT is strongly determined to establish constructive engagement with external organizations as well as private sector. By collaborating together, a synergy could be created to bring forth a sustainable well-being of the Thai economy, which is the vision and ultimate goal of the BOT.





Thailand is moving forward. It is of great importance that all involved parties, the Bank of Thailand included, join hands and constructively engage in the process that will lead to the much awaited structural changes, and ultimately to the sustainable development and inclusive economic well-being of Thailand.

## The Roles of the BOT in Supporting Thailand Country Strategy

Sustainable economic growths and social well-being is undeniably the ultimate goal for all nations, including Thailand. In addition to having common visions and strong determinations to move toward such goal, Thailand needs to lay out a strategic roadmap to facilitate the effective collaboration and coordination among all parties involved.

Structural changes should be put on the top of priority list. In order for Thailand to move out of the middle income trap, it needs to find new economic growth model that does not rely on low costs of labors, natural resources, and government subsidies. In the era of intense global competitions, although with great challenges ahead, it is of utmost importance for Thailand to create the economic ecosystem that is conducive for private sector to self-reinforce its competiveness, amidst the free market environments.

In 2012, the Office of National Economic and Social Development Board (NESDB) embarked on a process of formulating Thailand Country Strategy. The country strategy consists of 4 key strategies as follows: 1) Growth and Competitiveness 2) Inclusive growth 3) Green Growth and 4) Internal process. If well-implemented, these strategies will bring about the much needed structural changes. Provided that Thailand now has common visions, it is crucial that all economic agencies and the private sector stay committed to common goals and constructively engage in driving the country forward, in the same direction.

The Bank of Thailand's 5-Year Strategic Plan (2012-2016) will play important roles in supporting the country strategy particularly in the areas of growth and competitiveness, and inclusive growth. To better align our strategic plan with the country strategy, the BOT's action plans are grouped into 4 policy platforms as follows: 1) Connectivity 2) High Value-Added Economy 3) Financial Inclusion and 4) Economic and Financial Stability. These platforms are not only consistent with the country strategy, but also well-aligned with our ultimate goal.

Sustainable economic growths and well-being is the ultimate goal for the BOT

# Country Strategy

Pursuing Sustainable Economic Well-Being

#### Facilitating international connectivity of Thai businesses

## Connectivity : Facilitating Efficient Global Financial and Economic Connectivity

Integrating Thai economic and financial system with the global market would help to upgrade competitiveness. In order to grasp opportunities from globalized networks, Thailand must take on proactive roles in the international arena of trade and investment. Strategically, Thailand should leverage on the geographical advantages of locating in the center of economic activities of the Greater Mekong Subregion (GMS), which could be further extended to China and India.

In 2012, the BOT has contributed to the increased efficiency in the international connectivity of Thai businesses. Investment abroad by Thai residents has been made more convenient as a result of close collaboration between the Ministry of Finance and BOT to promote Thai Direct Investment (TDI) abroad as well as to relax foreign exchange control regulations under the Capital Account Liberalization Master Plan (Phase I). In addition, the BOT has mitigated risks of cross-border currency transfers by means of developing payment-versus-payment system for the settlement of US dollars, the most widely-used currency in trade and investment in Thailand.

In addition, relationship between BOT and central banks within the sub-region was further strengthened through technical assistances and dialogued workshops, which aim to create co-development and to reduce major impediments to future trade and investment.

Looking ahead into 2013, in order that international trade and investment could be further facilitated, the BOT will work closely

with the Ministry of Finance as well as regional countries to drive the co-development progresses among countries, strategically emphasizing on the ongoing plans with the CLMV while continuing to keep focusing on the preparation of the AEC. At the same time, the BOT would continue to develop a payment system that could well support the ever growing cross-border transactions.

Finally, the BOT will collaborate closely with other regulatory authorities in laying out a robust financial system landscape, which includes allowing more competition from foreign financial institutions. Such new landscape opens up alternatives for potential customers of financial services while making sure that financial stability would not be compromised. The plan would be carried out under the Financial Sector Master Plan Phase II, which offers the possibilities of new license issuances as well as licenses under the Qualified ASEAN Bank (QAB) scheme.



## Economic & Financial Connectivity



Integrating Thai Economic and Financial System with the Global Market

## High Value-Added Economy : Upgrading Thailand Competitiveness

To promote domestic-driven growth alongside the aforementioned external progress, Thailand needs to be ready to compete in a free market by upgrading the country's long-run competitiveness. In such pursuit, competitiveness could be broadened area-wise by facilitating the expansion of businesses across country which, in turns, could help to distribute wealth. At the same time, capacity could also be raised along the vertical line of value chains, i.e. adding value to products and services through innovation, branding and technology.

In 2012, financial system has been active in extending more loans and financial services to small and medium enterprises (SMEs). Government together with the BOT has been promoting greater financial accessibilities and, correspondingly, SMEs have obviously gained more access to financial services. In addition, the BOT has put strong efforts in enhancing the payment system so that businesses could run with greater convenience and at lesser costs. Such efforts include the introduction of the 'Imaged Cheque Clearing and Archive System (ICAS)', recently launched within the Bangkok and metropolitan areas, as well as the promotion of e-Payment usages.

Upgrading Thai competitiveness is an ongoing process. Moving into 2013, more concrete results should be realized as various projects are put forth to reduce costs and increase convenience in making financial transactions which include the expansion of the ICAS nation-wide, the adoption of e-Payment by large corporate and government mass transit, the standardization across various types of electronic cards, and the reduction in logistic costs of distributing banknotes.

At the same time, the BOT would actively engage in pushing forward the financial accessibilities of SMEs. Establishing loans database would provide added information that could assist business planning of commercial banks. In addition, promoting the use of currency futures would help to improve SMEs' access to hedging instruments against exchange rate risks.

Promoting efficient financial services to t the growing needs

meet the growing needs of businesses

Engaging with Businesses to Foster Sustainable Growth

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## Efficient Financial Services

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## Financial Inclusion : Promoting Efficient Accesses to Financial Services

Access to basic financial services is one of the important pillars in fostering inclusive growth. Although the level of financial access in Thailand is already satisfactory, there are rooms for improvements in some segments, particularly services for the grass roots and micro-enterprises. For banks, servicing costs per account of small clients are still relatively high. For customers, it is important that consumers are well protected, and equipped with sufficient financial education.

In 2012, the BOT strengthened its capabilities to better protect financial services customers. The Financial Consumer Protection Center, formally established in 2012, serves as the one-stop-service centre that performs functions such as raising awareness of customers' rights, providing information that might not be well understood by customers, and handling complaints from mistreated customers. In response to the widespread cross-selling of financial products in the financial industry, the BOT, in collaboration with other regulators, issued rules and guidelines for cross-selling products in order to protect customers from inappropriate sell practices.

In 2013, the BOT will focus on lowering costs of servicing customers. There are many ways in which servicing costs can be reduced such as the better uses of new technologies, or allowing banks to adopt new business models. However, technologies and new business models come with risks both to customers and banks. The Bank of Thailand will weigh carefully between benefits and risks of all possibilities, in order to avoid any potential pitfalls that may arise with new service channels.

Improving financial access at reasonable costs

# Financial Access

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Promoting Access to Basic Financial Services Countrywide

## Economic and Financial Stability : Preparing for Future Economic/ Financial Landscape

In the foreseeable future, if the current trend persists, Thailand will experience structural changes on many fronts, for example, higher degree of connectivity with global economic and financial landscape, more mega-investments by government and private sector, increasing roles of SMEs and provincial areas, and widespread uses of cutting-edge technologies. These changes will surely play important parts in upgrading Thailand's competitiveness and well-being. However, they will also dramatically change structure of the systemic risk profiles. Therefore, Thailand must be proactive in preparing to cope with risks that will grow in tandem with increasingly complex and interconnected economic and financial landscape.

In 2012, the BOT redesigned internal work processes to strengthen its capabilities in assessing interconnectedness issues. A multi-departmental taskforce was formed to integrate their surveillance capabilities. The key contribution of this taskforce is to draw birds' eye view pictures of the key risk build-ups and the connectedness of key risk drivers to economic and financial stability. The assessments will then be used for discussions at the Financial Stability Committee, chaired by the governor. At the policy board level, the BOT initiated regular meetings between Monetary Policy Committee (MPC)and Financial Institutions Policy Committee (FIPC) with an aim to facilitate better policy coordination.

To deal with increasingly important IT and operational risks, the BOT paid particular attentions on the functioning of financial system during crises by assessing the robustness of Business Continuity Plan (BCP) of major infrastructure systems at the BOT, including the back-up site.

In 2013, the BOT will further strengthen its coordination with other regulators by exchanging data and key findings on financial stability issues at the staff level. Internal database in the important areas such as capital flow compositions will also be enhanced to fortify understandings of dynamics in economic and financial system. Lastly, we will continue to ensure robustness of Thailand's Financial Market Infrastructure (FMI) by assessing soundness of current regulatory framework for FMIs, and resiliencies of the financial system in continuing to operate under the business-as-usual mode, even in time of crises.

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Strengthening financial stability surveillance framework

# Systemic Risk Oversight

Pursuing Economic and Financial Stability of the Thai Economy





## The Bank of Thailand Board



Mr. Virabongsa Ramangkura Chairman



Mr. Prasarn Trairatvorakul Deputy-Chairman



Mr. Arkhom Termpittayapaisith Member



Mr. Somchai Sujjapongse Member



Mr. Nontaphon Nimsomboon Member



Mr. Borwornsak Uwanno Member



Mr. Krirk Vanikkul Member



Mrs. Tongurai Limpiti Member



Mrs. Pongpen Ruengvirayudh Member



Mr. Kanit Sangsubhan Member



Mr. Siri Ganjarerndee Member



Mr. Ampon Kittiampon Member



### Executives of the Bank of Thailand



Mr. Prasarn Trairatvorakul Governor



Mr. Krirk Vanikkul Deputy Governor, Financial Institutions Stability



Mr. Paiboon Kittisrikangwan Assistant Governor, Monetary Policy Group



Mrs. Salinee Wangtal Assistant Governor, Supervision Group



Mrs. Amara Sriphayak Assistant Governor, Planning and Budgeting Group



Mr. Nutavoot Pongsiri Assistant Governor, Human Resources and Organization Development Group



Mrs. Chantavarn Sucharitakul Assistant Governor, Financial Markets Operations Group



Mrs. Tongurai Limpiti Deputy Governor, Corporate Support Services and Banknote Management



Miss Sibporn Thavornchan Assistant Governor, Information Technology Group



**Mrs. Ruchukorn Siriyodhin** Assistant Governor, Financial Institutions Policy Group



Mrs. Pongpen Ruengvirayudh

Deputy Governor,

Monetary Stability

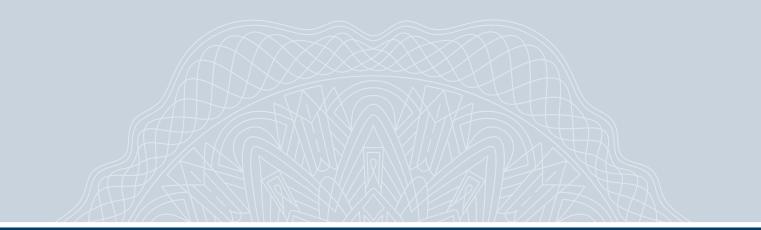
Miss Nawaporn Maharagkaga Assistant Governor, Internal Audit Group



Mr. Nopporn Pramojaney Assistant Governor, Banknote Management Group

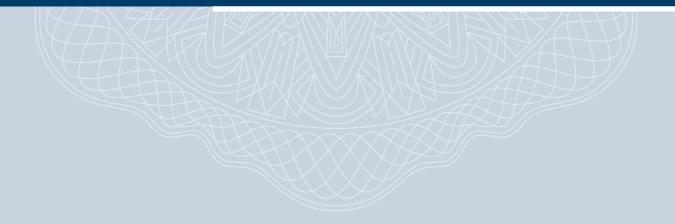


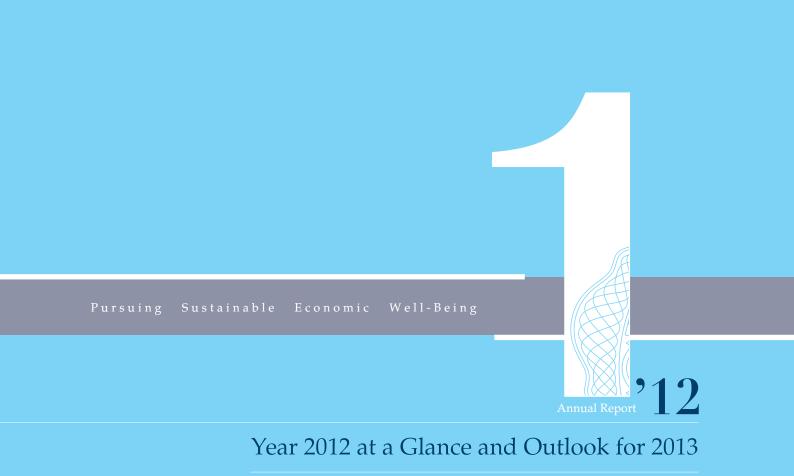
Mr. Chanchai Boonritchaisri Assistant Governor, Management Assistance Group



Thailand has one of the highest potentials in the region. Though there are challenges ahead, opportunities abound.

The BOT, as a key policy maker, will endeavour to deliver economic policies under its purviews in the most effective manner. We are committed to work with all parties, public and private alike, to create a supportive environment conducive to sustainable growth. We trust that, through closer policy coordination among all relevant agencies, a common vision for the country will be materialized, leading ultimately to constructive engagements between all parties.





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corporate credit growth both from continued demand and financial institutions' ability to lend. At the same time, consumer loans expanded significantly in tandem with consumer spending

# Year 2012 at a Glance and Outlook for 2013

The Thai economy expanded well in 2012 from private domestic demand. Robust consumption was supported by favorable employment conditions, income level and consumer confidence, as well as government stimulus measures. At the same time, private investment also continued to increase on account of flood-damaged repairs, production capacity expansion to support domestic demand, and restructuring of the production process to reduce dependence on labor.

Manufacturing production for domestic consumption expanded robustly in line with strong domestic spending. However, export-oriented production was affected by both domestic and foreign factors. During the first half of the year, limitations arose from flood-damaged production capacity. Later on, although repairs were made such that most major manufacturing production returned to normal, weak global economic conditions led to low foreign demand. As a result, merchandise export value for 2012 decelerated. Nevertheless, the tourism sector thrived following an increase in the number of Asian tourists.

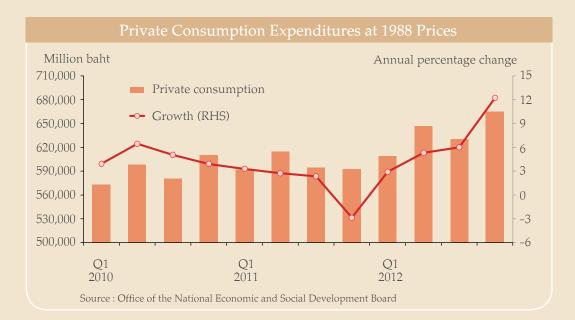
Overall economic stability was well maintained. Inflation decelerated from the previous year. Meanwhile, the hike in daily minimum wage to 300 baht in the seven pilot provinces and a 40 percent increase in the remaining 70 provinces did not result in widespread lay-offs. In addition, the pass-through of labor costs to retail prices was not higher than usual. The financial position of the corporate sector and financial institutions grew stronger on the back of robust domestic demand which in turn supported corporate credit growth both from continued demand and financial institutions' ability to lend. At the same time, consumer loans expanded significantly in tandem with consumer spending, partly from the government's first-car tax rebate scheme which resulted in higher-than-normal car purchases, as well as low interest rates which supported borrowings.

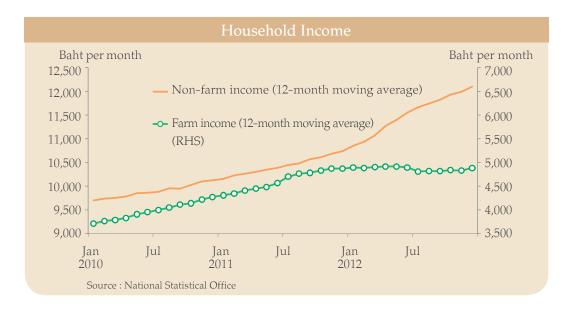
External stability remained stable. The current account recorded a surplus despite export limitations, while the financial account exhibited net inflow of capital causing the baht to strengthen. Nevertheless, the baht appreciated only slightly because Thai direct investment abroad and Thai portfolio investment abroad somewhat balanced out with capital inflows of the same type from foreign investors. For 2013, the Thai economy is expected to continue to expand well from 2012 with domestic demand remaining the main engine of growth in the first half of the year. Meanwhile, the export sector is expected to recover slowly in tandem with gradual improvements in the global economy. Inflation pressure is likely to remain close to the current level.

Economic and financial risk factors which render close monitoring include volatility of capital flows stemming from industrialized economies' monetary policy stance and global economic uncertainty, as well as persistently high consumer loan growth and impacts from the nation-wide minimum wage hike to 300 baht.

#### The Thai economy expanded strongly due to private domestic demand.

In 2012, the Thai economy grew at 6.4 percent owing to robust private domestic demand. Consumption increased in line with higher average earnings, in both farm and non-farm households. This was due to an increase in crop production, in particular rice, rubber and cassava following expansions in planting areas and favorable weather conditions. In addition, the government's rice pledging scheme helped increase farmers' income. Furthermore, on April 1, 2012, the government raised the daily minimum wage in seven pilot provinces to 300 baht and hiked up the minimum wage by 40 percent in the remaining 70 provinces, which consequently led to a wage increase of other workers given the tight labor market condition. This was reflected in the low unemployment level and a rise in the number of overtime hours worked in the manufacturing sector. This increase in income, given low inflation and no unusual surge in inflation despite the minimum wage hike, improved consumers' purchasing power and confidence.





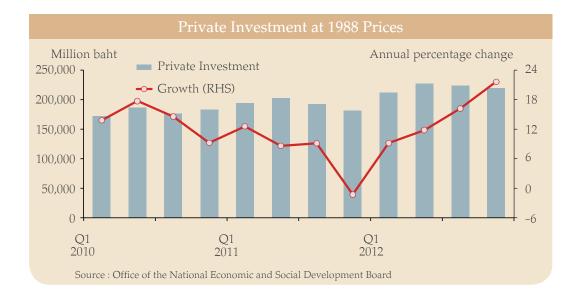
Employed Persons Working More Than 50 Hours Per Week

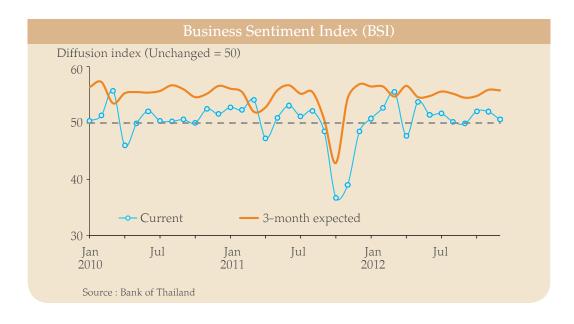


Index (sa) 70 60 50 40 30 20 Jul Jan Jul Jan Jul Jan 2010 2011 2012 Source : Bureau of Trade and Economic Indices, Ministry of Commerce and Bank of Thailand's calculations

Government measures helped stimulate spending, particularly the tax rebate scheme for first-time car buyers which was expected to involve 680,000 cars in 2012. Meanwhile, there was no indication that the purchase of cars lowered spending on other goods as reflected in an increase in VAT collection both in durable and non-durable goods.

In the meantime, **private investment** also grew robustly in line with high imports of capital goods. During the first half of the year, investments surged following building repairs and imports of machineries to replace those damaged by the flood in many key industries, such as automobile, electrical appliances, hard disk drive and electronics. Moreover, investments for production capacity expansion increased throughout the year to support robust domestic demand and to replace labor with machinery as the labor market remained tight and wages rose, as well as to accommodate an increase in neighboring country demand in anticipation of the launch of the ASEAN Economic Community (AEC) and opening of the market. Factors supporting investments included businesses' confidence in the economic outlook, low cost of borrowing and high corporate loan growth.





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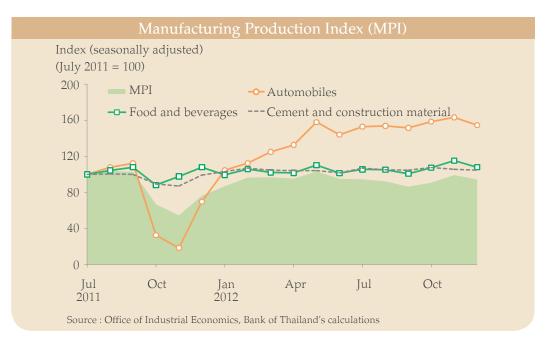


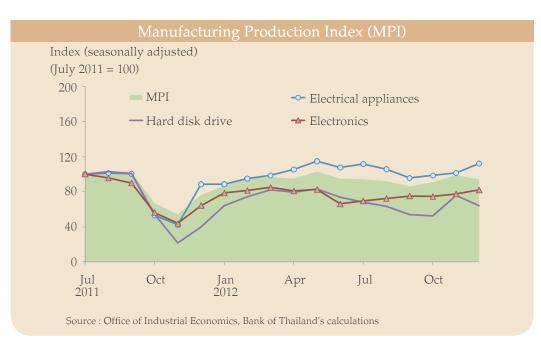


Note : \* New investment includes land, property, as well as machinery purchases Source : Bank of Thailand

## The manufacturing sector recovered quickly from the flood due to expedited reconstruction and production for domestic consumption.

Manufacturing production was severely affected by the flood toward the end of 2011, especially in the automobile, electrical appliance and electronics industries which were key export merchandises. Overall production contracted significantly in 2012 Q1, but was able to recover quickly from expedited reconstruction, with production almost returning to its normal level in the second quarter. For the rest of the year, automobile production accelerated notably, with producers focusing on domestic sales rather than exports to meet high demand thanks to government stimulus measures. Concurrently, other domestic-oriented industries, namely, petroleum products, cement and construction material, food and beverages, also expanded strongly.





Domestic Automobile Sales						
	2011	2012 –	2012			
			Q1	Q2	Q3	Q4
Domestic automobile sales*						
(thousand cars)	795.3	1,435.9	279.3	327.2	393.8	435.6
Annual percentage change	-0.6	80.6	17.1	69.2	64.8	250.5

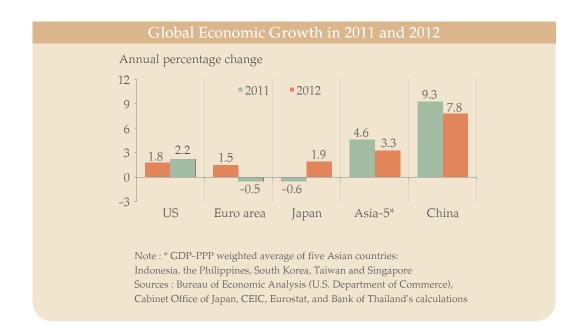
Note : \*Include passenger and commercial cars

Source : The Federation of Thai Industries

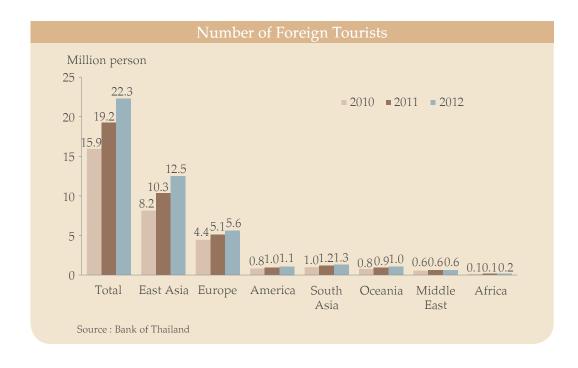
#### Merchandise exports remained sluggish, while the tourism sector expanded well.

The prolonged and widespread sovereign debt crisis in the euro area which caused uncertainty in the global financial markets, together with continued weakening of the US and Japanese economies, led to a slowdown in foreign demand. The impact on Thai exports became apparent towards the end of the second quarter, with the slowdown observed across most commodities and major export markets. As a result, although production in almost all industries had returned to normal, production of export-oriented industries in the latter half of the year declined from the first half of the year, before recovering slightly towards the end of the year in line with a more stabilized global economy.

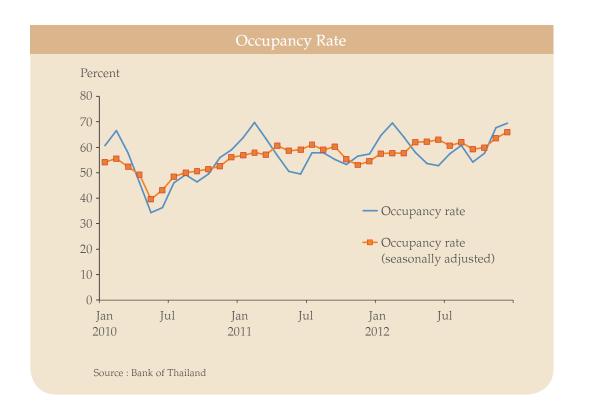




Overall, merchandise export value expanded somewhat in 2012, but export volume contracted slightly from the previous year. Nevertheless, the tourism sector grew significantly, with the number of foreign tourists reaching a new record high of 22.3 million people. The number of foreign tourists increased from all regions, particularly East Asia and ASEAN countries, and even tourists from Europe did not decline despite their economic crisis. This was because Thailand is a popular destination considered worth the value for money. Other supporting factors included an increase in the number of flights and the reopening of Don Muang Airport in October 2012. The increase in the number of foreign tourists coincided with higher hotel occupancy rates across all regions of the country.



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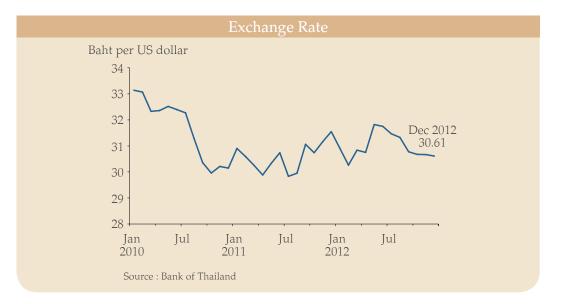
## Macroeconomic policies, both fiscal and monetary, helped support continuous economic growth.

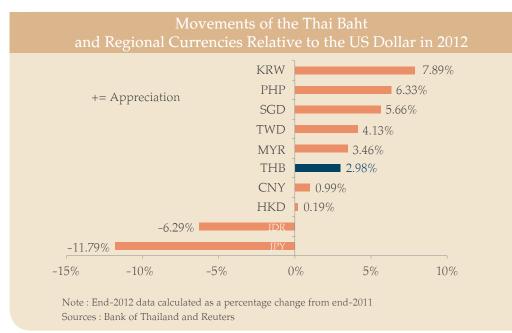
With the Thai economy faced with flood problems and weak global economic conditions, fiscal and monetary policies were crucial in bolstering consumer and business confidence as well as helping to facilitate flood-damaged repairs. Domestic spending was sufficient to compensate for impacts from the global economy on exports. In fiscal year 2012, the government set up a fiscal budget deficit of 400 billion baht or 3.7 percent of GDP as well as implemented many stimulus measures, for example, tax rebate for first-time car buyers, the rice pledging scheme, minimum wages and civil servants' salary hikes, and corporate income tax rate reduction from 30 percent to 23 percent.

At the same time, monetary policy remained supportive of borrowings. The policy rate was reduced twice, totaling 50 basis points to stand at 2.75 percent per annum at end-2012. The lower interest rate partly helped maintain robust private credit growth. Overall, corporate loans grew in tandem with domestic investment. Meanwhile, consumer loans also grew significantly, especially other personal loans and auto leasing. On the deposit side, competition for deposits through special products took place throughout the year to support credit growth.

#### The Thai baht appreciated in line with regional currencies.

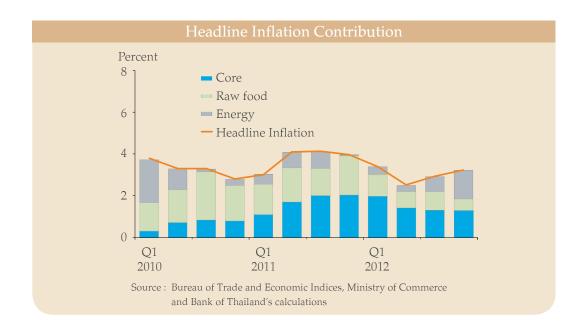
The Thai baht strengthened against the US dollar in 2012. Progress in resolving the sovereign debt problem in the euro area helped improve foreign investors' confidence so they subsequently increased holdings of risky assets which bore higher returns, including Thai baht assets. This together with abundant liquidity in the global financial markets stemming from monetary easing in major industrialized countries resulted in continuous capital flows into the region's bond and stock markets, including Thailand's. Consequently, the Thai baht stood at 30.61 baht per US dollar at end-2012, appreciating 2.98 percent from the beginning of the year. Nevertheless, the Thai baht appreciated less than the currencies of its trading partners and competitors in the region because Thai investors also increased investment abroad, particularly in direct investment and portfolio investment, which helped balance out capital inflows and outflows.



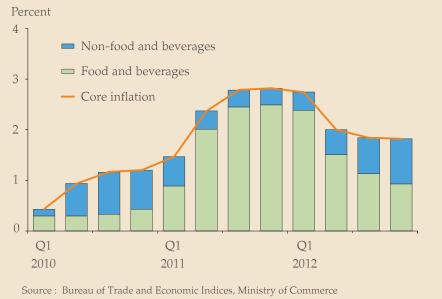


#### Overall economic stability remained sound.

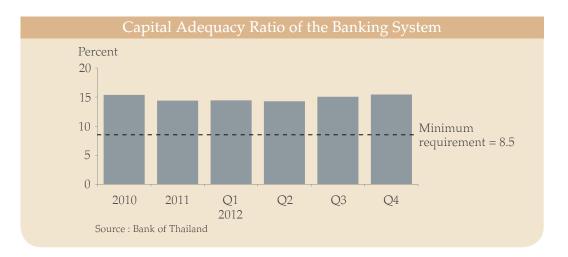
In 2012, headline and core inflation averaged at 3.02 and 2.09 percent, respectively. Headline inflation decelerated from the previous year following a slowdown in raw food prices, which was partly due to an oversupply of meat and eggs in the domestic market. Core inflation also moderated once the pass-through of costs to retail prices returned to its normal trend after having accelerated during the flood in the last quarter of 2011. Meanwhile, the minimum wage hike on April 1 did not cause core inflation to accelerate more than normal because some entrepreneurs feared that raising prices amidst fierce competition would result in market share loss.

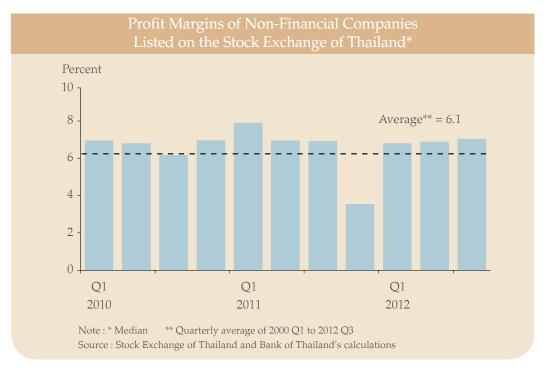


#### Core Inflation Contribution



and Bank of Thailand's calculations



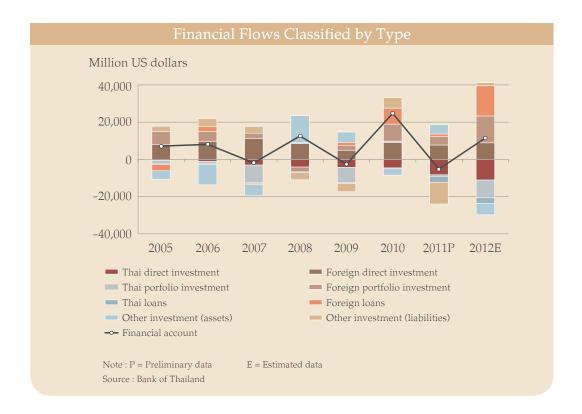


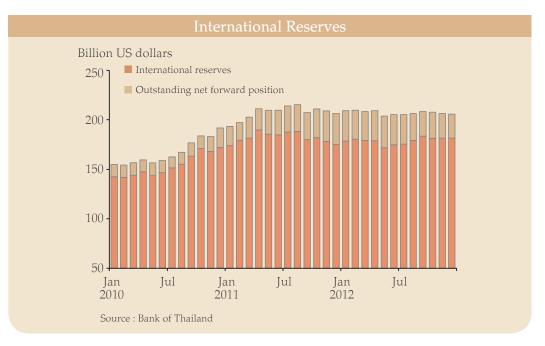
**Financial institutions** remained sound, as reflected by the capital adequacy ratio and strong profitability. This was a result of debtors' healthy financial position, both corporate and households, as reflected by strong profitability and liquidity conditions of companies listed on the Stock Exchange of Thailand, while households' financial position benefited from favorable employment conditions and income.

Fiscal stability also remained satisfactory. However, looking ahead, public debt could rise from short-term government stimulus spending. In particular, expenditures on quasi-fiscal policies via specialized financial institutions, as well as public utility and energy price subsidies, could put pressure on fiscal sustainability in the long-term.

External stability remained sound. The balance of payments recorded a surplus of 5,265 million US dollars, thanks to the surplus in both current and capital accounts. The latter surplus stemmed from capital inflows due to 1) foreign investment in government bonds, 2) foreign borrowings of financial institutions, especially short-term loans to manage transactions in the foreign exchange swap market, and 3) foreign direct investment, mainly from Japan and the euro area. Concurrently, capital outflows increased from the previous year, albeit to a lesser extent than capital inflows. These outflows mostly originated from Thai direct investment abroad which was boosted by capital account liberalization measures and the integration of the AEC.

Combining the balance of payment surplus with valuation change, **international reserves** stood at 181.6 billion US dollars as of end-December 2012, or an increase of 6.5 billion US dollars compared to end-2011. Adding Bank of Thailand's outstanding net forward position of 24.1 billion US dollars would result in **net international reserves** totaling 205.8 billion US dollars. Meanwhile, the ratios of international reserves to imports and international reserves to short-term debt remained solid.





Indicators of liquidity	International	2011	2012				
	benchmark	2011	Q1	Q2	Q3	Q4	
- Gross reserves to short-term external debt	> 1	3.7	3.1	3.0	3.2	3.0	
- Gross reserves to import value (months)	> 3-4 months	10.4	10.4	9.9	10.5	10.0	
- Short-term debt to external debt (percent)	n.a.	45.2	49.2	49.2	45.3	45.5	

# **External Stability Indicators**

Going forward, risks that could lead to imbalances in the economy and render close monitoring include the following. 1) Volatile capital flows arising from high liquidity in the global financial markets and uncertainty in the world economy could cause sudden changes in foreign investor confidence. 2) Persistently high consumer loan growth, especially auto leasing and other personal loans, could adversely impact households' debt servicing ability and in turn affect financial institutions' loan quality. And 3) impacts from the nation-wide minimum wage hike to 300 baht on January 1, 2013, could be more substantial than the first round due to a much larger net increase in minimum wage in the outer provinces (excluding the seven pilot provinces) which involve more small businesses who on average have thinner profit margins and are less capable of accommodating higher labor costs than large businesses.

## For 2013, the Thai economy is expected to expand continuously with moderate inflation concern.

The Thai economy is expected to expand well in 2013, with domestic demand remaining the main engine of growth. In particular, private investment is expected to accommodate growth in domestic spending and market expansion to neighbor countries, as well as restructuring of the production process to reduce dependence on labor. Meanwhile, strong private consumption growth should persist following continual effects from the first-car tax rebate scheme and the personal income tax cut. Moreover, public spending will continue to provide economic stimulus. The export sector is expected to recover gradually before taking on a greater role in driving the Thai economy in the latter half of 2013, which would help maintain momentum of the Thai economy after some government measures have ended.

Inflation pressure is likely to remain close to the current level. Headline inflation and core inflation in 2013 are expected to moderate somewhat from the previous year to stand at 2.8 and 1.7 percent, respectively. Although demand pressure could rise slightly from strong domestic spending, cost pressure is expected to soften on the back of stable oil and commodity prices in the global market, in line with the steady 1-year ahead inflation expectation.

#### Summary Forecast for 2013

Annual percentage change	2012*	2013
GDP Growth	6.4	4.9
Headline Inflation	3.0	2.8
Core Inflation	2.1	1.7

Note : \* Actual outturn Source : January 2013 Monetary Policy Report

# Thailand's Economic Conditions in 2012

			2011			2012	
	2010	H1	H2	Year	H1	H2	Year
(Annual percentage change, unless specified otherwise)							
Gross Domestic Product <sup>1/</sup>	7.8	3.0	-2.8	0.1	2.3	10.7	6.4
Demand (expenditure)							
Private consumption expenditure	4.8	3.0	-0.3	1.3	4.1	9.1	6.6
General government consumption expenditure	6.4	1.4	0.9	1.1	3.6	10.9	7.4
Gross fixed capital formation	9.4	6.6	0.0	3.3	7.7	19.2	13.3
- Private	13.8	10.5	3.8	7.2	10.5	18.9	14.6
- Public	-2.2	-5.9	-11.4	-8.7	-2.7	20.4	8.9
Exports of goods and services	14.7	14.0	5.2	9.5	-1.1	7.1	2.9
Imports of goods and services	21.5	15.9	11.7	13.7	6.5	5.8	6.2
Supply (production)							
Agriculture	-2.3	7.1	1.2	4.1	2.7	3.6	3.1
Manufacturing	13.9	0.8	-9.5	-4.3	-0.8	15.9	7.0
Construction	6.8	-4.6	-5.6	-5.1	3.9	11.7	7.8
Services and others	5.0	4.4	2.1	3.3	4.8	8.2	6.5
Domestic stability							
Headline Consumer Price Index	3.3	3.56	4.05	3.81	2.95	3.08	3.02
Core Consumer Price Index (excluding raw food and energy)	1.0	1.91	2.80	2.36	2.37	1.83	2.09
6 6	1.0	0.7	0.6	0.7	0.8	0.5	2.09
Unemployment (percent)							
Public debt (end of period, billion baht) Share of GDP (end of period, percent)	4,280 42.5	4,263 41.1	4,298 40.8	4,298 40.8	4,810 43.7	4,961 44.0	4,961 44.0
	42.3	41.1	40.0	40.0	43.7	44.0	44.0
External stability (billion US dollars) Trade balance	29.8	12.2	4.8	17.0	2.6	5.8	8.3
							8.3 2.7
Current account balance	10.0	4.5	1.4	5.9	-0.9	3.7 0.1 <sup>E</sup>	0.2
Capital account balance	0.2	-0.1	0.0	0.0	0.1	0.1 8.4 <sup>E</sup>	0.2 11.5
Financial account balance	24.8	1.7	-6.9	-5.2	3.0	8.4 5.8 <sup>E</sup>	5.3
Balance of payments	31.3	7.3	-6.1	1.2	-0.6		
Gross international reserves (end of period)	172.1	184.9	175.1	175.1	174.7	181.6	181.6
External debt (end of period)	100.6	109.3	104.6	104.6	120.1	133.8	133.8
Internation reserves to short-term debt <i>(percent)</i>	3.4	3.3	3.7	3.7	3.0	3.0	3.0
External debt to GDP (percent)	35.2	36.8	33.8	33.8	36.6	39.0	39.0
External debt to export value (percent)	49.0	51.2	47.0	47.0	50.0	52.7	52.7
Short-term debt to external debt (percent)	50.4	51.5	45.2	45.2	49.2	44.9	44.9
Monetary statistics (end of period) (billion baht)							
Monetary base	1,243.3	1,223.4	1,365.5	1,365.5	1,330.3	1,497.8	1,497.8
Annual percentage change	12.7	14.1	9.8	9.8	8.7	9.7	9.7
Narrow money	1,302.4	1,336.6	1,414.3	1,414.3	1,452.8	1,598.3	1,598.3
Annual percentage change	10.9	13.3	8.6	8.6	8.7	13.0	13.0
Broad money	11,778.8	12,603.9	13,559.9	13,559.9	14,013.0	14,960.2	14,960.2
Annual percentage change	10.9	16.2	15.1	15.1	11.2	10.3	10.3
Financial institution's deposits including bills of exchange <sup>2/</sup>	11,564.3	12,362.1	13,195.4	13,195.4	13,783.7	14,649.7	14,649.7
Annual percentage change	10.8	15.1	14.1	14.1	11.5	11.0	11.0
Financial institution's private credit <sup>2/</sup>	9,947.0	10,679.1	11,587.3	11,587.3	12,396.4	13,358.8	13,358.8
Annual percentage change	12.6	16.1	16.5	16.5	16.1	15.3	15.3
Interest rates (end of period) (percent per annum)							
- Repurchase rate, one-day	2.00	3.00	3.25	3.25	3.00	2.75	2.75
- Overnight interbank rates (mode)	1.87	2.90	3.15	3.15	2.90	2.65	2.65
- Time deposit rate, one year <sup>3/</sup>	1.55	2.35	2.87	2.87	2.86	2.46	2.46
- Prime rate <sup>3/</sup>	6.12	6.87	7.25	7.25	7.13	7.00	7.00
Exchange rate (end of period) (baht per US dollar)	30.15	30.74	31.55	31.55	31.75	30.61	30.61

Notes : 1/ At constant prices

2/ Financial institutions consist of all deposit-taking institutions except the Bank of Thailand

3/ Average rate of four largest commercial banks

E = Estimated data

Sources : Office of the National Economic and Social Development Board, Ministry of Commerce, National Statistical Office,

Public Debt Management Office, and Bank of Thailand

#### Pursuing Sustainable Economic Well-Being

# The Bank of Thailand's Activities 2012

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Annual Report

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# The Bank of Thailand's Activities 2012

Under the Bank of Thailand (BOT) Act B.E. 2551, the Bank of Thailand Board is authorized to oversee the overall operation of the BOT. It aims to achieve the objective as stipulated by Article 7 of the BOT Act. In particular, the BOT Board is responsible for approving the budget, as well as evaluating the performances of the BOT and the Governor. However, the BOT Board is not mandated to hold responsibility of the operations of other committees, namely Monetary Policy Committee (MPC), Financial Institutions Policy Committee (FIPC), and Payment Systems Policy (PSC). The BOT's activities in 2012 are as follows:



the Bank of Thailand Board is authorized to oversee the overall operation of the BOT. It aims to achieve the objective as stipulated by Article 7 of the BOT Act

# 1. Banknote Issuance and Management

#### 1.1 Cash Management and Banknote Issuance

In 2012, the Bank of Thailand (BOT) disbursed cash (net amount) of 102,363.2 million baht. The receipt of cash from financial institutions and other entities totaled 2,390,112.9 million baht (up by 16.2 percent compared to the previous year), while the disbursement of cash totaled 2,492,476.1 million baht (up by 13.8 percent compared to the previous year).

The banknotes issued into circulation in 2012 increased 100,000 million baht, equivalent to the value of securities transferred to the currency reserve account. At the end of 2012, currency reserve assets valued 1,399,484.7 million baht, an increase of 7.7 percent compared to the end of previous year.

#### Unit : Million baht

Currency reserves	2012	2011	Increase (Decrease)	Percent
Year-end currency reserves	1,399,484.7	1,299,484.7	100,000.0	7.7
- Assets credited to currency				
reserve account	100,000.0	195,000.0	(95,000.0)	(48.7)
- Assets withdrawn from				
currency reserve account	-	40,000.0	(40,000.0)	(100.0)
- Net assets transferred				
(withdrawn)	100,000.0	155,000.0		

#### 1.2 Banknote Production

#### 1.2.1 Banknotes

The total number of banknotes produced was 3,031.8 million notes, a 4.9 percent increase compared to the last year. The production volume was categorized according to denomination as shown in the following table:

#### Banknote Production in 2012

Denomination (Baht)	1000	500	100	50	20	Commemorative banknotes marking the 80 <sup>th</sup> birthday anniversary of H.M. the Queen	Commemorative banknotes marking the 60 <sup>th</sup> birthday anniversary of Crown Prince Maha Vajiralongkorn	
Volume (Million baht)	600.5	212.5	971.8	145.2	1,089.8	2.0	10.0	

#### 1.2.2 Non-banknote Security Products

131.6 Million pieces of revenue stamps were produced and delivered to the Revenue Department, the Ministry of Finance.

#### 1.2.3 Security Inks and Chemicals

254.9 tons of security inks and 127.4 tons of chemicals were produced.

#### 1.2.4 Research and Development

The Note Printing Works conducted a wide range of R&D projects particularly for the purposes of improving counterfeit deterrent features, improving the quality of security inks and printing materials, and enhancing sorting machines and production machines. The Note Printing Works also studied various factors to support banknote production by implementing new technology and to meet energy-saving and environment conservation requirements. The 9 projects were successfully completed while the other 13 projects were to be continued.

#### 1.3 Banknote Management

As of the end of 2012, the number of banknotes issued was 4,813.2 million notes, an increase of 7.5 percent compared to the previous year. The value of banknotes issued was 1,399,484.7 million baht, an increase of 7.7 percent compared to the year 2011. The volume of banknotes issued, by denomination, is exhibited below:

#### Banknotes Issued at the end of 2012

Unit : Million notes

	Denomination (Baht)											
500000	1000	500	100	80	60	50	20	10	5	1	0.50	BOT Note 60 baht
0.000235	1,102.8	256.4	1,213.6	1.9	11.3	263.9	1,442.0	333.6	39.2	121.3	18.9	8.3

In 2012, a total of 9,419 counterfeited banknotes (2.4 Part per Million or 2.4 ppm) were detected and seized, a decrease from 2.5 ppm in the previous year.

At the end of 2012, the Currency Reserves were valued at 1,399,484.7 million baht, equal to the value of banknotes issued at the time. The assets in Currency Reserves are described below:

#### Assets in Currency Reserves as of 31 December 2012

Description	Value (Million baht)	Share (%)
1. Foreign currencies	225,680.4	16.1
2. Foreign securities	1,173,804.3	83.9
Total	1,399,484.7	100.0

#### 1.4 Banknote Strategic Planning and Initiatives

The achievements are as follows:

#### 1.4.1 Banknote Excellence

#### 1) Clean Note Policy

In 2012, the Banknote Management Group (BMG) continued the Clean Note Policy with the following activities:

- 1.1) Following the success in 2011, special periods were offered to the cash centers of commercial banks. During the mentioned periods, cash centers were able to deposit unsorted 20-Baht banknotes at BMG to expedite the removal of unfit banknotes and the distribution of new banknotes into circulation. As a result, there was a 4.5% increase in the removal of unfit 20-Baht banknotes from circulation in 2012.
- 1.2) Volunteered convenience stores cooperated with BMG to remove unfit banknotes from circulation and distribute new banknotes into circulation. In 2012, the project was successfully implemented in all regions and will be continued in 2013.
- 1.3) Banknote quality survey was carried out so as to develop Banknote Quality Index, which reflected the quality of banknotes in circulation. The survey data, by areas, were used to formulate appropriate measures in removing unfit banknotes.
- 1.4) The public communication framework was designed along with the proactive communications strategies to promote the Clean Note Policy.

#### 2) Longer Life Spans of Banknotes

BMG continued to study alternatives to increasing life spans of banknotes such as coating techniques and choices of substrate. The progresses are as follows:

- 2.1) A research on Flexography was conducted using a variety of substrates.
- 2.2) Experiments on banknote paper and printing plate were conducted using UV technology.

#### 1.4.2 Cash Processing Pools System

Within the 5-year operating framework, 2008-2012, BMG continued with the establishment of cash processing pools as mutually agreed by all parties involved. The establishment was operated under the Banknote Management System Improvement Committee. In 2012, BMG followed the Banknote Management Master Plan and achieved the following results:

- 1) Meetings with other central banks were held to share knowledge, exchange the ideas about banknote management policy so as to apply knowledge gained to the establishment of cash processing pools system.
- 2) BMG finalized the directions of cash processing pools system and the strategic plan on the improvements to the standards of cash centers.
- 3) The framework was set up for controlling the quality of banknotes and formulating sorting machine specifications.

- 4) The compliance team followed up the working progress and the improvement of cash centers in order to ensure the compliance with the standards.
- 5) BMG provided commercial banks and cash operation companies with technical information and other necessary information to support the process of pooling and reduce wasteful spending in connection with the upgrading cash centers.
- 6) The information system was improved to support the banknote management in a long run.

#### 1.4.3 Banknotes Users Protection

#### Proactive Communication Plan

BMG continued with proactive communication plan aiming at educating the public on how to check genuine banknotes and how to handle banknotes appropriately by focusing on the primary targets and also extending to the new target groups. The educational materials were distributed to the public. The achievements are as follows:

- Banknote education programs were provided for students and teachers visiting the Banknote Exhibition so that they could apply the knowledge in their daily lives and become a voice for anti-counterfeiting.
- 2) Banknote education programs were held for the primary target (cashiers of public and private agencies). Special training was provided for professional cash handlers at commercial banks, Thailand Post Company Limited, Expressway Authority of Thailand, Transport Company Limited, Bangkok Metro Public Company Limited, CP All Public Company Limited, and Central Department Stores.
- 3) BMG expanded target groups to vendors in wholesale markets and workers in industrial estates. The Rak Thanabat Thai campaign tours were held in the targeted areas such as Marketing Organization for Farmers, Bobae Market, Bon Marche' Market Park, and companies in Amata Nakorn Industrial Estate.
- 4) New educational outreach materials (Infographic and comic book presenting the Rak Thanabat Thai campaign, DVD presentation promoting the 16th series of banknotes) were created to expand the public coverage.

#### 1.4.4 Sustainable Competitiveness Development

#### 1) Roadmap to Thailand Quality Award (TQA)

Aiming at the world-class standards, in 2012, BMG focused on the implementation of the TQA Criteria as follows:

- 1.1) A series of TQA related training sessions were held in order to familiarize the management and key staff with the TQA framework. Outside experts were consulted in the process of TQA application to BMG.
- 1.2) The working group conducted the self-assessment to identify the organization strengths and areas for improvement.

- 1.3) BMG submitted the Application Report to the Office of the Thailand Quality Award to undergo first-year assessment process. The feedback report will be used for the continued improvement of organizational performance to be a world-class organization.
- 1.4) An internal event named, "BMG towards Excellence", was held to communicate with employees and increase their involvement across the organization.

#### 2) Procurement and Upgrading Plan on Banknote Sorting Machines

According to intermediate-term and long-term plans on banknote sorting capacity, BMG purchased new banknote sorting machines and improved the efficiency of existing machines so as to move towards the excellence in banknote management. The achievements are as follows:

- 2.1) An agreement was signed for upgrading 6 existing banknote sorting machines to accommodate the issuance of the new series of banknotes (Series 16).
- 2.2) An agreement was signed for purchasing 2 new machines with higher capacity with sorting rate of 30 notes per second.
- 2.3) The engineering team improved the electrical systems at 5 Banknote Operation Centers to support the new sorting machines.

#### 3) Banknote Printing Machines Purchasing Plan

New machines are required to replace the 36-year-old machines and to support the decrease in work force and growth in demand for banknotes in the next 5-10 years. Therefore, 3 new machines were purchased in 2012; i.e. intaglio printing machine, numbering machine, and cutting and packaging machine. After finishing the installation in 2013–2014, the production capacity will increase by 15 percent.

#### 1.4.5 Human Resource Focus

#### Employee Engagement Plan

The employee engagement policy was implemented to reinforce employee's passion for work with the organization, devotion to work, and better deliverables. The achievements are as follows:

- 1) BMG conducted work engagement and employee satisfaction surveys and analyzed factors that affected satisfaction and engagement of employee.
- 2) A plan to increase employee satisfaction and engagement was formulated.
- 3) Strategic directions were communicated to management and employees so as to gain their full support in alignment with the plan.

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# 1.4.6 Knowledge Management and Innovation

#### Knowledge Management Plan

With strong commitment to achieving Thailand Quality Award, BMG focused on improving information and knowledge management (KM). The progresses and outcomes are as follows:

- 1) Assessment of BMG's KM system
- 2) A KM vision alongside KM Roadmap for 2013-2017
- 3) The training programs and communication campaign to create awareness among management and employees on KM's importance and to inform them about the directions and criteria for assessments
- 4) KM Assessment Committee
- 5) KM Committee and Sub-Committee to formulate strategies and action plans for each department as well as to efficiently drive the Knowledge Management towards desired objectives
- 6) KM Implementation Plans for all departments

# 2. Reserve Management and Operations

During the year 2012, the BOT managed the country's international reserves based on the principle of prudence and financial soundness, as well as liquidity, in order to achieve a desirable return within the investment guidelines and risk profiles set by the Risk Management Committee and closely monitored by the Investment Sub-Committee.

To optimize investment returns within acceptable risk, the Bank closely monitored factors that affect asset price movements, such as developments in financial markets and the global economy, including policy responses of countries in which the Bank invests. This served to support the assessment of future asset prices and risk environment, and created opportunities to achieve higher returns and lower financial risk. With strict adherence to the principle of safety and liquidity, the Bank had continued to pursue its policy in investment diversification by expanding eligible asset classes and countries out of traditional universe.

Major portfolios under BOT management include Liquidity Portfolio, Investment Portfolio and Long-term Investment Portfolio. BOT has employed quantitative models and derivative instruments such as bond futures and short-term interest rate futures to enhance the efficiency of reserves management. BOT has consistently been developing various investment tools to improve return generating capabilities, as well as to reduce risk and minimize operating expenses.

# 3. Monetary Operations

The BOT's monetary operations aim to maintain the policy rate at the level set by the Monetary Policy Committee (MPC). In so doing, the BOT uses various monetary instruments to manage liquidity to ensure that it remains supportive of money market rates that are consistent with the policy rate. These will help enhance the efficiency and effectiveness of the market mechanism and monetary policy transmission in the long run. The BOT's monetary operations also aim to foster the development of financial markets as well as strengthen financial stability.

In 2012, global financial market volatility was driven by the European sovereign debt crisis and uncertainty over the economic recovery. Net capital inflows into the region increased in 2012 from 2011, partly due to unconventional policies of central banks in major countries. Liquidity build-up was also observed in the Thai financial system following the launch of the credit facility scheme to assist the flood victims of 2011. As a result, the BOT's liquidity absorption resorted to four main liquidity management tools, namely, the issuance of the BOT bonds and bills, bilateral repurchase transactions, foreign exchange swap transactions, and outright purchases and sales of government securities.

#### 3.1 Bank of Thailand Bonds and Bills

The issuance of BOT bonds and bills continued to be the principal instrument used to absorb the persistent liquidity surplus in the system. This also fostered Thai bond market development by enhancing liquidity and efficiency of the market. In formulating the bond issuance plan, market sentiment and government bond issuance plan are taken into account. In 2012, total outstanding of BOT bonds and bills' increased by 441 billion baht to 3,083 billion baht (accounting for approximately 64 percent of total absorption outstanding).

The BOT adjusted the issuance plan of BOT bonds and bills to suit market demands and enhance liquidity in the secondary market. The adjustments primarily includes 1) a change of auction date for the two-year and three-year fixed coupon bonds to avoid such bonds maturing on a weekend and 2) a reduction in the number of new issues while increasing the amount per issue. Following comments from market participants during the market consultation of November 2012, the BOT made further adjustments to the bond issuance plan in line with the changing market conditions and to further facilitate bond market development. The four-year fixed coupon bond was discontinued to accommodate the growing issuance of government bonds for funding purposes in 2013.

Additionally, as the overall net excess liquidity is not expected to change much going forward, there was not a strong case for issuing longer term bonds to enhance the capacity to manage excess liquidity. Moreover, as the BOT plans to enhance liquidity of Floating-Rate Bond (FRB) by increasing the issue size, only one type of FRB, namely the three-year FRB against 3-month Bangkok Interbank Offered Rate (BIBOR), will be issued while the two-year and three-year FRB that were linked to 3-month BIBOR and 6-month BIBOR, respectively, will be discontinued.

In addition, the BOT adjusted the process and methodologies for Non-Competitive Bidding (NCB) auction by increasing the auction amount, extending the maturity range of the bonds as well as changing eligible bidders, auction process, settlement process and bond allocation process. The objective of which is to promote market access, reduce investment difficulties of less experienced investors such as foundations, cooperatives, and non-profit organizations, and to strengthen the role of Ministry of Finance Outright Primary Dealers as the market makers.

#### 3.2 Bilateral Repurchase (BRP) Transactions with Primary Dealers (PDs)

The BOT uses BRP 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 alternatives. Normally, the BRP transactions are carried out every morning<sup>1</sup> with PDs, which effectively act as liquidity adjustment intermediaries between BOT 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.

Furthermore, the BOT conducted the Securities Borrowing and Lending (SBL) transactions in the first three quarters to accommodate the 14-day and 1-month BRP. This would enhance the BOT's capacity to accommodate the needs of financial institutions for a higher amount of longer maturity BRP<sup>2</sup>.

At end-2012, the absorption amount through BRP was 942 billion baht (or approximately 20 percent of total absorption outstanding).

<sup>&</sup>lt;sup>1</sup> On days where there is an MPC meeting, the repurchase window is open in the afternoon (after the MPC decision announcement).

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

#### 3.3 Foreign Exchange Swap Transactions

A foreign exchange swap transaction was another important absorption tool. The BOT resorted to this instrument in a fairly flexible manner, depending broadly on market conditions and needs. For instance, the BOT decreased FX swap transactions during the second half of 2012 in order to accommodate increasing US dollar liquidity. At end-2012, the BOT's net forward position stood at 24.2 billion US dollars (or approximately 748 billion baht which accounted for 16 percent of total absorption outstanding).

#### 3.4 Outright Purchases and Sales of Government Securities

To permanently add or drain liquidity in the financial system, the BOT buys or sells debt securities outright with appointed e-Outright counterparties. The BOT typically adds rather than drains liquidity through this channel to accommodate the permanent increase in demand of currency in circulation as the economy grows. Though eligible securities include all types of public debt securities and debt securities guaranteed by the Government, the BOT has primarily conducted outright operations on government and BOT bonds as these papers are highly liquid in the secondary market. In 2012, total outright purchases were 48 billion baht.

In addition to the open market operations mentioned above, the BOT also provides a collateralized overnight standing facility called the "End-of-Day Liquidity Adjustment Window". It serves as a corridor to limit the volatility of short-term money market rates as the BOT stands ready to conduct overnight lending to and borrowing from financial institutions at the policy rate plus or minus 50 basis points respectively. Most of such transactions conducted in 2012 were through the deposit facility amounting to an average of approximately 12 billion baht per day.

In early 2012, the BOT signed a Memorandum of Understanding (MOU) with Bank Negara Malaysia (BNM) and the Monetary Authority of Singapore (MAS) to establish a reciprocal Cross-Border Collateral Arrangement (CBCA) to enhance the liquidity facilities of eligible financial institutions. The arrangement allowed eligible financial institutions in Malaysia or Singapore to access liquidity in local currency (Malaysian Ringgit (MYR) from BNM or Singapore Dollar (SGD) from MAS) by pledging Thai Baht (THB) or Thai government bonds or BOT bonds. Likewise, eligible financial institutions operating in Thailand may obtain THB from the BOT by pledging MYR/SGD or Malaysian/Singaporean government bonds or BNM/MAS bonds. These would enhance the efficiency of monetary policy implementation during normal and crisis times; and hence, help maintain financial stability.

# 4. Financial Market Development

#### 4.1 Developing the Bangkok Interbank Offered Rate (BIBOR)

The BOT continued its efforts in developing the Bangkok Interbank Offered Rate, or BIBOR, with an aim to promote its use as a reference rate in 5 main categories of financial transactions within 2015. These include 1) interbank lending and borrowing 2) corporate sector lending 3) hedging 4) investment in floating rate instruments and 5) issuance of floating rate instruments. In 2012, progress was made in the following areas:

- The value of term interbank lending with maturities of 3 months and above increased 101 percent from the previous year. On average, the level of interest rates transacted was close to the BIBOR Fixing calculated from the quotes contributed by BIBOR Contributing Banks and published on the BOT WebSite.
- 2) The BOT, in cooperation with BIBOR Contributors, stepped up its public relations efforts through various communication channels, i.e. through BIBOR Contributors' websites, newspaper articles, including one-on-one meetings with high-level management of a number of financial institutions, private corporations, state-owned enterprises (SOEs) and the Ministry of Finance (MOF). The main thrust of the efforts was to publicize the BOT's policy as well as the benefits of using BIBOR as a reference rate, in order to encourage these parties to consider referencing against BIBOR when borrowing funds from banks. In addition to targeting the public relation activities at the core group of potential users of BIBOR as mentioned above, the BOT has also incorporated knowledge on BIBOR into the education materials for high school students to start spreading out awareness to a wider public.
- 3) BIBOR had been accepted as a reference rate option and had actually been used by the MOF and SOEs in some of their borrowing transactions. This should contribute favorably towards confidence of the private sector in using BIBOR in their financial transactions and, in turn, lead to the development of BIBOR-referenced hedging instruments in the market.
- 4) BIBOR Contributors had begun providing quotes for 3-month interest rate swaps (IRS) on the Reuters and Bloomberg pages. This move should help increase price transparency as well as provide market participants information on the names of those financial institutions offering this hedging product.

In addition, the BOT, together with the 17 BIBOR Contributors, had been following the situation regarding short-term reference rate manipulation abroad, especially the London Interbank Offered Rate (LIBOR). The measures being undertaken to shore up market confidence in those markets were looked at and considered in terms of how they could be used to reinforce confidence in BIBOR. However, BIBOR may not be liable to manipulation as LIBOR, because both the rates quoted as well as the rates transacted by Contributors are being closely monitored by the BOT.

#### 4.2 Capital Market Development

The corporate bond market development measures proposed by the BOT in 2011 was accepted by the Capital Market Development Committee and incorporated into the Capital Market Development Plan. Under this Plan, the BOT had undertaken actions on several fronts:

- Increasing the variety of corporate bonds in the market : The BOT had been in consultation and cooperation with relevant authorities to reduce restrictions and allow market participants to issue and/or invest in foreign currency denominated bonds in the Thai market more conveniently. In addition, the BOT, in collaboration with the SEC, had conducted a study on covered bond issuance models and relevant legal frameworks in other countries. The SEC is now in the process of reviewing the existing legal framework in Thailand and changes necessary to support covered bond issuance.
- 2) Establishing a guarantee mechanism for SMEs' bond issuance : The BOT undertook a study on several guarantee models proved to be successful in other countries and made a proposal to the MOF to establish a working group to work on an appropriate model for Thailand. The working group is headed by the Senior Assistant Secretary-General of the SEC.
- 3) Improving price transparency in the secondary market : The BOT had required all 12 Primary Dealers to provide quotations on corporate bonds with acceptable ratings to large institutional investors, large issuance sizes, and original maturity of not less than 3 years, on the Fixed Income and Related Securities Trading System (FIRSTs) of the Stock Exchange of Thailand. The measure aimed to improve price transparency and hence improve liquidity and demand for investment in the secondary market.
- 4) Providing one-stop information service on bonds : As the SEC and Thai Bond Market Association (ThaiBMA) are the main organizations providing service in this area to both issuers and investors, the BOT's role in this regard was mainly to support and provide feedback to these organizations.

# 5. Role as the Government's Banker and Registrar of Government Securities

#### Providing bank account facilities and serving as registrar of government securities

At the end of 2012, balance in the treasury reserve account held with the BOT stood at 245,051.7 million baht, decreased by 2.6 percent compared to the previous year's end, while the balance in the public organizations' accounts held with the BOT stood at 18,732.1 million baht, increased by 4.5 percent compared to the previous year's end.

The outstanding amount of government debt securities at the end of 2012 totaled 6.7 trillion baht, increasing from 5.6 trillion baht in the previous year, mainly ascribed to the increase of the BOT bonds of 478.8 billion baht, issued primarily to absorb liquidity in the financial system.

The government bonds' outstanding amount increased 397.1 billion baht issued mainly to finance the government budget deficit and debt restructuring. Also, the outstanding amount of state-owned enterprises bonds increased by 140.0 billion baht as the Bank for Agriculture and Agricultural Cooperatives issued 139.0 billion baht worth of bonds for the rice-pledging scheme. Meanwhile, the outstanding amount of the Financial Institutions Development Fund bonds remained unchanged.

Treasury bills had no outstanding amount as all remaining issues reached maturities, and debt restructuring bill's outstanding amount increased by 57.8 billion baht. Depository institutions and other financial institutions remained the largest holders of government debt securities.

## Government debt securities at the end of 2011-2012

			Un	it : Million baht		
Types of debt securities		standing 31 Dec 2011)	Issuance	Redemption		tstanding 31 Dec 2012)
51	Issues	Value	Value	Value	Issues	Value
Government Bonds	72	2,626,628.1	687,095.3	290,023.2	71	3,023,700.2
State-Owned Enterprise Bonds	303	322,700.4	191,544.3	51 <b>,</b> 577.5	345	462,667.2
Bank of Thailand Bonds	83	2,641,721.9	7,799,269.0	7,320,495.9	77	3,120,495.0
Financial Institutions						
Development Fund Bonds	1	48,000.0	-	-	1	48,000.0
Treasury Bills	-	-	142,135.0	142,135.0	-	-
Debt Restructuring Bills	_	-	114,350.0	56 <b>,</b> 595.0	6	57,755.0
Total	459	5,639,050.4	8,934,393.6	7,860,826.6	500	6,712,617.4

# Debt securities outstanding classified by groups of holders as of 31 December 2012

	Unit : Million baht
Groups of holders	Value
Bank of Thailand	639,025.9
Depository institutions	1,970,192.0
Financial institutions not elsewhere classified	1,985,170.4
Other non-financial institutions	160,068.0
Central government	805,227.2
Local government	69.3
Public non-financial institutions	2,081.6
Households and non-profit institutions serving households	441,937.0
Non-residents	708,846.0
Total	6,712,617.4

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Bank of Thailand	51

The value of coupon payment of government debt securities increased to 196,124.6 million baht, up by 10.8 percent compared to the previous year. Tax withheld from coupon payments and remitted to the Revenue Department amounted to 4,701.1 million baht, a 4.5 percent decrease from the previous year.

#### Coupon payment of government debt securities 2011-2012

					Un	it : Million baht	
<b>T</b> (	C	oupon paymen	t 2012	Coupon payment 2011			
Types of securities	Issues	Transactions	Value	Issues	Transactions	Value	
Government Bonds	147	729,352	134,786.3	157	839,536	125,449.0	
State-Owned Enterprise Bonds	598	3,822	14,602.7	626	5,054	15 <b>,</b> 597.1	
Bank of Thailand Bonds	66	202,892	44,271.3	67	239,308	32,074.7	
Financial Institutions							
Development Funds bonds	2	2	2,464.3	4	22,038	3,873.3	
Total	813	936,068	196,124.6	854	1,105,936	176,994.1	

#### Tax withheld from coupon payment and remitted to the Revenue Department 2011-2012

Unit : Million b						
Tax withheld		nd remitted to epartment 2012	Tax withheld and remitted to the Revenue Department 2011			
	Transactions	Value	Transactions	Value		
Corporate income tax	17,558	1,350.8	17,769	1,228.7		
Personal income tax	746,506	3,350.3	857,909	3,693.0		
Total	764,064	4,701.1	875,678	4,921.7		

## 6. Role as the Financial Institutions' Banker

#### 6.1 Providing Bank Account Facilities to Banks and Financial Institutions

Balance in banks' accounts held with the BOT at the end of 2012 stood at 92,323.2 million baht, increased by 36.2 percent compared to the previous year's end, while the balance in the financial institutions' accounts held with the BOT stood at 17.9 million baht, decreased by 78.6 percent compared to the previous year's end.

#### 6.2 Lending to Financial Institutions

As a banker to financial institutions, the BOT can extend secured lending to financial institutions for a period of up to 6 months. The lending of which must be collateralized by first class assets prescribed by the BOT. In March 2013, the BOT issued the regulation and relevant notification to broaden the range of collaterals eligible for borrowing from the BOT.

#### 7. Financial Institutions Supervisory Policies

#### 7.1 Financial Institutions Supervisory Policies

The Bank of Thailand (BOT) has the responsibility to supervise, examine, monitor and analyse the financial position and performance of the financial institutions (FIs). In 2012, the BOT supervised significant activities that have effects on the performance and strategy of FIs that relate to their lines of business, particularly on credit process, which was their principle task. Other important processes include treasury and information technology.

The BOT also assessed management effectiveness of the significant activities by reviewing end-to-end processes, and further identifying the audit findings. Assessment of the significant activities must be consistent with strategy and management and in compliance with the risk based supervision standard.

The BOT conducted on-site examination, and closely monitored FIs' financial position and performance, as well as, granted approval, responded to FIs' inquiries, and reviewed their practices according to the BOT's principles and conditions in order to prevent any financial problems and to ensure that prompt and effective measures were put in place.

In 2012, the BOT's supervision focused on key areas namely FIs' information technology systems, the provision of possible impaired loans, the concentration of large single borrower, large oversea project financial facilities, liquidity risk management in connection with their financial affiliations, and preparation for Basel III implementation process.

#### 7.2 Financial Institutions On-site Examination

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

#### 1) Commercial Banks and Their Financial Affiliations

- 1.1) Assessing the provision adequacy of non-performing loans (NPLs) and possible impaired loans including capital adequacy under Basel II and future capital requirements based on FIs' business expansions, competitive capacities, financial performances, the efficiency of risk managements, corporate governance, the compliance of related law and regulations, and the Internal Capital Adequacy Assessment Process (ICAAP) to ensure the adequacy of capitals and to absorb potential losses under normal or under crisis.
- 1.2) Assessing FIs' IT systems focusing on core-banking systems particularly data securities and business continuity plans, as well as, the capacities of the central computer centers to support normal business operation, and crisis recovery plans. Many commercial banks were in the process of planning and improving their computer systems in order to obtain competitive advantages.
- 1.3) Assessing the credibility of FIs' internal rating systems attempted to approve FIs to use Internal Ratings Based Approach (IRB) in calculating capital charge for credit risk. Examinations were also carried out to measure the reliability of Value at Risk (VaR) model for market risk management.

#### 2) Finance Companies and Credit Foncier Companies

Assessing focused on the soundness of financial position and performance, practices in compliance with the laws, sufficient liquidity as well as the adequacy of provisions to absorb potential losses.

#### 3) Specialized Financial Institutions<sup>3</sup>

Similar process of risk-based examination was performed at the specialized financial institutions. The results of examination were sent to the Ministry of Finance for consideration with recommendation to carry out appropriate actions.

#### 4) Asset Management Companies

In examining asset management companies, the focus was on the compliance with related laws on the purchase and transfer of assets, financial performances, impaired assets management, and the accuracy of submitted reports.

<sup>&</sup>lt;sup>3</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.

#### 5) Non-banks operating Credit Card Businesses and Personal Loans

On-site examination of non-banks operating credit card business and personal loans would focus on their compliance with the BOT's regulations on consumer protection and any unfair treatment to their customers.

#### 7.2.2 Summary

The BOT examined financial position and performance as well as risk management focusing on FIs' significant activities that had adverse effect on FIs' business operations at a total of 42 FIs (Table 1). Most significant activities of Thai FIs were corporate loans, small and medium size (SMEs) loans, and consumer loans, while those of the foreign bank branches were investments and derivatives. For specialized financial institutions, the significant activities were special project loans. Meanwhile, asset and liability management (ALM) was the significant activities of all FIs.

In 2012, Thai financial sector continued to grow in line with the economic expansion with continued profitability, high capital and improved asset quality, and decreased NPLs. The examinations revealed that most FIs' composite ratings ranged from fair to fairly good. Their risk managements were also improved particularly on credit risk management.

On the other hand, some improvements need to be made related to customer services. Moreover, to strengthen the financial system resiliency, several measures were carried out namely: to induce FIs to raise provision for the possible impaired loans and normal loans; to hold additional capital on corporate loans that exceed the legal lending limit; to facilitate financial access of SMEs with high growth potential; and to provide soft loan to flood victims.

# Numbers of Fle Einancial Institutions

#### Table 1 : The numbers of FIs examined by the BOT in 2012

Financial Institutions	Numbers of FIS
1. Thai Commercial Banks / Retail Banks	15
2. Foreign Bank Branches / Subsidiaries	9
3. Finance and Credit Foncier Companies	3
4. Specialized Financial Institutions / Credit Bureau Companies	8
5. Asset Management Companies	2
6. Non-banks operating credit card businesses and personal loan	5
Total	42

#### 7.3 Financial Institutions Monitoring and Analysis

#### 7.3.1 Financial Institutions Monitoring and Analysis

The BOT monitored and analysed the financial position and performance 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.

#### 7.3.2 Special Studies and Analysis

Special studies and analysis namely: criteria and surcharge rate collecting from financial institutions take into account the amortization of the principal to fiscal the Financial Institution Development Fund (FIDF) losses; opportunities and challenges of Thai financial institutions toward ASEAN Economic Community (AEC); the fast growing credit expansion of Thai commercial banks' loans comparatively higher than the economic growth; the effects of European economic crisis on liquidity and asset quality of Thai commercial banks; and the relief measure to debtors affected by the flood. Furthermore, the BOT has developed "Financial Institution Monitoring and Analyzing System" to support the implementation of consolidated supervision and Basel III in order to assess and monitor FI's financial position and performance.

#### 7.4 Financial Institution Applications

The BOT approved applications, responded to inquiries and followed up on the permission to be in compliance with the terms and conditions as specified under the notification and circulars totaling 3,873 cases. In granting the approval, the BOT would consider FIs risk management and readiness of FIs, particularly on corporate governance, financial position, and market competition as well as advantage and effect on the customers and economy at large.

#### 7.5 Consumer Protection

The BOT coordinated with FIs and non-banks relating to personal loan and credit card businesses to resolve customers' complaints on the financial services of FIs. Most complaints were on FIs' customer services, consumer loans and debt restructuring processes. Of the total 3,810 complaints, 95.56 percent were resolved.

In addition, financial literacy, in coordination with government organizations, was provided to the public, such as conducting seminars on the topic of "Financial institution supervision and credit bureau operations", "Knowledge of deposit protection", "Banking financial services and illegal lending", and participating in meetings with Economic Crime Division to seek cooperation in arresting illegal money lenders.

#### 7.6 Supervision Efficiency Enhancement

In 2012, the BOT has continuously conducted training for examiners to enhance their efficiency and updated them on new international regulatory standards totaling 29 courses of which 7 were standard courses and 22 were special courses. Professional guest speakers were invited from various agencies, both local and international. Moreover, seminars and study visits were organized, both domestic and overseas, to broaden the examiners and senior managements' skills and coordination.

#### 7.7 Meetings

In 2012, the BOT held several important meetings including presentations on the overall banking industry supervision in 2011 and the focus in 2012, FIs' external auditors and internal auditors, and also held functions between BOT's staff and compliance unit of commercial banks to exchange ideas on important supervisory issues and audit program.

#### 7.8 Training and Seminar

The BOT coordinated with other organizations, such as Central Bank of Myanmar, The Thai Bankers' Association and Thai Institute of Director by conducting training courses and seminars relating to banking supervision, significant activity supervision framework, credit risk and loan examination under significant activity supervisory approach, loan operation process and credit underwriting standards, information system examination and capital adequacy of FIs under ICAAP process.

### 8. Operation of Payment Systems

#### 8.1 Interbank Cheque Clearing System

The BOT has developed the ICAS (Imaged Cheque Clearing and Archive System : ICAS) which is an imaged-based cheque clearing system instead of physical exchange. The objectives of the ICAS are: to shorten the cheque clearing cycle to one-day clearing nationwide, to extend the closing time for cheque collection windows, to reduce the total cost of cheque clearing system, to reduce the risk of the loss of physical cheques during transportation in collection process, and to enhance the efficiency of Thailand's cheque clearing process to meet the international standards and strengthen the competitiveness of the country.

The ICAS has launched in Bangkok and metropolitan areas since February 3, 2012. The roll out to the rest of the country will be carried out in phases through the year 2013; Suphan Buri province as the pilot region on November 15, 2012, Rayong province and Khon Kaen province in February and March 2013 respectively.

At the end of 2012, there were 37 member banks of the ICAS, consisted of 15 Thai banks, 16 Foreign Bank branches and subsidiary, and 6 specialized banks established under specific laws. There were 9,974 branches (including sub-branches) in total, increased by 1,592 branches from the previous year. On October 1, 2011, Thanachart Bank and Siam City Bank merged. The Siam City Bank's code and its branch have been cancelled from all of cheque clearing systems in Thailand since December 14, 2012.

		Volume (Item)	)	Value (Billion baht)			
	2011	2012	% Change	2011	2012	% Change	
Cleared cheques	73,927,540	74,730,343	1.09%	35,998.49	38,843.32	7.90%	
Returned cheques	1,176,491	1,067,638	-9.25%	182.23	209.40	14.91%	
	(1.6%)	(1.4%)		(0.5%)	(0.5%)		
Returned cheques	782,148	710,548	-9.15%	96.35	97.36	1.05%	
due to insufficient fund	(1.1%)	(1.0%)		(0.3%)	(0.3%)		

# Volume and value of cleared cheques, returned cheques, and returned cheques due to insufficient fund Countrywide Interbank Cheque Clearing 2012

Note : ( ) represents the proportion of cleared cheques (%)

Source : Payment and Bond Department, Bank of Thailand

In 2012, the total number of cleared cheques in Bangkok and the Metropolitan areas (ICAS)<sup>4</sup> together with the Intra Provincial Cheque Clearing and Inter Provincial Cheque Clearing (B/C-3D) was 74.73 million, amounted to 38,843.3 billion baht. The volume and value of cleared cheques increased from the previous year by 1.09 and 7.90 percent respectively. The proportions of cleared cheque in these three systems were 71.1 percent, 19.8 percent, and 9.1 percent respectively.

In 2012, the total number of returned cheques in Thailand was 1.1 million, amounted to 209.4 billion baht. The volume decreased from the previous year by 9.25 percent, while the value increased by 14.91 percent. The proportion of returned cheques to total cleared cheques slightly decreased from 1.6 percent of the previous year to 1.4 percent in terms of volume, while in value, the proportion remained at 0.5 percent.

<sup>4</sup> The BOT has implemented the ICAS since February 3, 2012. The transition period of the ICAS from the previous system (Electronic Cheque Clearing System - ECS) is from February to April 2012.

The number of returned cheques due to insufficient fund was 0.7 million, amounted to 97.36 billion baht. When compared to the previous year, the volume decreased by 9.15 percent, while the value increased by 1.05 percent. The proportion of returned cheques due to insufficient fund compared to the total cleared cheques slightly decreased from 1.1 percent of the previous year to 1.0 percent in terms of volume, while in value; the proportion remained the same at 0.3 percent.

#### 8.2 BAHTNET

At the end of 2012, BAHTNET had 65 member institutions including 16 Thai commercial banks, 15 foreign bank branches, 11 finance and securities companies, 14 specialized financial institutions, government entities, and other institutions, and 9 BOT's departments (one of which was a new member conducting transactions related to the Emergency Decree Granting Financial Assistance to Persons Sustaining Damages from Floods, B.E. 2555).

In 2012, funds transfer transactions sent through BAHTNET totaled 2,946,179 transactions, increased by 8 percent from the previous year. The value of funds transfer totaled 649.1 trillion baht which decreased by 15 percent from previous year as the bilateral repurchase (decreased by 18 percent), interbank loan (decreased by 9 percent), and foreign exchange (decreased by 7 percent) transactions declined. Meanwhile, the value of multilateral funds transfer and third party funds transfer increased from the previous year. Additionally, over 200 billion baht of funds were transferred through the flood-victim assistance program.

As to funds transfer classified by group of sending institutions, in terms of both volume and value, Thai commercial banks had the largest share of 62 and 48 percent of the total, respectively. The other groups included the BOT's departments and foreign bank branches having shares of 28 and 16 percent of total value, respectively.

#### 9. Foreign Exchange Control

#### 9.1 Capital Account Liberalization

With regard to the global economy and financial market tightly connected with international trade and investment and the upcoming regional economic integration of ASEAN countries working toward freer flows of capital, these will lead to more opportunities and necessities for Thai people to expand their overseas investment. Therefore, the BOT has proposed the "Capital Account Liberalization Master Plan" (master plan) by relaxing foreign exchange regulations in order to encourage Thai companies and depositors to diversify their investments and operate their businesses more efficiently, create environments that support more balanced capital flows, and promote financial markets development to facilitate economic integration of the region.

#### Relaxation under the master plan can be summarized as follows:

During 2012-2013, the BOT plans to relax foreign exchange regulations to increase flexibility for Thai residents in overseas investment and in foreign exchange risk management, which consists of five main issues;

- 1) Outward Direct Investment : to remove amount limit for direct investment by Thai individuals to facilitate expansion of their markets and operation bases, as well as strengthen their competitiveness.
- 2) Outward Portfolio Investment : to widen institutional investor base, raise amount limit per investor, expand list of permitted type of securities, and ease regulations for transfers of foreign currency to facilitate investment in foreign securities through ASEAN Linkage, an integration of capital markets under ASEAN Economic Cooperation.
- 3) Foreign Currency Deposit (FCD) : to remove the amount limit of FCD (opened with domestic financial institutions) having future obligations in order to provide more flexibility for importers or residents with obligations in their foreign exchange risk management.
- 4) Foreign Exchange Risk Management : to allow Thai residents hedging overseas investment to freely unwind their foreign currency hedging of capital transactions.
- 5) Others :

- To relax qualifications of money changer and money transfer agent and regulations on foreign currency exchange and transfers for more flexibility in providing service to their customers.

- To relax measures to prevent Thai baht speculation by non-residents (NR) by considering domestic financial institutions to provide direct loan in Thai baht to NR up to the underlying trade and investment in Thailand on a case by case basis.

Next phases the BOT will evaluate the impacts of the foreign exchange relaxation implemented during 2012-2013 and all required pre-conditions which include a well-functioned surveillance mechanism and monitoring system, alignment with the financial services liberalization and stability of domestic financial markets. The BOT will also seek to promote financial literacy of Thai investors. After the evaluation process, the BOT will consider relaxing additional regulations as deemed appropriate.

In 2012, the BOT has relaxed foreign exchange regulations as follows:

 Proposed the Ministry of Finance on February 1, 2012 to grant license for agents and related companies<sup>5</sup> that involve in trading dollar futures contracts on Thailand Futures Exchange, with the aim to provide small and medium-sized enterprises with a hedging instrument as well as increase financial tools in order to support financial market development.

<sup>&</sup>lt;sup>5</sup> Including Thailand Futures Exchange Public Company Limited, Thai Clearing House Company Limited, and Securities Companies that are brokers in currency futures trading.

Issued a Notice of the Competent Office on rules and practices regarding investing in securities abroad and derivatives (No.2) dated October 17, 2012. The main issues are to 1) allow listed companies to invest in securities abroad directly, 2) allow institutional investors to invest in foreign currency denominated bond issued and offered in Thailand (FX bonds), and 3) allow some institutional investors to unwind foreign exchange hedging with regard to portfolio investment transactions.

#### 9.2 Thai Direct Investment

Thai Direct Investment (TDI) has been continuously increasing, particularly after the Bank of Thailand relaxed foreign exchange regulations which has allowed Thai companies to freely carry out outward direct investment ever since October 2010, in addition to support from the government sector, the appreciation of the Baht, as well as the business sector's increasing need to invest overseas in order to maintain their competitiveness. While Thailand is still stuck in the Middle Income Trap, the economy is still highly dependent on foreign investments and is vulnerable to external factors. In accordance with the current trend of world economic development focusing on business opportunities in potential developing countries, TDI figures soared in 2011. For the first 10 months of 2012, TDI rose to USD 10.34 billion, signifying a 24.7 percent increase from the same period in 2011.

#### Thai Direct Investment

				Unit : Millions US dollars		
	2009	2010	<b>2</b> 011	Jan - Oct 2011	Jan - Oct 2012	
Net Thai Direct Investment (Net TDI)	4,153	4,616	8,221	8,288	10,336	
(yoy % change)	(1.3%)	(11.2%)	(78.1%)	(113.1%)	(24.7%)	

Source : Balance of Payment

Major barriers limiting Thai Direct Investment include tax concerns, the lack of an agency to promote investment by comprehensively providing the necessary information required for investing overseas, funding issues, as well as foreign investment regulations. The Bank of Thailand has kept up the cooperation with relevant agencies in order to solve these aforementioned problems as some progress has been made in many areas.

The Fiscal Policy Office (FPO) under the Ministry of Finance is mainly responsible for the tax issues, in coordination with the Revenue Department. Meanwhile, the Board of Investment (BOI) has officially launched the Thailand Overseas Investment Center (TOI), which will serve as

an investment clinic and offer information services. Country experts rotating at TOI will also be available for providing in-depth information and investment consulting. As for funding issues, however, small and medium enterprises (SMEs) in particular still have difficulty in accessing financial services provided by financial institutions or raising long-term funds through Thailand's capital market. Then, to promote the SMEs, higher level of cooperation and integration among agencies involved like the Ministry of Finance and EXIM Bank is necessary. Moreover, the Bank of Thailand will further relax its foreign exchange regulations in late 2012 to 2013, to facilitate investors to invest overseas with more flexibility.

#### 9.3 Foreign Currency Transactions

#### 9.3.1 Foreign Currency Transactions for Trade Purposes

In 2012, total export value stood at 230,637.2 million US dollars, expanding by 3.6 percent from the previous year. The export proceeds totaled 226,117.6 million US dollars, an increase of 3.0 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 98.0 percent of the total export value, the difference of which resulted from netting transactions and exported goods that are exempted from acquiring foreign currencies.

As for imports, total value stood at 247,770.9 million US dollars, expanding by 8.3 percent from the previous year. The import proceeds totaled 238,375.4 million US dollars, an increase of 10.5 percent from the previous year. The proceeds were either in Baht to NRBA or in foreign currencies which were either withdrawn from the foreign currency accounts or bought in foreign currency. The proceeds were also foreign currency loans from authorized financial institutions for payment of obligations to NR. Total import proceeds accounted for 96.2 percent of the total import value, the difference of which resulted from netting transactions.

	Unit :	Unit : Millions US dollars		
Values	2011	2012 <sup>e/</sup>		
Exports <sup>1/</sup>	222,575.7	230,637.2		
Change (percent)	14.0	3.6		
Imports <sup>1/</sup>	228,786.6	247,770.9		
Change (percent)	25.1	8.3		
Foreign currency received from exports	219,443.7	226,117.6		
Change (percent)	19.1	3.0		
Foreign currency paid to imports	213,272.7	238,375.4		
Change (percent)	22.1	10.5		

#### Export Value vs Receipt of Export Proceeds

Note :  $\underline{e}$  / Estimate

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

#### 9.3.2 Volume of Foreign Exchange Transactions

In 2012, the purchase and sale of foreign currencies from customers amounted to 635,652.7 and 649,797.7 million US dollars, growing by 7.5 and 10.2 percent from the previous year, respectively. Total sale volume exceeded purchase volume by 14,145.0 million US dollars, with sale for foreign trade at 38,854.9 million US dollars and purchase for others at 24,709.9 million US dollars.

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

		Un	Unit : Millions US dollars		
	2011	2012 <sup>e/</sup>	% Change		
Purchase	591,514.5	635,652.7	7.5		
Export	144,736.1	144,189.4	(0.4)		
Other	446,778.4	491,463.3	10.0		
Sale	589,584.1	649,797.7	10.2		
Import	167,050.8	183,044.3	9.6		
Other	422,533.3	466,753.4	10.5		
Net Purchase and (Sale)	1,930.4	(14,145.0)	_		
Foreign Trade	(22,314.7)	(38,854.9)	-		
Other	24,245.1	24,709.9	-		

Source : Based on Data Set received from authorized financial institutions

Note :  $\underline{e}$  / Estimate

#### 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 2012<sup>e/</sup>

Туре	Change from		Licenses Vol		/Remittance Sale/Remi lume Volun		
	100.	Previous Year	Returned to BOT	Million US Dollar	%	Million US Dollar	%
Authorized Money Changer	1,262	237	32	1,769.48	(17.67)	1,769.81	(17.60)
Money Transfer Agency	1,290	17	3	182	(3.68)	36.14	7.08

Note : % represents the percentage change from the same period of the previous year

e/ Estimate

#### 9.5 Bank of Thailand's Financial Assistance to Emergency Program in 2011

The emergency act to relief those affected by the late 2011 flood has authorized the BOT to launch a special 300,000 million baht low-interest credit scheme (soft loan) for flood-affected SMEs and individual flood victims. The Act empowered the BOT onetime credit extension worth 210,000 million baht together with not less than 90000 million baht from financial institutions.

The total loan outstanding as of end 2012 stood at 203,055 million baht covering 541,900 victims in all provinces especially those who are retail customers of financial institution that truly need assistance and in the spirit of the law.

#### 10. Oversight under Related Laws

#### 10.1 Oversight on Electronic Money (e-Money) Service Providers

The BOT oversees non-bank e-Money service providers that have been granted license under the Ministerial Notification of Ministry of Finance: Business for which Permissions must be obtained. The notification was issued according to Section 5 of the Notification of the Revolution Council No.58 (Business of Electronic Money Card) dated October 4, 2004. In 2012, there were eight non-bank e-Money service providers. No new license application was received during the year.

In 2012, the BOT coordinated with relevant agencies, including the Fiscal Policy Office (FPO) in revising regulations on the undertaking of e-Money service businesses to reflect changes in business environment and requirements by other laws. The revised notification is currently in the process of drafting and will be submitted to the Ministry of Finance for consideration and approval.

#### 10.2 Oversight on Electronic Payment Service Providers

According to the Royal Decree Regulating on Electronic Payment Service Business, B.E. 2551 (2008) issued under the Electronic Transaction Act, B.E. 2544 (2001), the BOT is empowered to oversee electronic payment service providers, which are categorized into three 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 2012, the BOT's main oversight activities can be summarized as follows:

- Considering license applications submitted by applicants wishing to become service providers under List C and submitting recommendations to the Electronic Transactions Commission (ETC) for approval. In 2012, ten service providers were granted with a total of twelve licenses. At the end of 2012, there were seven service providers registered in List B and 82 service providers licensed in List C (31 commercial banks and 51 non-banks) with a total of 124 licenses. There was no service provider under List A.
- 2) Monitoring and overseeing all electronic payment service providers to ensure their legal compliance with the Royal Decree and related Notifications, and regularly submitted oversight reports to the ETC. In 2012, the BOT, as assigned by the ETC, recommended a guideline for calculating administrative penalties and the composition of the administrative penalty subcommittee that will be used in the administrative penalty process for the electronic payment service providers who fail to comply with such regulations.
- 3) Revising regulations on requirements, procedures, and conditions for undertaking electronic payment service businesses to reflect changes in economic environment and business models. The BOT has proposed principles on the revision to the Subcommittee on Legal Policy and the Subcommittee on Oversight of Electronic Transactions Service Providers under the ETC. The BOT is currently drafting relevant notifications and will conduct public hearings before proposing the revised regulations to the ETC for consideration and approval.
- 4) Drafting the Royal Decree under the Electronic Transaction Act, B.E. 2544 (2001) to oversee electronic payment services of the specialized financial institutions, as assigned by the ETC. The BOT has coordinated with the FPO in drafting the law and will propose the draft Royal Decree to the ETC for consideration and approval.

## 11. Other Important Activities

#### 11.1 Research Works and Organization of Research Meetings

The Bank of Thailand (BOT) places important emphasis on producing research works, supporting research projects, and organizing research scholar meetings, which serve 4 main purposes as follows:

- 1) Build the knowledge base in support of the BOT's policy implementation and her role as an economic consultant to the government.
- Underline the BOT's status as the country's leader in academic research as well as the BOT's policy credibility.
- Strengthen working relationship and harmonize understanding vis-a-vis academic counterparts and network of leading academics.
- 4) Leverage intellectual alliance vis-à-vis academic counterparts to better accumulate and promulgate the body of knowledge.

Details of events and activities organized to serve abovementioned objectives are as follows:

- 1) Building the knowledge base : in 2012, the BOT produced the following researches;
  - 1.1) Research work titled "Inflation Dynamics and Monetary Policy" found that inflation dynamics in Thailand were mainly driven by inflation expectation and demand pressure from the output gap, both of which could be anchored and curbed by monetary policy.
  - 1.2) Research work titled "Thailand's Short-term External Debt Assessment" found that the recent increase in Thailand's short-term external debt was mainly attributable to import trade credit and inter-company borrowings by foreign bank branches to provide FX swaps to domestic banks in need of USD to square off FX exposures created by increased forward selling by Thai exporters and Thai investors investing abroad. As such, their risks were limited.
  - 1.3) Research work titled "Thailand's Wage Setting Behavior" found that: 1) Business did not adjust prices and wages frequently 2) The real wage and labor cost rigidity was not high.
    3) Most companies adjusted wage based on operating results and the minimum wage. Only a third of companies adjusted wages based on inflation and cost of living. 4) The minimum wage had a fairly high impact on general wages; but the minimum wage adjustment was based on historical inflation data. 5) When businesses encountered problems, most of them sought to reduce cost and improve manufacturing productivity. There were only some firms that sought to increase goods prices, especially labor-intensive ones.
  - 1.4) Research work titled "Proposal of New Hybrid PD Estimation Model for the Low Default Portfolios (LDPs), Empirical Comparisons and Policy Implications" proposed the new group of hybrid models to be used for the probability of default estimation on low default portfolios.
  - 1.5) Research work titled "Challenges on the Validation of PD Models for Low Default Portfolios (LDPs) and Regulatory Policy Implications", the first of its kind to compare the probability of default estimates for low default portfolios from various methods, found that different models gave substantially different results. This research outlined strength and weakness of each model and suggested an approach which can be employed to prevent a possible under-estimation of credit risk.

#### 2) Underline the BOT's research status

2.1) The BOT Annual Symposium, presented under the theme "Central Banking Amidst Global Changes", September 24-25, 2012, presented 5 academic papers dealing with 5 key principles of central banking. Three conclusions drawn from the symposium are as follows:

- (1) Monetary, financial institutions and exchange rate policies, and their effects on the BOT's balance sheet. The BOT has done reasonably well in implementing these policies. Promoting financial development should be another goal. The balance sheet loss has not yet had an implication on implementation of these policies. Nevertheless, the BOT should communicate with the public and ensure that the effects of the balance sheet loss will be limited.
- (2) The public's expectation of the BOT's roles. The BOT should play an important role in monitoring and mitigating economic problems, maintaining price stability, as well as supervising financial institutions. The BOT is also expected to have a role in protecting, informing as well as educating consumers of financial products and services, and pursue greater communication and coordination with other economic organizations.
- (3) Future Challenges. Given increasing volatility of capital flows following the implementation of the latest Quantitative Easing (QE3) as well as an upward trend of the public debt due to populist policies, especially those implemented by the Specialized Financial Institutions (SFIs), the BOT should monitor these risks closely and make the public aware of these future challenges.
- 2.2) To highlight the special occasion of the 70<sup>th</sup> Anniversary of the Bank of Thailand, a series of Bank of Thailand Policy Forums were organized. This series of events were aimed at providing policy makers, academics and business community in Thailand with an opportunity to learn from the insights of prominent international financial leaders. A total of 3 Policy Forums were held in 2012 where each event was attended by approximately 50 invited participants.
  - (1) Ms. Christine Largarde, Managing Director of the International Monetary Fund (IMF), delivered the speech "New Perspectives on Asia's Role in the Global Economy" on July 12, 2012. Ms. Largarde praised Asia's economic resilience and adaptability to the recent global economic crisis and stressed the importance of its regional cooperation which can help provide a better understanding of how to sustain economic growth and to guard against "spillovers" from one country's policies to others.
  - (2) Dr. Wolfgang Schauble, Federal Minister of Finance of the Federal Republic of Germany, delivered the speech "Asia and Europe - What we can learn from each other : Towards an economic policy model for the future" on October 15, 2012 and shared his experiences in resolving the European debt crisis.
  - (3) Dr. Glenn Stevens, Governor of the Reserve Bank of Australia, delivered the speech "Challenges for Central Banking" on December 12, 2012. Dr. Stevens pointed out challenges for central banks; monetary policy and financial stability, the limits of central banking and challenges with international spillovers. Policy coordination becomes a necessity given the international connectivity of the global economy.

- 2.3) The publication of short research articles under the series "Focused and Quick (FAQ)" presenting timely and topical policy issues and recommendations. A total of 16 articles were produced in 2012. Topics ranged from real economic sector to financial sector issues as well as policy evaluation, e.g. future challenges for central banks, central bank balance sheet, costs and benefits of holding international reserves, Thailand direct investment in CLMV, sovereign debt crises. These articles proved to be of great interest to the general public, as evidenced in the publication and references made in newspaper and academic publication.
- 2.4) The publication of short articles and commentaries in newsprints aimed at communicating and elucidating the public on topics of interest, e.g. in the column "Jang See Bia" (Bangkok Biz News), such titles as "Inflation", "Current Account and Monetary Policy", "Facts about Liquidity and Interest Rates", "Chinese Economy", etc.

#### 3) Strengthen alliance with the academic circles

- 3.1) Organized the 4<sup>th</sup> Young Economists' Meeting as a platform for knowledge exchanges amongst new generations of economists. The 2012 event, which took place on November 9-11 in Chiang Rai, was organized under the theme "Thailand Resiliency amidst Global Economic Turmoil".
- 3.2) Organized a total of 4 Economic Seminars as forums for presenting research findings of interest by researchers from within as well as outside the BOT, hence good opportunities to exchange knowledge and discuss research techniques.

#### 4) Leverage the academic network/alliance

- 4.1) Organized the 4<sup>th</sup> BOT Research Workshop, a forum for researchers from the academic, public and private sectors to present and exchange knowledge. The 2012 event, which took place in Chonburi on June 15-16, addressed the issue of "Monetary and Fiscal Policy for Sustainable Growth" through 6 background research papers and involved 50 participants. This forum gave the BOT an opportunity to take in feedbacks directly from the public, particularly their views on the BOT's and government policy conduct.
- 4.2) Organized a total of 3 Economists' Parties, forums for 15-20 BOT and leading Thai economists to exchange views on directions of the economy and related policies.

#### 11.2 The Bank of Thailand's Participation in International Organizations and International Fora

In 2012, international fora's main discussion still focused on the global financial crisis resolution and challenges to central banks' policy implementation. This related to central banks' role in maintaining stability, as well as developing the mechanism under various international cooperations for surveillance and crisis prevention. The International Monetary Fund (IMF) has made a progress on building up resources in order to stand ready to meet the members' need for financial support. ASEAN+3 has made a progress on enhancing the effectiveness of its crisis prevention mechanism. On a bilateral front, the Bank of Thailand (BOT) has agreed with other central banks to increase alternative instruments for stability purposes. Moreover, the BOT, in cooperation with the IMF, has established a technical assistance office in Thailand which will provide technical assistance to the Lao P.D.R. and the Republic of the Union of Myanmar.

#### 1) Association of South East Asian Nations : ASEAN

In 2012, the ASEAN meetings focused on the progress of continuing regional financial liberalization as well as reducing impediments to economic integration in view of the establishment of the ASEAN Economic Community (AEC) by the end of 2015. However, the ASEAN Financial Integration would take place later in 2020 given the greater sensitivities and differences among member countries' financial system and regulations.

Under the cooperation framework of ASEAN central banks, the BOT Governor participated in the ASEAN Central Bank Governors' Meeting (ACGM) held in Phnom Penh, Cambodia. The meeting discussed further progress on the implementation of the financial integration overseen by the working committees as follows:

- On capital account liberalization, the Working Committee on Capital Account Liberalization was co-chaired by the BOT and the Bangko Sentral ng Pilipinas. Member countries have developed their capital account liberalization heat map and individual milestones blueprints. Thailand's blueprint is in line with the BOT's Capital Account Liberalization Master Plan which aims to relax rules and regulations on outward portfolio investments. This would not only increase flexibility and give greater options to diversifying risks for Thai investments abroad, but also provide alternative sources of funds to facilitate economic integration under the AEC.

- On financial services liberalization, there has been notable progress made on deliberations on the structure and criteria of Qualified ASEAN Banks (QABs). ASEAN banks that fulfilled the requirements would be allowed to operate in other ASEAN countries with aims to support businesses in expansion of trade and investment within ASEAN.

- On capital market development, ASEAN Link project was launched. The project would connect seven stock exchanges in six ASEAN countries<sup>6</sup> with the aim to enhance competitiveness and attract global investment to the region by allowing investors to trade securities in ASEAN stock markets via the ASEAN trading link system. To date, the link between the stock markets of Singapore, Malaysia and Thailand have been established.

- On payment and settlement systems, the Working Committee of Payments and Settlement Systems was co-chaired by the BOT and Bank Indonesia. This year's work centered on various areas of ASEAN payment system such as the development of retail payment systems, and improvement of foreign workers' remittance channels.

- On the capacity building of member countries, the Steering Committee for Capacity Building (SCCB), co-chaired by the Asian Development Bank (ADB) and the South East Asian Central Banks (SEACEN), was established to provide assistance to match the learning needs of ASEAN members, particularly CLMV countries<sup>7</sup>.

#### 2) ASEAN+3

In 2012, the ASEAN+3 Finance Ministers and Central Bank Governors' Meeting (AFMGM+3) reached an agreement to strengthen Chiang Mai Initiative Multilateralization (CMIM)<sup>8</sup> to cope with the uncertainty surrounding the international financial market. This includes 1) doubling the total size of the CMIM from USD 120 billion to USD 240 billion; 2) increasing the IMF de-linked portion from 20 percent to 30 percent; 3) lengthening the maturity and supporting period of the facility; and 4) introducing a crisis prevention facility called "CMIM Precautionary Line (CMIM-PL)".

In this regard, the AFMGM+3 agreed to enhance the organization capacity of the ASEAN+3 Macroeconomic and Research office (AMRO), an independent surveillance unit established under the CMIM agreement, in order to support the crisis prevention facility of the CMIM. In addition, the ASEAN+3 countries are in the process of institutionalizing AMRO as an international organization.

<sup>&</sup>lt;sup>6</sup> Vietnam has 2 stock exchange markets.

<sup>&</sup>lt;sup>7</sup> CLMV countries are Cambodia, Laos, Myanmar and Vietnam.

<sup>&</sup>lt;sup>8</sup> CMIM is a mechanism to provide financial support to its member countries facing temporary balance of payments or liquidity problems. The current size is USD 120 billion, of which USD 4.552 billion is contributed by Thailand. In the case of short-term liquidity problems or balance of payments difficulties, Thailand would be allowed to request assistance for US dollar liquidity up to 2.5 times of its contribution or USD 11.38 billion.

On the development of regional bond markets, ASEAN+3 countries adopted the New Roadmap+ under the Asian Bond Markets Initiative (ABMI). The projects under the New Roadmap+ are (1) to promote local currency-denominated (LCY) bond issuance through the operations of the Credit Guarantee and Investment Facility, which has been in operation since the beginning of 2012; (2) to foster an investment-friendly environment for the LCY bond markets; (3) to encourage greater private sector's engagement to share their views about the harmonization of regulatory standards in the region; and (4) to develop bond market infrastructure of member countries including establishment of the regional settlement intermediary and to strengthen the foundation for a regional credit rating system.

#### 3) Bank for International Settlements (BIS)

The Bank for International Settlements' bimonthly meetings provide a focal venue for central bank governors from both advanced and emerging market economies to regularly discuss and outline problems in conducting monetary policy including unconventional measures. This helps ensure timely response against risks to stability of macroeconomic and financial systems.

In 2012, thematic discussions revolved around the challenges faced by central banks in their mission to reinforce economic and financial stability amidst volatile global conditions. At the same time, central banks need to foster the development of financial infrastructure in accordance with new regulatory reforms which would become effective in the near future. Given such challenges, central banks may need to adopt macro prudential policy, in order to mitigate unwarranted risks from accommodative policies of advanced economies that may affect both economic and financial stability as well as central banks' balance sheets stature.

#### 4) The Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)<sup>9</sup>

The EMEAP is a forum for East Asia-Pacific central banks to exchange views and information regarding current economic and financial developments of member countries. It is also a forum to discuss topical issues that are of particular interest and concerns, and raise collective voice to international regulatory bodies in a timely manner where necessary.

In 2012, EMEAP meetings continued to focus on the development of the Crisis Management and Resolution Framework (CMRF) as well as formulation of tools and measures to cope with the impact of global uncertainties arising from accommodative monetary policies of the advanced economies and new regulatory reforms such as Basel III. The working process of EMEAP is currently divided into 4 working groups, responsible for 1) Monetary and Financial Stability 2) Banking Supervision 3) Financial Markets 4) Payment and Settlement Systems. Key progresses made this year are summarized as follows:

<sup>9</sup> EMEAP comprises the central banks and monetary authorities of eleven economies: Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, The Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore, and Bank of Thailand. - On the macro-surveillance front, the Monetary and Financial Stability Committee (MFSC) have made material progress to enhance the CMRF through 1) regular preparation of the Macro Monitoring Report (MMR) as a basis for discussions and analysis, 2) development of event-driven triggers and threshold conditions for different crisis scenarios, and 3) revision of the "Terms of Reference for Protocols and Procedures for Cross-border communication" to ensure flexibility and appropriateness in its use. In this accord, a simulation exercise will take place in early 2013 to test the efficiency of the proposed information escalation process under the CMRF. Furthermore, the Working Group on Financial Markets (WGFM) has developed Financial Market Stress Indicators to supplement members' risk-monitoring process.

- As for the supervision of financial institutions, EMEAP have collectively sent joint letters to regulatory bodies such as the Financial Stability Board (FSB) and the Commodity and Futures Trading Commission (CFTC) addressing the unintended consequences of new regulatory measures that could affect domestic financial systems and financial markets as well as investment decisions in the region. On financial market developments, the WGFM is currently assessing ways to further expand the use of the Asian Bond Fund (ABF) to deepen regional bond markets as an alternative financing channel to bank-loans.

Moreover, EMEAP also aimed at developing regional payments and settlement systems to meet international standards. In this regard, the developments of Central Counterparty (CCP) and Trade Repository (TR) were under way along with the Asian Payment Network (APN) project to connect the payment and settlement system within the region.

#### 5) International Monetary Fund (IMF)

In 2012, the BOT, in collaboration with the IMF, had played pivotal roles in the international arena, within both bilateral and multilateral frameworks. Regarding the bilateral cooperation, the BOT and the IMF jointly established the International Monetary Fund's Thailand Technical Assistance Office for the Lao P.D.R. and the Republic of the Union of Myanmar. The objective of the Office is to provide technical assistance and capacity building in conducting macroeconomic policies for the sub-region, particularly for the Lao P.D.R. and the Republic of the Union of Myanmar which have been undergoing macroeconomic and financial reforms.

Under the multilateral framework, the BOT, together with other members of the IMF, consented to the transfer of its allocated portion of the windfall gold sales profits<sup>10</sup> to the Poverty Reduction and Growth Trust (PRGT). This was a part of the international effort to finance the PRGT to become self-sustaining and able to sufficiently support Low-Income Countries (LICs), going forward.

Furthermore, given the changing global economic and financial landscape, the IMF had improved its operations throughout 2012, in order to enhance its effectiveness in maintaining the stability of the international monetary system. This is summarized as follows:

- Global Surveillance : The IMF Executive Board adopted a new legal framework, the Integrated Surveillance Decision (ISD), which integrates bilateral surveillance and multilateral surveillance in order to monitor and oversee economic and financial conditions of its 188 member countries. The ISD emphasizes on spillovers from members' economic and financial policies onto the others and the global economy. In addition to the modernized legal framework, the IMF also upgraded and released its new multilateral surveillance products such as the Pilot External Stability Report, which presented analyses of external stability and imbalance of the 28 world's largest economies.

- Adequacy of Fund Resources : The IMF had made an attempt to increase its lending capacity through bilateral borrowings from member countries to meet potential demand from its members affected by the current global financial crisis, including other crisis bystanders. The resources obtained from the bilateral borrowing initiative would complement the quota resource and New Arrangements to Borrow (NAB). As of June 2012, the amount of pledged resources totaled USD 456 billion. Thailand also committed to contribute USD 1 billion to the scheme. Moreover, the IMF had reviewed and streamlined its concessional lending mechanism to ensure all the Fund's facilities still meet LICs' needs and country specifics, including helping them weather repercussions of the recent global financial crisis.

- Enhancing Governance : The IMF was in a process of implementing its 14<sup>th</sup> Quota Review and Governance Reforms Package approved in 2010. Once the package becomes effective, it would result in, (1) doubling the Fund's quota resource from currently SDR 238.4 billion to SDR 476.8 billion and 6 percent of quota shares to be shifted to dynamic emerging markets and under-represented countries, (2) increasing another position of the Alternate Executive Director (AED) for a voting group having an Executive Director who represents 7 member countries or more, (3) amending the Fund's Articles of Agreement resulting in all elected 24 Executive Directors.

<sup>10</sup> The IMF obtained the windfall gold sales profits of SDR 2.45 billion and it sought the members' consent to contribute SDR 0.7 billion to support the Poverty Reduction and Growth Trust (PRGT), of which the contribution from Thailand was accounted for SDR 4.2 million.

# 6) South East Asian Central Banks Research and Training Centre (SEACEN)

SEACEN has successfully implemented its strategic initiatives in accordance to the Three-Year Strategic Business Plan (SBP) which aims to promote SEACEN to become the regional learning hub for central banks in the Asia-Pacific region, as well as, to foster network collaboration among central banks in the region. Mr. Hoo-kyu Rhu has officially assumed the position of the 7<sup>th</sup> SEACEN Executive Director, succeeding Dr. A.G. Karunasena, effective from July 1, 2012.

SEACEN jointly organized the 2<sup>nd</sup> SEACEN-CEMLA (Center of Latin American Monetary Studies) Conference on "The Role of Central Banks in Macroeconomic and Financial Stability : The Challenges in an Uncertain and Volatile World" in Uruguay in order to promote a stronger cross-regional collaboration among central banks in Asia and Latin America.

SEACEN has welcomed Bank of the Lao P.D.R. to become its 18<sup>th</sup> official member, effective from February 14, 2012, as well as the Reserve Bank of India (RBI) to become its 19<sup>th</sup> member, effective from January 1, 2013. This is to reinforce the capacity of SEACEN in becoming the learning hub and foster network collaboration among central banking group in the region.

# 7) Other Bilateral Cooperations

- 7.1) Twining Arrangements between the BOT and the Bangladesh Bank (BB) on technical collaboration On May 18, 2012, the BOT signed Memorandum of Understanding (MOU) on Twinning Arrangements with the BB. This agreement aims to establish a mutual cooperation on technical exchange and expertise sharing pertaining to both central banks' operations. The cross disciplinary nature of this collaboration will see to the organizations' efficiency and also reflects the commitment to enhance relationship between the two authorities.
- 7.2) The exchange of banking supervision information with the National Bank of Cambodia On August 25, 2012, the BOT and the National Bank of Cambodia (NBC) signed a MOU on the Exchange of Banking Supervision Information. The MOU provides a formal basis for banking supervisory cooperation between the BOT and the NBC in areas of information sharing and communication during the licensing process as well as ongoing supervision of banks operating under their respective supervisory responsibility.

# 7.3) The BOT supports the capacity building for the Central Bank of Myanmar (CBM)

On June 19, 2012, the BOT signed a MOU with the CBM on the technical collaboration. This MOU formalizes the exchanges of knowledge and technical know-how in the area of central bank functions which supports capacity building for CBM staffs. Priority is given to critical areas such as monetary policy formulation, financial institution supervision, and payment and settlement system. Modes of cooperation can be in forms of a bilateral agreement between BOT and CBM or a multilateral agreement that involves both domestic and international organizations. This partnership will help move forward Myanmar's economic transformation and strengthen the ties between Thailand and Myanmar.

# 7.4) Collaboration between the BOT and Bank Negara Malaysia to enter into a Cross-border Collateral Arrangement

On February 2, 2012, the BOT and Bank Negara Malaysia (BNM) jointly announced the signing of a MOU to establish a cross-border collateral arrangement in order to facilitate a reciprocal operational arrangement aimed at enhancing liquidity facilities to financial institutions in both countries.

Under this arrangement, eligible financial institutions operating in Malaysia may obtain Malaysian ringgit (MYR) liquidity from BNM by pledging Thai baht (THB) or Thai government and central bank debt securities with BNM. Eligible financial institutions operating in Thailand may obtain THB liquidity from the BOT under similar process.

# 7.5) Collaboration between the BOT and the Monetary Authority of Singapore to enter into a Cross-border Collateral Arrangement

On June 23, 2012, the BOT and the Monetary Authority of Singapore (MAS) jointly announced the signing of a MOU to establish a reciprocal cross-border collateral arrangement to enhance liquidity facilities to financial institutions in both countries.

Under this arrangement, eligible financial institutions operating in Singapore may obtain Singapore dollar (SGD) liquidity from MAS by pledging Thai baht (THB) or Thai government and central bank debt securities with MAS. Eligible financial institutions operating in Thailand may obtain THB liquidity from BOT under similar process.

# 11.3 Information System Activities

#### 11.3.1 Information Technology

In 2012, BOT has enhanced IT governance by restructuring Computer Steering Sub-Committee and also improving program management process resulting in more strategically and efficiently aligned projects.

There were 52 IT-related projects organized in 7 programs last year. Each program has been supervised and guided by a Computer Steering Sub-Committee. The budget for all projects is approximately 282 million baht. Below is a brief summary of each program.

#### Program 1 : Financial Market Excellence

- Important projects in this program which are completed and have gone live in July 2012 are "Portfolio Monitoring and Performance Attribution (PMPA)", "Dealing Room System Upgrade (DRS)" and "Foreign Exchange and Capital Flow Monitoring System (FCM)". PMPA project aims to improve capability of reserve management. The system helps BOT's executives and fund managers to monitor investment positions and risks and can also be used to set investment mandate and attribute the performance of individuals based on excess return.
- The DRS upgrades a 10-year-old system to a more recent version for supporting new financial instruments like Interest Rate Swap, Options, Cross Currency Swap, Indexed Bilateral Repo, among others.
- FCM project aims to monitor Foreign Exchange and capital flow. The system supports policy formulation processes on issues such as the exchange rate and hot money that can have great impact on financial market stability.

#### Program 2 : Financial Institutions Excellence

- Significant projects in this program consist of "Financial Institutions General Information System" which focuses on creating the information system to service financial institutions regulated and supervised by BOT. The system is on testing phase and will be operational in May 2013.
- "Financial Institutions Inquiry Management" is another important system, providing summary for questions and answers between BOT and financial institutions which is being used as an internal common reference. The system is scheduled to operate in January, 2013.

# Program 3 : Payment Excellence

- The most significant project in this program is the Imaged Cheque Clearing and Archive System (ICAS) which aims to develop a country-wide one-day cheque clearing system. ICAS has successfully gone live in Bangkok Metropolitan Region on February 3, 2012 and has been extended to Suphan Buri Province on November 15, 2012. It will be extended to Rayong and Khon Kaen Provinces during February-March 2013 and cover all areas in the country by the end of 2013.
- The Bank of Thailand-Electronic Financial Services (BOT-EFS) project is aimed to improve financial infrastructure especially the integration of settlement services, and the efficiency and security of the system. The system is also adequately designed to support International Settlement in the future. BOT-EFS is currently testing the current account system, settlement services, authentication services, and e-Bidding. The system is scheduled to go live in May 2013.

 The Debt Instruments System project is enhancing BOT's scrip-based bond system to integrate primary market information from financial institutions in a straight-through fashion. Several functions have been completed in 2012, for example, tax certificate, scripless bond issued system, bond capital and interest payment via Bulk Payment. Other functions will be completed in 2013 which will improve efficiency and convenience for bond holders.

#### Program 4 : Monetary Data & Statistics Excellence

Important projects in this program are the Thailand Financial Instrument Information Center (TFIIC) project and the Data Management System Enhancement (DMSE) project. TFIIC is the cooperation of five agencies (BOT, the Securities and Exchange Commission-SEC, Public Debt Management Office-PDMO, the Stock Exchange of Thailand-SET and the Thai Bond Market Association-TBMA) to develop a database system for financial instrument registry and transactions and an information sharing channel for investors and market participants. A pilot system to share registry and transactional data among five agencies began in 2012 and will be open to public in 2013.

The DMSE project is enhanced to acquire and analyze more data from financial institutions in compliance with BIS Framework such as Foreign Exchange and derivatives turnover, Interest Rate Derivative Turnover. The system is currently under testing. The DMSE also upgraded its International Standard Industrial Classification of All Economic Activities (ISIC) to Rev.4 in order to promote financial service access of SMEs. The ISIC Rev.4 is partially launched and will fully deploy in March 2013.

#### Program 5 : HR & Organization Development Excellence

HR projects completed in 2012 are Employee Self Service Online (ESSO) and Employee Recruiting System. The ESSO brings all employee information and services into one single portal. The system provides convenient ways to view and edit employee data and related services such as medical service, personal loan and other employee benefits.

Employee Recruiting System is an enhancement to recruit potential employees through BOT WebSite channel. The Manpower Planning and Recruitment project utilizes a business warehouse to improve capability for analyzing HR data. Employee Time Tracking System involves changes in replacing existing time recording devices with standard building access control units.

#### Program 6 : Planning & Budgeting Excellence

Treasury Accounting System (TAS) Enhancement improves an existing system to record new financial market and reserve management transactions. Employee Reimbursement Enhancement system has been updated to support BOT's employee expense reimbursement process for new benefits provided by BOT.

E-Planning and Budgeting Enhancement provides enhancements for BOT's annual planning and budgeting system which include coverage of during-the-year and overlapped budgets. The system is planned to go live in 2013.

#### Program 7 : IT Infrastructure Excellence

A highlighted project in this program is the IT Infrastructure Enhancement project. Based on objectives to strengthen BOT's IT infrastructure for supporting both normal and disaster recovery scenarios; and perform data center upgrades to increase overall efficiency and create a more robust environment. The project covers intrusion prevention system implementation for enhancing network security between BOT's computer system connecting to external networks, complying with industry standards. BOT's network system enhancement also addresses the wider range of connectivity between buildings at headquarter, regional and banknote offices, including the enhanced BOT-WiFi wireless access coverage. In addition, usage of system and database monitoring enable proactive monitoring and notifications for BOT's critical systems. Expansion of IP phone technology across the BOT provides the support for all remaining analog phones replacement for all employees.

BOT has also conducted a study, planning, and assessment with leading consultants and experts for IT infrastructure upgrades, especially for Storage Virtualization with preparation for future growth and better management efficiency in order to reduce recovery time and to provide critical infrastructure for future enhancement, and also creating a plan to build a new data center (DC3) as a disaster recovery site to align with the current financial BCP improvement plan.

When smart devices with robust capabilities and convenient form factors become ubiquitous, employees have more demands to access to BOT applications anywhere and anytime. With the objectives to boost overall organizational productivity in a secure manner, BOT experimentally conducted a pilot usage of tablets amongst high-level executives and found positive feedbacks. Therefore in 2012, a scalable, highly secure mobile solution platform, policies and processes have been outlined and prepared to manage mobile devices and ensure high-level of security. The BYOD@BOT (Bring Your Own Device at BOT) program has been successfully launched in January, 2013.

#### 11.3.2 Data Management

In 2012, 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. The data were complete and adequate to support the formulation of monetary and financial policies, and basic understanding about the statistics. Core actions implemented throughout the year are listed below:

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

- 1.1) External Sector Statistics : Improvements included implementation of the new Harmonized System 2012 for the compilation of international trade statistics and indices. Moreover, data compilation processes for external debt and International Investment Position were improved to obtain accurate and timely results, in line with the new international standards.
- 1.2) Statistics for Financial Stability Monitoring : Compilation of Financial Soundness Indicators was made to support the analysis of macroeconomic risk and the supervision of relating financial institutions. The indices were classified by institution types, institutions, and peer groups which were comparable to other country's indices. The country's financial account is being developed with the goal to improve the capability of financial stability monitoring.
- 1.3) Real Sector Statistics : The indices and indicators of real sector were enhanced to increase efficiency; for example retail sales index, production index, residential property price index, and the farm input price index. The indices are being modeled and tested, and are expected to be disseminated by 2013.
- 1.4) Government Financial Statistics : Improvements to data processing and data dissemination processes were in place to reduce work process and processing time, providing more timely and more accurate results. Example includes the development of the template for processing government expenditure data, which was also adopted by the Fiscal Policy Office. Furthermore, collaboration with other compiling agencies was encouraged to improve compilation of comprehensive Government Financial Statistics for the country.
- 1.5) Financial Markets Statistics : With the collaboration of several external agencies, securities database was consolidated and standardized. Additionally, the BOT participated in the Bank for International Settlements (BIS) Triennial Central Bank Survey, which is the survey of foreign exchange and derivatives market activities. Collaboration with commercial banks to provide the survey data is underway.

#### 2) Statistical collaboration with other agencies

- 2.1) Continual collaboration with 4 agencies; namely, the Securities Exchange Commission (SEC), the Public Debt Management Office (PDMO), the Stock Exchange of Thailand (SET) and the Thai Bond Market Association (ThaiBMA), in order to establish the Thailand Financial Instruments Information Center (TFIIC). Moreover, the BOT also coordinated with the registrars to collect data on holding of scrip securities; the data will subsequently be disseminated through the TFIIC's website. The TFIIC's website was launched for the BOT and 4 agencies to access data and pilot-test the system. The official launch for the public is scheduled for 2013.
- 2.2) Acting as a chairman and the secretary of the sub-committee for the Financial, Banking, and Insurance sector for 2012, following the Thailand Statistical Master Plan established under the National Statistical Office's Statistical Act B.E. 2550, to develop core sets of official statistics for the Financial, Banking, and Insurance sector. Moreover, close collaboration across sub-committees (e.g., sub-committees on the System of National Accounts, on Tourism, on Government Finance Statistics, and on Industrial Statistics) have also been strengthened. Participation in these sub-committees not only helped re-shaping the country's official statistics but also encouraged a better collaboration among agencies specifically the Customs Department and the Office of Insurance Commission for their compilation of the international trade in services statistics.
- 2.3) Collaboration with other agencies, such as the Fiscal Policy Office, the Office of the National Economic and Social Development Board, the Comptroller General's Department, and the Department of Business Development, to compile the country's financial account. Additionally, coordination with the Revenue Department was initiated to facilitate the compilation of the Foreign Affiliates Statistics (FATS).
- 2.4) Acting as the BOT's representative in the working group under the Indonesia-Malaysia-Thailand Growth Triangle for the establishment of the International Trade, Investment and Tourism Database (IMT-GT ITITD).
- 2.5) Acting as the BOT's representative and chairperson in the working groups, with ASEANstats and with other ASEAN members states on statistics-related issues; namely the Working Group on International Investment Statistics (WGIIS) and the Taskforce on Statistics of International Trade in Services (TFSITS).

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

- 3.1) Dissemination of an article on the implementation of the Harmonized System 2012, an up-to-date trade commodity classification, and the new classification for exports and imports of goods.
- 3.2) Dissemination of an article on the Foreign Affiliates Statistics (FATS).

# 4) Improvement of the in-house IT system in line with the database and statistical development

- 4.1) Improvement of financial databases and development of IT systems to support the compilation of Financial Soundness Indicators (FSIs).
- 4.2) Enhancement of the company information acquired by external sector surveys in order to visualize corporate relationships within a business group and to develop the external sector corporate balance sheet, enabling cross-system data linkages.
- 4.3) Enhancement of the Data Management System (DMS), particularly the data acquisition, data processing, and data dissemination. Achievements include the system supporting financial institution supervision, the system supporting BIS Triennial survey, the adoption of ISIC Rev 4.0, the Involved Party Application, and the reports for partner agencies disseminated through the Data Exchange System.

#### 5) Enhancement of the BOT data dissemination system (BOTdd)

To facilitate a better access to more complex data for analysis, the BOTdd was developed to support data usage and incorporated as a service channel for all levels of BOT staff. The appearance was renovated to align with the BOT branding and embedded the gaps's solutions based on the study of marketing and Information Supermarket concept. Prototype was developed, to finalize all requirements, prior to final development in 2013.

#### 6) Data Quality Management

In order to manage risks which may impact on BOT's creditability due to data quality issues and to enhance efficiency of the system of data management, many actions related to data quality management were adopted.

- 6.1) Developed a finer data quality framework adapting from the current framework implemented by renowned institutions, such as the IMF, Eurostat, and Australian Bureau of Statistics (ABS).
- 6.2) Produced documents specifying the data preparation, data compilation and data dissemination processes of Financial Institutions Statistics, Financial Statistics, Government Finance Statistics, and Involved Parties Information. Meanwhile, recommendations were provided to increase the efficiency of processes and to improve the quality of related data.

# 12. Bank of Thailand Regional Office

The Bank of Thailand Regional Office consists of (1) Northern Region Office (NRO); (2) Northeastern Region Office (NEO); and (3) Southern Region Office (SRO) The structure of the Bank of Thailand Regional Office is divided into (1) Regional Economy Division (2) Financial Consumer Protection Division (3) Regional Banking Services and Administration Division; and (4) Human Resources Team.

# 12.1 Northern Region Office (NRO)

The details of NRO performances in 2012 are as follows:

- 1) Regional Economy Responsibilities
  - 1.1) Analyzing and Monitoring Economic Conditions and Major Commodities of the Northern Region

Major responsibilities include studying, surveying, monitoring major economic sectors and developing relevant key economic indicators in order to assess the Northern region's economic conditions. This information is then integrated to the process of macroeconomic assessment for monetary policy monitoring and implementation as well as regional development planning. In the meantime, NRO is in charge of in-depth analysis of major commodities and economic sectors of the Northern region (Commodity Desk). Moreover, NRO officials exchange views with business owners as per our Economic/ Business Information Exchange Program or Business Liaison Program (BLP).

To gather first-hand information and be able to assess economic and business conditions as well as trends intensively, NRO organizes quarterly meetings with private entrepreneurs from various sectors and also timely meetings with heads of either government entities or private organizations within the region. NRO also organizes meetings between high level managements of the BOT, mostly in the Monetary Policy Group, and major regional entrepreneurs so as to gain first-hand information on the current economic conditions and their outlook, when applicable, are incorporated.

To fulfill the mission of capacity building to the locals, NRO regularly disseminates press releases and economic and monetary conditions of the Northern region via electronic media on a monthly basis and organizes quarterly press conferences. Furthermore, we also organize seminars on topical economic and financial issues, either as a host or a co-host with academic entities in the Northern region. From time to time, NRO officials participate in not only the provincial treasury office's meetings to provide comments and recommendations on the compilation of Gross Provincial Product (GPP) in the 17 provinces of the Northern region; but also meetings and seminars of both government's offices and local organizations. Our participation includes frequent presentations on economic and monetary aspects upon request.

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### 1.2) Analyzing and Monitoring Economic Conditions of Neighboring Countries

The NRO studies, monitors and analyses economic conditions of neighboring countries, particularly Myanmar and Southern China (Yunnan province), together with border trade and payment settlements, as well as follows up on the progress of the Greater Mekong Subregion Economic Cooperation (GMS) and the ASEAN Economic Community (AEC). Moreover, we also exchange views on economic and payment system with the central banks of the aforementioned countries. In order to enhance our good relationship with the Peoples' Bank of China (PBC), Yunnan province, we have arranged a staff visit to the Central bank.

#### 1.3) Facilitating the Payment System Development Strategy

In order to promote the cross-border payment between Thailand and Southern China or Myanmar to pave the way for local currencies usage in trade and investment with neighboring countries in the future, various activities were organized in 2012. The notably China-Thailand Bilateral Domestic Currency Settlement meeting with the PBC, Kunming sub-branch was arranged, aiming to establish a direct currency quotation of Thai Baht and China Renminbi – RMB. Currently, such quotation has been exercised in China's interbank market via China Foreign Exchange (CFETS). Related costs and risks in trade settlement between Thailand and China therefore decline. Also, as a part of the above meeting, business matching between Thai and Yunnan Commercial Banks were also arranged. These can be considered stepping stone to the development of payment system and local currencies exchanges. In order to facilitate transaction demand, practical procedures to transport banknotes of either baht or RMB and accommodative rules and regulations have been considered as well.

Furthermore, NRO representatives visited the Central Bank of Myanmar (CBM) twice, in March 26-29, 2012 and May 25, 2012 to attend the bilateral meeting between the Bank of Thailand and the CBM. In addition, on-site surveys on border trade and payment system between Thailand and Myanmar at Amphur Mae Sod, Tak province and Amphur Sangklaburi, Kanchanaburi province were conducted to gather information for economic assessment and payment system development.

#### 1.4) Developing New Monitoring Tools for the Northern Region Economy

The NRO has developed and introduced the BLP scoring, named BLP quantification, as a new tool to enhance an efficiency of the Northern region economy's monitoring and analysis. This scoring applies a quantitative method to analyze qualitative data by using weighted-average score computation of relevant key economic indicators to create line graphs. Moreover, the NRO has redesigned existing analytical model in response to the NESDB's new data calculation method of the Northern region's Gross Regional Product – GRP, namely Chain Volume Measure. The updated model should yield a better forecast.

#### 1.5) Studying Special Economic Issues

A special issue of in-depth analysis of "Rice Price Policies in Thailand: From Income distribution and Productivity perspectives" was published. Besides, 14 regional economy analyses were studied and published as well.

#### 2) Financial Consumer Protection Responsibilities

#### 2.1) Operating Financial Consumer Protection Activities

In 2012, the NRO gave advises to and received 2,206 cases of financial complaints within the Northern region. Among those cases, 2,142 cases were classified as uncomplicated and 64 cases were classified as complicated.

For the capacity building in the Northern region on Financial Literacy (FL), the NRO organized seminars and presentations to SMEs, community leaders, local people and students. Moreover, during the year 2012, the NRO in collaboration with internal and external partners conducted 66 seminars and presentation on financial literacy to local administrative officers, village leaders, headman, academics, SMEs, microfinance firms and others. Coupled with that, NRO officials conducted 119 presentations of mass media via 7 channels, namely radio, television, printed matter and other media. Two radio spots were also introduced. In addition, broadcasts of FL presentation via local and village radio channels in 5 major Northern provinces were implemented as a pilot project.

# 2.2) Monitoring Financial Sector

The NRO is responsible for examination of a licensed non-bank operation within the Northern region as well as supervision and examination of foreign exchange operation of authorized money changers and money transfer agencies. Furthermore, the NRO conducted several surveys to support the headquarters' policy reviews in order to promote not only more accommodative regulations for new non-bank licensing, but also more financial accessibilities of the SMEs. Those surveys are: non-bank operators within the Northern region; and the burden of inaccessibility to financial services and rejection to lending by financial institutions to the SMEs in 5 major provinces in the Northern region. Survey on speedy cash advertising leaflets of non-licensed operators in the Northern region was conducted as well.

#### 2.3) Foreign Exchange Control

- 2.3.1 As of December 2012, the NRO monitored 91 authorized money changers who operated foreign currencies exchange within the Northern region.
- 2.3.2 In the meantime, the NRO supervised 256 money transfer agencies within the region.

Besides, the NRO also organized several presentations, meetings and seminars in order to disseminate knowledge and promote better understanding of: 1) foreign banknote examination and 2) the rules and procedures that authorized money changers and money transfer agencies must comply.

#### 2.4) Monitoring Financial Health

The NRO is responsible for analyzing and monitoring the financial health of major commercial bank's debtors or any business groups that may have impact on the economic and financial conditions within the area of responsibility.

### 3) Banking Business Facilities

#### 3.1) Fund Deposit and Withdrawal Activities

In 2012, the NRO handled funds deposited to and withdrawn from current accounts at the Headquarters amounted to a total of 15,942.0 million baht and 15,812.5 million baht respectively, increasing from the previous year by 87.58 percent and 83.56 percent respectively due mainly to the redemption of matured bonds throughout the year.

#### 3.2) Bonds Registrar

In 2012, the total value of 13,824.44 million baht of government bonds held by 5,769 bondholders matured. NRO handled the redemption services of all the bonds for those bondholders. Also, during the year, 10,154 bondholders requested registry services, 167 of which amounting to 78.63 million baht were of Script Bond selling. At the year end, there were 26,448 bondholders with a total holding of 23,118.79 million baht registered at the Northern region.

#### 3.3) Check Clearing

In 2012, 3.08 million checks were processed, compared with 3.09 million checks processed last year through clearing system within the Northern region. However, the total values decreased slightly by 0.32 percent from the previous year, amounting to 692,193.07 million baht. In the meantime, only 0.38 percent of the total amount or 2,649.87 million baht were returned checks.

#### 3.4) Accounting

In 2012, NRO's budgetary disbursement was reported at 79.17 million baht and accounted for 84.66 percent of allocated budget amounting to 93.51 million baht.

#### 4) Others

Besides the aforementioned responsibilities, the NRO is responsible for networking with local alliances and communicating with the public in the Northern region to promote understanding of the BOT's roles, responsibilities and policies through various activities and media. Some examples included participating in important meetings, specifically meetings with local government executives, the public and private sectors. In the meantime, the NRO also arranged programs for visitors, provided library services and operated the BOT's coinage and textiles museum. In the last quarter of 2012, NRO organized the annual textile exhibition namely "Lanna Heritage: Monetary Treasure of the Kingdom" and published a related book called "Lanna Monetary Treasure".

### 12.2 Northeastern Region Office (NEO)

The major contributions of NEO in 2012 are as follows:

#### 1) Economic Research and Analysis

#### 1.1) Economic Analysis

1.1.1) On Economic Research and Analysis, the NEO conducts a number of studies, researches and analyses statistical, estimation, economic forecasting which are published in an annual NE Economic and Financial Report, portraying both supply and demand sides.

The NEO Economic forecasting relies on a number of key economic indicators and economic models that are regularly updated and refined then combined with information derived from a Business Liaison Program involving regular on-site visits to some 289 business operators per year in the NE Region to keep abreast with the latest micro economic development.

In addition, the NEO also regularly conducts meetings/conferences with other private and public organizations to exchange views and monitor changes in the underlying economic trends, parts of which are compiled into the Commodities Market Development Report with partials emphases on tapioca, sugar and cane, and alternative energy industries. This information together with other government's policies e.g. the rice and cassava pledging schemes, the increase in the minimum wage in the NE region, and the drought situation are then combined summarized and fed into the Bank of Thailand Head Quarters' Macroeconomics and Monetary Policy Meetings. The final policy meetings and decisions are thence released through various press conferences and through the BOT WebSite to the general public on a regular basis.

1.1.2) On neighboring countries' economic development, the NEO also monitors, studies, analyses and forecasts the macroeconomic conditions particularly of those belonging to Lao PDR, Cambodia and Vietnam. On trade and investment, in addition to the cross-border and general trading between Thailand and neighboring countries, the NEO also monitored and keeping track of the latest developments in the cross-border payment and settlement system as well.

In 2012, the NEO conducted 2 research studies on the topics (1) Ethanol: Opportunities and Challenges for Thailand's Renewable Energy (2) A Survey of financial access of the small and medium enterprises (SMEs) in the Northeast region, followed subsequently by a paper in Bimonthly Workshop jointly between the NEO and Khon Kaen University. The NEO also published 8 economic articles on topics of particular interests in a number of local newspapers, journal of commerce and BOT WebSite.

#### 1.3) Collaborations, Seminars and Meetings

- 1.3.1) On technical assistance to the neighboring countries, the NEO on behalf of the Bank of Thailand provided training courses and study visits to staff members of the Bank of Lao PDR (BOL) and National Bank of Cambodia (NBC) on key topics such as "Risk Base Approach; Basel II and Monetary Policy and Economic Stability" and "Risk Based Supervision, IT Supervision, Consolidated Supervision and Financial Analysis" per their requests on various occasions.
- 1.3.2) The NEO also organized Bilateral Meetings between delegations from the BOT and BOL hosted by BOT in 2012, and similarly for NBC. In addition, a follow-up meetings initiated by the Thailand-Laos Joint Committee was also arranged to promote cooperation and dialogue between the commercial banks of Laos PDR, and Thailand to exchange views and experiences in the business and discuss areas of cooperation and development of various banking facilities for businesses on both sides.
- 1.3.3) The NEO conducted a public seminar to discuss and promote the Khon Kaen green industrial estates establishment attended by regional leaders of both public and private sectors. Prior to the seminar, moreover, a team of economists also conducted a field visit into a number of successful industrial estates to obtain an on-site, first hand information on how to manage an industrial estate successfully.
- 1.3.4) On the occasion of the NEO's 44<sup>th</sup> anniversary, a special seminar was organized on the topic "Indochina in the context of an emerging Asia" with a keynote speech personally delivered by the BOT Governor on "Challenges ahead for dynamic Asia".
- 1.3.5) Another interesting developments, the NEO also organized two panel academic and practice discussions on (1) "Transportation and Logistics in Thailand, Laos, Vietnam, the way towards The AEC 2015" (2) "Inequality of wages in manufacturing industry of Thailand" combined with another paper on "The Loss incurred by economic policies on renewable energy pricing: the cases of diesel fuel (B0, B2, B3) and Biodiesel B5"
- 1.3.6) Jointed in the meetings and seminars with other public and organizations102 times, and lectured both inside and outside BOT's office 27 times.

### 2) Financial Consumer Protection

#### 2.1) Promoting Financial Literacy

The NEO undertook 43 trips to promote financial literacy to SMEs entrepreneurs and many other organizations in the NE Region, reaching approximately 12,300 people attending. Indirectly, the NEO also disseminated financial knowledge via mass media to reach the general public by incorporating financial knowledge into a total of 6 episodes of radio plays titled under a popular local radio program. This program aims specifically at rural people that are less knowledgeable of debts and financial trickeries all broadcasted through Radio Thailand, Khon Kaen province, covering all of the NE region. More conventionally, the NEO published 12 financial literacy articles through local newspapers, and instigated 2,274 financial crime warnings via the villages' own broadcast towers around Khon Kaen province.

#### 2.2) Resolving Customer Complaints against Financial Institutions

The NEO received 1,525 complaints and cases, relating to financial transactions where customers were seeking for redresses and NEO managed to resolve 1,495 cases almost immediately within the NEO, leaving only 30 cases to be referred to the Customer Complaint Centre in Bangkok.

#### 2.3) Public Relations on one of BOT's roles on Financial Customer Protection

The NEO conducted public relations sessions on the role of financial customer protection to the people in the NE region by giving 58 lectures and via public mass communications as well as 5 private disc jockeys/community radios. In addition, the NEO took an opportunity to introduced BOT Call Centre 1213 to some 1,500 people attending a Dharma ceremony and passed out call centre information along with 15,000 copies of a popular Dharma book (Luang Poo Fark Wai) with call centre number at back covers to those who were interested.

#### 2.4) Business and Financial Analysis and Foreign Exchange Monitoring

- 2.4.1) The NEO collaborated with the Onsite Examination Department 2, in the Supervision Group to examine a business office and branch of a commercial bank in the region. The NEO also coordinated with a number of Specialized Financial Institutions and the Non-bank Examination Department, Supervision Group, to conduct a survey on business operators' views regarding customers' personal loans as basic information for the reveal/amendment of personal loans under supervision criteria. Moreover, NEO conducted 2 surveys of financial access by micro business operators (Small Business : SME) in the region.
- 2.4.2) The NEO conducted analysis and reported on micro credit conditions with 2 surveys focusing on possible overheating and asset price bubbles in the property sector in the region.
- 2.4.3) The NEO gave 3 training/seminars on Non-bank Laws and Regulations to the Provincial Police Forces Sections 4, Internal Security Operations Command, Khon Kaen and Nakhon Ratchasima provinces as well as supported a training course on accounting record and computerized report for Local administration (e-LAAS).

2.4.4) The NEO conducted 5 Business Liaison Programs to exchange views between financial institutions' executives and BOT's executives. In 2012, two applicants were granted the licenses to become Authorized Money Changers and six were allowed to officially become Authorized Money Transfer Agents. Once in the system, the NEO is thence charged with the responsibilities of regulating and monitoring these authorized foreign exchange operators to operate within and in accordance with the laws and regulations stipulated.

#### 3) Banking Business Facilities

- **3.1) Government Bond Agent**, at the end of 2012, the number of government and state enterprises bondholders registered at NEO was 23,751 accounts with the total holdings of 21,651.9 million baht. During the year 2012, 68,291 bond transactions were conducted, with the total amount of 12,698.7 million baht while 4,313 bond holdings were redeemed with a total amount of 9,407.7 million baht, along with 56,687 interest-paying transactions conducted giving out a total amount of 1,477.6 million baht and 7,291 other transactions related with a total amount of 1,813.4 million baht.
- 3.2) Preparing fully use of the Imaged Cheque Clearing and Archive System (ICAS) in NE region pilot project in Khon Kaen, NEO canceled the operation of 3 district clearing houses and introduced ICAS on first quarter of 2013.
- **3.3)** Banking Activities and Cheque Clearing In 2012, a total 1,978 deposits were made into the NEO current account valuing 11,413.3 million baht, while 221 withdrawals were recorded, paying out 11,413.3 million baht from the account. In terms of cheque transactions processed, 3,393.9 thousand claiming cheques were received accounting for an amount of 972,053.8 million baht. Of this, 37.3 thousand cheques were returned, with the total value of 7,848.3 million baht.

#### 12.3 Southern Region Office (SRO)

The performances of SRO in 2012 are described as follows:

- 1) Economic Analysis
  - 1.1) Studying, analyzing and monitoring economic conditions of the Southern region : Key responsibilities of the SRO include studying, analyzing, monitoring major economic sectors, developing economic indicators in order to assess Southern economic conditions. The Southern region economy has been monitored simultaneously with the overall economy of the country. The output of which has been reported through SRO monthly report on economic and monetary conditions as well as SRO commodity report on major agricultural pricing trend. Furthermore, SRO conducts the Economic/Business Information Exchange Program or Business Liaison Program (BLP) for interchanging perspectives on economic situation in order to have a comprehensively understanding of microeconomic units and businesses and to get the reflection from the public regarding the policies rendered by the Bank of Thailand, and a Report on the Policy Response and Business Trend has been made accordingly. In addition, SRO closely monitors and analyses economic externalities which affect southern economy, for instance, European economic crisis. The SRO's economic reports comprehensively offer the macroeconomic outlook of southern Thailand which is quarterly publish on press conferences and monthly issue on BOT WebSite (www.bot.or.th). Ultimately, the reports will support the decision of Monetary Policy Committee for laying monetary policy and further region development.

Furthermore, in 2012, SRO organized many activities which gave economics and financial knowledge to public sectors, entrepreneurs and students including an annual academic seminar, a financial learning for economics instructors program and the economic competition of high school students under BOT Challenge & Experience 2012 program. SRO also comments on the fabrication and calculation of gross province products (GPP) of the provincial offices of comptroller general. In addition, SRO also disseminated economic and financial knowledge to public sectors in 14 operational southern provinces.

- 1.2) The In-depth Study : In 2012, SRO conducted the in-depth study under the topic of "Supporting the Payment in Thai Baht and Malaysia Ringgit for Thai-Malaysian Trade". The study analyzed challenges and obstacles of local currency payment (Thai Baht and Malaysia Ringgit) in Thai-Malaysian Trade. Furthermore, SRO organized the meeting to share perspectives between local entrepreneurs involve in Thai-Malaysian trading transaction. Ultimately, the study will be beneficial for the plan to support and encourage transactions in local currency for Thai-Malaysian trade.
- 1.3) Studying and Conducting Articles on Southern Region Economy : Apparently, SRO continually studies and updates key issues on Southern Economy in major economic sectors, such as rubber, palm oil, fishery, real estate and Thai-Malaysian border trade. By utilizing SRO's comprehensive southern economic data SRO conducted and published 18 high-quality articles on BOT WebSite (www.bot.or.th) and newspaper in 2012.
- 1.4) Studying, analyzing and monitoring economic situation of 5 border provinces and Thai-Malaysian trade : SRO studies, analyzes and monitors economy of 5 Southern border provinces (Yala, Pattani, Narathiwat, Satun and Songkhla Province) and Border Trading for supporting the economic development of border provinces and Thai-Malaysian trade under IMT-GT framework.

# 2) Financial Consumer Protection

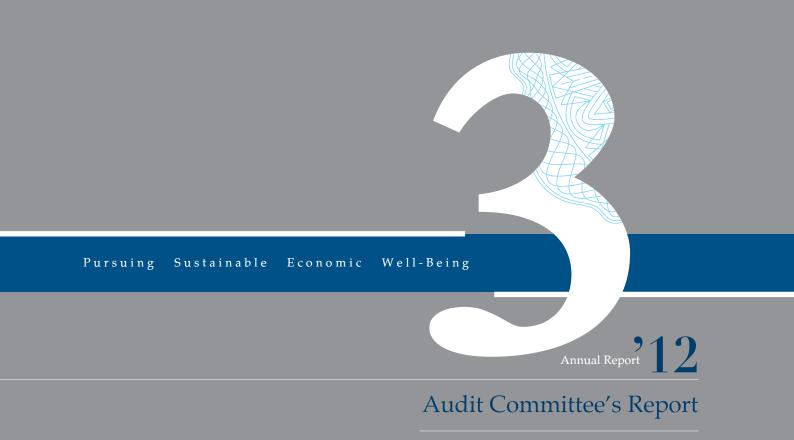
- 2.1) Personal Loan under Supervision : The SRO and Specialized Financial Institutions and Non-bank Examination Department worked together to collect the informal loan borrowers and lenders (which are not under supervision) in order to consider and improve the procedure of acquiring the license before providing the personal loan under supervision.
- **2.2)** Foreign Exchange Control : The SRO regulates authorized money changer and money transfer agent to comply with the law and the notifications issued under the exchange control Laws. At the end of 2012, there were 524 authorized money changers in southern region with the value of buying and selling foreign currency of 300.1 and 299.6 million US dollars respectively. Meanwhile, there were 222 money transfer agents with the value of receiving and remittance foreign currency of 13.0 and 4.7 million US dollars respectively.
- 2.3) Financial Literacy : The promotion of financial literacy is to help the consumers and SMEs gaining knowledge and understanding their rights and roles, thereby enabling them to have the ability to make a financial plan and select appropriate services to meet their needs. SRO also provides consumers the understanding of financial threats in order to build their financial immunity. In 2012, the SRO organized 113 events to promote the financial literacy with 23,947 participants.

Moreover, the SRO promotes the Hot Line 1213 and Financial Consumer Protection Center which provides the financial knowledge and the caution of financial threats via radio network, poster, leaflet and booklet in 14 provinces of southern region.

- 2.4) Monitoring Financial Health : The SRO is responsible for analyzing and monitoring large exposure of commercial bank as well as businesses status undertaken by private entities and economic condition in a particular area of the Southern Region that may have impact on the condition and operation of a financial institution or financial institution system. This will enhance SRO to have information on the financial health of the financial institutions and trend of business, undertaken in the Southern Region.
- 2.5) The Business Liaison Program for Financial institution : The SRO conducted 3 times of Business Liaison program which held at the area of the southern east coast, the southern west coast and the southern border provinces to exchange opinion about financial situation between financial institutions' executives and BOT's executives.
- **2.6)** Financial Ombudsman Service : In 2012, there were 313 cases to deal with whether they are customer enquiries or disputes about loan, deposit and other services.
- 2.7) Monitoring the businesses that are not acquired the license under supervision of Bank of Thailand : Information on the businesses undertaking that are not required the license were collected and informed to the relevant department in order to formulate the supervision policy or inform the police to take an action.

#### 3) Banking Business

- **3.1)** Deposit and Withdrawal : In 2012, the totals of deposit and withdrawal transactions to current account of SRO were 942 and 335 transactions with the value of 7,403.0 and 7,334.1 million baht respectively.
- **3.2)** Cheque Clearing : In 2012, the 18 Cheque Clearing Houses in southern region processed 3.93 million issues with the value of 886,450.9 million baht. The amount of returned cheques was 54,416 issues with the value of 7,588.9 million baht. The ratio of returned cheques to total processed cheques in volume and value were 0.94 and 0.47 percent respectively.
- **3.3)** The Government Bond Agent : At the end of 2012, the total of the government bond holders and the Bank of Thailand bond holders that registered at SRO were 24,471 holders, or 24,892 issues with the total value of 19,812.1 million baht. The interest payments to bond holders were 58,831 transactions with the value of 1,155.3 million baht. There were 98 new registered bond holders with the value of 113.7 million baht. The bond redemptions were 4,293 issues with the value of 6,168.5 million baht. In addition, there were 3,587 transactions of changing personal records.



Audit Committee's Report

The Bank of Thailand Audit Committee (the AC) consists of four non-executive members, appointed by the Bank of Thailand Board (the Board). The current AC members are:

- 1. Mr. Nontaphon Nimsomboon (June 24, 2009 June 23, 2012 and July 27, 2012 Present), a member of the Board, as the Chairman,
- 2. Khun Pornthip Jala (June 24, 2009 January 31, 2011 and February 1, 2011 Present), an external expert,
- 3. Dr. Kanit Sangsubhan (February 1, 2011 Present), a member of the Board,
- 4. Mrs. Chittima Duriyaprapan (October 1, 2011 Present), an external expert,

The main responsibility of the AC is to be an effective mechanism of the Board for ensuring the effectiveness of risk management system, internal control system, governance, and internal audit. The role of the AC is stipulated by the Audit Charter, including additional work assigned by the Board in order to assist BOT's management in achieving the goals efficiently.

In 2012, the AC convened 12 times, including twice with the BOT Governor, twice with external auditors from the Office of the Auditor General of Thailand (OAG). One of the AC meetings was held at a BOT regional office.

The tasks carried out and reviewed by the AC are as follows:

# 1. Review of Financial Statements

The AC reviewed the process of preparing financial statements and financial reports under operations of the BOT, i.e. financial statements of the BOT, of Currency Reserve and of Banknote Issuance Business, for reasonable assurance of fair representation, reliability, appropriate accounting policies, and adequate information disclosure, in accordance with generally accepted accounting principles and relevant regulations.

In the AC's opinion, the overall process of bookkeeping and preparing financial statements of the BOT is under prudent and effective internal control. The BOT's financial condition and the results of its operation, in all material respects, are fairly presented in the financial statements and reliable in accordance with generally accepted accounting principles, as well as appropriate accounting practices for central banks, and comply with relevant regulations. There is also adequate and appropriate disclosure of information. In this regard, the AC requested the external auditor to evaluate and keep the AC informed of its opinion on the effectiveness of internal control of information system relating to the preparation of financial statements.

#### 2. Good Governance

In strengthening good governance of the BOT, the AC has assigned the Internal Audit Group (IAG) to perform a comparative study of the enhancing roles of audit committees of central banks in good governance and whistle blowing policy and practices.

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# 3. Risk Management

In order to ensure an effective risk management, the AC initiated meeting with the Risk Oversight Committee (ROC) at least twice a year or as deemed necessary.

Furthermore, the AC recommended that IAG hold a meeting with Enterprise Risk Management Department to discuss issues on enterprise risk management for the purpose of audit planning, risk assessment, and review of BOT departments' risk management system, in order to avoid the duplication of work.

#### 4. Internal Control and Auditing

The AC reviewed audit reports submitted by the Internal Audit Department (IAD), and made recommendations on the strengthening of the BOT's internal audit. In this regard, the AC requested that IAG assess compliance of significant core business processes as approved by the Board, i.e. international reserves management process, work processes that support the 3 policy formulation committees, and the BOT financial statement preparation process.

In the AC's opinion, the BOT operates under appropriate, strong and efficient internal control, while internal auditing demonstrates continuous effectiveness and improvement.

### 5. Supervision and Support of the Work of Internal Auditors

The AC reviewed and endorsed the IAD's annual audit plan and 3-year audit plan, together with the IAG's operating plan and annual budget. To support the IAG in carrying out its duties effectively, the AC made recommendation to the Board on the appointment of the IAG Assistant Governor. The AC emphasized that the IAG's work process is in accordance with international standards and encouraged sufficient coordination among BOT Management, the external auditor, and IAG.

# 6. Review of the AC Charter and the 2012 BOT Internal Audit Charter

To strengthen the good governance system by promoting independence of Internal Audit, after appropriate consultation with Management, the AC proposed to the Board the approval of the revision of the 2012 BOT internal audit charter and the AC charter.

#### 7. Co-Meetings with the External Auditor

The AC met with the external auditor twice a year (once without BOT management presence) to receive the auditor's comments and suggestions on accounting practices and preparation of BOT financial statements as well as to be informed of any problem and obstacle faced by the auditor in performing its duties, the condition of internal control, and independence of the external auditor. The AC also requested the external auditor to evaluate information technology system of departments being audited. In addition, the AC also proposed to the Board for approval of the external auditor's annual audit fee.

# 8. Reporting of the AC's Performance

The AC prepared a report summarizing the tasks performed in each period and submitted to the Board and the Minister of Finance on a quarterly basis, in accordance with the provisions of BOT Act B.E. 2485, as amended by BOT Act (No. 4) B.E. 2551 Section 55.

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#### 9. Evaluation of the AC's Performance

While the Board has full authority to evaluate the performance of the AC, to identify improvement opportunities, the AC conducted self assessment, covering the AC's composition, meeting's effectiveness, results of operations and relationship among the AC, the Board and the external auditor in consistence with good practice and the AC charter.

The assessment presented good result, having common qualities to that of the previous year, and the AC considered means for further improvement.

The AC submitted the result of the assessment to the Board for acknowledgement and additional comments.

#### Summary of the AC's Opinion

The AC has received considerate cooperation from BOT Management as well as audited departments.

In an effort to fulfill its responsibility, the AC tried its best to make use of the knowledge, ability and skills of individual committee member at his/her utmost capability in conferring independent and impartial opinions and recommendations to the Board, BOT Management and BOT officers by taking interests of all stakeholders into consideration.

Overall, the AC believes the Board, BOT Management and BOT officers are committed to performing their duties in a professional manner in order to achieve BOT's objectives. In order to strengthen confidence of all relevant parties and stakeholders, BOT places emphasis on ensuring good governance in its operation, in order to attain effectiveness, transparency and reliability. It also seeks to ensure prudence in risk management and internal control system, in keeping with best principles, to strengthen BOT's credibility.

N. Nimsonboy

(Mr. Nontaphon Nimsomboon) Chairman, Audit Committee Bank of Thailand 8 February 2013



# Report of the Auditors and Bank of Thailand Financial Statements



# Report of the Auditors

# To the Minister of Finance

The Office of the Auditor General of Thailand has audited the accompanying financial statements of the Bank of Thailand, which comprise the statement of financial position as at December 31, 2012 and the income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

# Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

# Auditor's Responsibility

The Office of the Auditor General of Thailand's responsibility is to express an opinion on these financial statements based on the audit. The Office of the Auditor General of Thailand conducted the audit in accordance with Thai Standards on Auditing. Those standards require that the Office of the Auditor General of Thailand comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk asessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

The Office of the Auditor General of Thailand believes that the audit evidence the Office of the Auditor General of Thailand has obtained is sufficient and appropriate to provide a basis for the audit opinion.

# Opinion

In the opinion of the Office of the Auditor General of Thailand, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank of Thailand as at December 31, 2012, and its financial performance and its cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

(Miss Thammaluck Lertpatarapong) Director of Audit Office No. 3

> (Mrs. Sarunya Toneon) Auditor In-charge

Office of the Auditor General March 21, 2013

# Bank of Thailand Statement of Financial Position As at December 31, 2012

			Unit : Baht
	Notes	2012	2011
ASSETS			
Cash and Deposits	3	660,067,794,951	496,086,356,212
Reserve Tranche and Holdings of Special			
Drawing Rights	4	66,150,645,664	68,275,648,315
Investments	5	2,964,143,983,179	3,141,082,438,217
Loans	6	204,946,854,324	1,138,940,356
Premises and Equipment, net	7	5,815,990,299	5,996,172,311
Other Assets	8	84,497,154,735	245,122,809,780
Total Assets		3,985,622,423,152	3,957,702,365,191
LIABILITIES AND EQUITY			
Deposits	9	387,199,304,157	376,191,926,230
Allocations of Special Drawing Rights	10	45,671,650,402	47,225,450,485
Securities Sold under Repurchase Agreements	11	155,300,000,000	401,100,000,000
Debt Securities Issued by the Bank of Thailand	12	3,855,736,893,225	3,216,631,375,751
Other Liabilities	13	72,606,810,833	239,591,554,465
Total Liabilities		4,516,514,658,617	4,280,740,306,931

# Bank of Thailand Statement of Financial Position (Continued) As at December 31, 2012

			Unit : Baht
	Notes	2012	2011
LIABILITIES AND EQUITY (Continued)			
Equity			
Initial Capital		20,000,000	20,000,000
Statutory Appropriation	14	27,307,931,128	27,307,931,128
Reserve for Stabilization of Profit Payable			
to the Government	15	624,075,747	624,075,747
Assets and Liabilities Revaluation Reserve	16	(116,468,645,828)	(17,956,962,290)
Accumulated Losses	17	(333,375,845,141)	(202,661,599,138)
Net Loss for the Year		(108,999,751,371)	(130,371,387,187)
Total Equity		(530,892,235,465)	(323,037,941,740)
Total Liabilities and Equity		3,985,622,423,152	3,957,702,365,191

The accompanying notes form part of these financial statements.

(Mr. Prasarn Trairatvorakul) Governor

(Miss Wongwatoo Potirat) Senior Director, Finance and Accounting Department

# Bank of Thailand Income Statement For the Year Ended December 31, 2012

			Unit : Baht
	Notes	2012	2011
Income			
Interest Income		43,686,385,253	52,122,482,501
Commission		685,391,777	544,336,554
Others	18	26,055,898,982	15,992,009,547
Total Income		70,427,676,012	68,658,828,602
Expenses			
Interest Expense		143,818,679,284	126,807,054,427
Net Losses on Foreign Exchange		29,049,902,433	66,549,604,303
Personnel Expenses		3,719,393,239	4,208,627,633
Others		2,839,452,427	1,464,929,426
Total Expenses		179,427,427,383	199,030,215,789
Net Loss		(108,999,751,371)	(130,371,387,187)

# Bank of Thailand Statement of Comprehensive Income For the Year Ended December 31, 2012

		Unit : Baht
Notes	2012	2011
Net Loss	(108 <b>,</b> 999 <i>,</i> 751 <b>,</b> 371)	(130,371,387,187)
Other Comprehensive Income (Loss)		
Change in Assets and Liabilities Revaluation Reserve	(98,511,683,538)	242,254,338,415
Actuarial Loss	(342,858,816)	(104,991,746)
Total Other Comprehensive Income (Loss)	(98,854,542,354)	242,149,346,669
Total Comprehensive Income (Loss)	(207,854,293,725)	111,777,959,482

Statement of Changes in Equity For the Year Ended December 31, 2012 Bank of Thailand

Unit : Baht

	Initial Capital	Statutory Appropriation	Reserve for Stabilization of Profit Payable to the Government	Assets and Liabilities Revaluation Reserve	Accumulated Losses	Net Profit (Loss) for the Year	Total
Balance as at January 1, 2011	20,000,000	27,307,931,128	624,075,747	(260,211,300,705)	(82,096,228,251)	(117,473,193,317)	(431,828,715,398)
Adjustment for change in	,	I		1	(7 087 185 874)	1	() 087 185 877)
Adjusted Balance	20,000,000	27.307.931.128	624.075.747	(260,211,300.705)	(85.083.414.075)	(117.473.193.317)	(434.815.901.222)
Changes during the Year							
Net Loss transferred to							
Accumulated Losses	I	I	I	1	(117,473,193,317)	117,473,193,317	1
Total Comprehensive							
Income (Loss)	I	I	1	242,254,338,415	(104,991,746)	(130,371,387,187)	111,777,959,482
Balance as at December 31, 2011	20,000,000	27,307,931,128	624,075,747	(17,956,962,290)	(202,661,599,138)	(130,371,387,187)	(323,037,941,740)
Changes during the Year							
Net Loss transferred to							
Accumulated Losses	I	I	1	I	(130,371,387,187)	130,371,387,187	1
Total Comprehensive							
Income (Loss)	I	I	I	(98,511,683,538)	(342,858,816)	(108,999,751,371)	(207,854,293,725)
Balance as at December 31, 2012	20,000,000	27,307,931,128	624,075,747	(116,468,645,828)	(333,375,845,141)	(108,999,751,371)	(530,892,235,465)

# Bank of Thailand Statement of Cash Flows For the Year Ended December 31, 2012

		Unit : Baht
Notes	2012	2011
Cash Flow from Operating Activities		
Net Loss	(108,999,751,371)	(130,371,387,187)
Adjustments to Reconcile Net Loss to Net Cash		
Provided by (Used in) Operating Activities :		
Depreciation and Amortization Expenses	543,878,589	526,391,271
Gain on Disposal of Premises and Equipment	(20,858,344)	(8,834,006)
Write Off of Work in Progress	6,312,021	2,974,866
Gain from Disposal of Investments	(25,670,357,699)	(15,624,269,829)
Interest Income	(43,686,385,253)	(52,122,482,501)
Interest Expense	143,818,679,284	126,807,054,427
Loss from Non-cash Foreign Assets and Liabilities		
Cost Averaging	40,462,715,385	19,907,266,259
Gain from Decreasing in Provision for Contingent Losses		
on Forward Contracts under Resale Agreements	(85,404,681)	(107,306,925)
Net Decrease (Increase) in Accrued Revenues	(155,484,922)	35,571,971
Net Increase (Decrease) in Accrued Expenses	(119,789,894)	142,719,365
Net Increase in Prepaid Expenses	(1,112,228)	(21,545,923)
Cash Received (Paid) on Operation	6,092,440,887	(50,833,848,212)
Cash Received on Interest Income	51,988,846,853	55,994,553,388
Cash Paid on Interest Expense	(97,118,095,122)	(82,531,563,374)
Net Loss from Operation before Changing in		
Operating Assets and Liabilities	(39,036,807,382)	(77,370,858,198)

# Bank of Thailand Statement of Cash Flows (Continued) For the Year Ended December 31, 2012

		Unit : Bah
Notes	2012	2011
(Increase) Decrease in Operating Assets		
Foreign Deposits	(129,745,507,113)	122,103,018,719
Reserve Tranche and Holdings of Special Drawing Rights	(112,163,186)	(8,743,797,608)
Loans	(203,859,183,647)	11,351,354,804
Other Assets	959,467,883	6,852,942,059
Increase (Decrease) in Operating Liabilities		
Deposits	11,009,695,708	(172,240,657,501)
Securities Sold under Repurchase Agreements	(245,799,997,874)	63,200,000,000
Debt Securities Issued by the Bank of Thailand	592,064,951,511	41,858,613,544
Other Liabilities	(1,661,129,348)	(1,797,449,140)
Net Cash Flow from Operating Activities	(16,180,673,448)	(14,786,833,321)
Cash Flow from Investing Activities Purchase of Domestic Securities	(10,807,460,892)	(23,891,217,631)
Proceeds from disposal of Domestic Securities	13,467,500,000	41,983,000,000
Purchase of Foreign Securities	(11,228,409,579,342)	(11,206,308,754,819)
Proceeds from disposal of Foreign Securities	11,287,111,113,644	11,239,650,964,604
Purchase of Premises and Equipment	(430,161,431)	(462,343,883)
Proceeds from disposal of Premises and Equipment	34,396,575	9,595,156
Net Cash Flow from Investing Activities	60,965,808,554	50,981,243,427
Assets and Liabilities Revaluation Reserve on Cash	(1,907,877,450)	1,216,342,112
Net Increase in Cash and Cash Equivalents	42,877,257,656	37,410,752,218
Cash and Cash Equivalents at the Beginning of the Year	86,066,440,181	48,655,687,963
Cash and Cash Equivalents at the End of the Year 3	128,943,697,837	86,066,440,181

# Bank of Thailand Notes to Financial Statements For the Year Ended December 31, 2012

# 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 the Bank of Thailand Act, B.E. 2485 as amended (BOT Act), 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 the account of the BOT, not including 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 Assets and Liabilities Revaluation Recognition

Unrealized gains or losses from revaluation of assets and liabilities of the BOT are presented in the Assets and Liabilities Revaluation Reserve under the equity section as prescribed under Section 16 of the BOT Act.

# 2.4 Foreign Currency Transactions

Transactions denominated in foreign currencies are translated into baht at the exchange rates prevailing at the date of transaction. At year-end, assets and liabilities denominated in foreign currencies are revalued into baht at the exchange rates prevailing on the reporting date. Unrealized gains or losses from revaluation of foreign assets and liabilities are presented in the Assets and Liabilities Revaluation Reserve under the equity section.

Gains or losses from foreign currency transactions are recognized in the income statement 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. The accounting policy is in conjunction with general practices of other central banks that the BOT Board has prescribed by virtue of the BOT Act.

#### 2.5 Forward Contracts

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

#### 2.6 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. The non-settlement contracts are presented at fair value and the changes in the fair value are presented in the Assets and Liabilities Revaluation Reserve under the equity section.

#### 2.7 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 reporting date and net value changes are presented in the statement of financial position. Unrealized gains or 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.

#### 2.8 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 or 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 income statement when the settlement of the variation margin takes place.

#### 2.9 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 or losses from revaluation are presented in the Assets and Liabilities Revaluation Reserve under the equity section, and are recognized in the income statement on disposal.

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

#### 2.10 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 or losses from revaluation are presented in the Assets and Liabilities Revaluation Reserve under the equity section, and are recognized in the income statement on disposal.

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

## 2.11 Loans

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

#### 2.12 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, Temporary Buildings and Improvements	5 - 20	years
Equipment	3 - 15	years

#### 2.13 Intangible Assets

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

#### 2.14 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 income statement. 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".

#### 2.15 Post-employment benefits

#### 2.15.1 Defined Contribution Plans

The BOT's Rules and Regulations for Provident Fund 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 income statement.

## 2.15.2 Defined Benefit Plans

Defined benefit plans include pension plan, as prescribed by the BOT's Rules and Regulations for Pension Fund, and post-employment medical plan, as prescribed by the Rules and Regulations for Medical Care.

The obligations under defined benefit plans are calculated by using actuarial valuation method, the Projected Unit Credit Method, and presented at present value as employee benefit obligations. The BOT recognized all related expenses in the income statement and all actuarial gains and losses in the statement of comprehensive income in the period occurred.

## 3. Cash and Deposits

		Unit : Million baht
	2012	2011
Cash and Cash Equivalents		
Cash	48,552.9	50,915.3
Domestic Deposits (Demand Deposits)	21.7	7.2
Foreign Deposits (Demand Deposits)	80,369.1	35,143.9
Total Cash and Cash Equivalents	128,943.7	86,066.4
Foreign Deposits (Time Deposits and Special Deposits)	531,124.1	410,020.0
Total	660,067.8	496,086.4

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

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

		Unit : Million baht
	2012	2011
Quota Subscribed to International Monetary Fund (IMF)	67,806.1	70,113.0
Less : IMF Current Account No.1	(9,912.6)	(11,393.8)
Non-Negotiable with Non-Interest Bearing		
Promissory Notes Payable to IMF	(37,581.9)	(37,817.5)
Reserve Tranche	20,311.6	20,901.7
Holdings of Special Drawing Rights	45,839.0	47,373.9
Total	66,150.6	68,275.6

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

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

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

## 5. Investments

		Unit : Million baht
	2012	2011
Domestic Securities		
Cost after amortization of premiums or discounts	258,000.9	262,510.4
Foreign Securities		
Cost after amortization of premiums or discounts	2,671,397.5	2,832,750.2
Plus : Unrealized gains from price and foreign		
exchange rate revaluation of investments	34,745.6	45,821.8
	2,706,143.1	2,878,572.0
Total	2,964,144.0	3,141,082.4

## 6. Loans

		Unit : Million baht
	2012	2011
Loans to financial institutions for person damaged by flood	203,054.6	-
Contribution to the IMF under the NAB	1,892.3	1,138.9
Total	204,946.9	1,138.9

The outstanding balance of loans to financial institutions for person damaged by flood in accordance with the Emergency Decree on Financial Aids for Person Damaged by Flood, B.E. 2555 as at December 31, 2012 was B203,054.6 million. The emergency decree stipulates that the BOT and financial institutions shall be providers of the amount of financial aids that shall not exceed B300,000.0 million. The BOT shall have the power to provide specific lending to financial institutions with special lending interest rate, not exceeding 70 percent of the total amount of each loan shall be specific lending from the BOT or not exceeding B210,000.0 million and the remaining shall be money of the financial institutions.

As at December 31, 2012, the outstanding balance of contribution to the IMF was SDR40.2 million equivalent to B1,892.3 million, which was the commitment under the IMF's New Arrangements to Borrow (NAB) as mentioned in Note 20.7.

## 7. Premises and Equipment, net

Balance as at December 31, 2012									
		Сс	ost		А	ccumulated	Depreciatio	n	
	Opening	Increase	Decrease	Closing	Opening	Increase	Decrease	Closing	Net
	Balance			Balance	Balance			Balance	
Land	2,475.8	-	-	2,475.8	-	-	-	-	2,475.8
Buildings	4,234.1	36.8	93.7	4,177.2	2,135.9	175.2	93.7	2,217.4	1,959.8
Equipment	2,474.8	317.2	86.6	2,705.4	1,472.4	282.7	73.2	1 <b>,</b> 681.9	1,023.5
Work in progress	419.8	337.8	400.7	356.9	-	-	-	-	356.9
Total	9,604.5	691.8	581.0	9,715.3	3,608.3	457.9	166.9	3,899.3	5 <i>,</i> 816.0

## Unit : Million baht

## Unit : Million baht

Balance as at December 31, 2011									
		Сс	ost		А	ccumulated	Depreciatio	n	
	Opening Balance	Increase	Decrease	Closing Balance	Opening Balance	Increase	Decrease	Closing Balance	Net
Land	2,475.8	-	-	2,475.8	-	-	-	-	2,475.8
Buildings	3 <b>,</b> 817.7	416.4	-	4,234.1	1,906.3	229.6	-	2,135.9	2,098.2
Equipment	2 <b>,</b> 255.1	259.1	39.4	2,474.8	1 <b>,</b> 277.2	232.6	37.4	1,472.4	1,002.4
Work in progress	749.4	396.5	726.1	419.8	-	-	-	-	419.8
Total	9,298.0	1,072.0	765.5	9,604.5	3,183.5	462.2	37.4	3,608.3	5,996.2

Depreciation expenses for the year 2012 and 2011 were B457.3 million and B461.0 million, respectively.

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## 8. Other Assets

#### Unit : Million baht 2012 2011 Quota Subscribed to IMF - Baht 47,494.5 49,211.3 Assets from Derivatives Revaluation 22.8 50.2 9,303.7 Net Assets from Foreign Exchange Swaps 15,548.2 Claim on Debt Securities under Repurchase Agreement 164,174.3 Investment in Other Organizations 1,552.2 1,600.2 Staff Loans 2,620.0 2,627.1 Intangible Assets 208.5 160.5 Accrued Income 12,762.8 14,602.1 Others 4,288.1 3,393.4 Total 84,497.1 245,122.8

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

## Unit : Million baht

Balance as at December 31, 2012									
		Co	ost		А	ccumulated	Depreciatio	n	
	Opening	Increase	Decrease	Closing	Opening	Increase	Decrease	Closing	Net
	Balance			Balance	Balance			Balance	
Computer									
Software									
and Systems	887.5	134.6	-	1,022.1	727.0	86.6	-	813.6	208.5
Total	887.5	134.6	-	1,022.1	727.0	86.6	-	813.6	208.5

## Unit : Million baht

Balance as at December 31, 2011									
		Сс	ost		А	ccumulated	Depreciatio	n	
	Opening Balance	Increase	Decrease	Closing Balance	Opening Balance	Increase	Decrease	Closing Balance	Net
Computer Software									
and Systems	774.2	114.7	1.4	887.5	662.2	65.4	0.6	727.0	160.5
Total	774.2	114.7	1.4	887.5	662.2	65.4	0.6	727.0	160.5

Amortization expenses for the year 2012 and 2011 were B86.6 million and B65.4 million, respectively.

## 9. Deposits

		Unit : Million baht
	2012	2011
Non Interest-Bearing Deposits		
Government	266,646.3	271,301.3
Financial Institutions	92,341.2	67,893.3
Others	12,491.8	3,489.3
	371,479.3	342,683.9
Interest-Bearing Deposits	15,720.0	33,508.0
Total	387,199.3	376,191.9

The interest-bearing deposits facility is 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.

## 10. Allocations of Special Drawing Rights

The IMF's member countries are allocated special drawing rights in proportion to their subscriptions to the IMF. As at December 31, 2012 and 2011, the BOT was allocated the balance of SDR970.3 million, an equivalent of B45,671.7 million and B47,225.5 million, respectively.

## 11. Securities Sold under Repurchase Agreements

The outstanding balances as at December 31, 2012 and 2011 were B155,300.0 million and B401,100.0 million, respectively, which were totally the securities sold under repurchase agreements in the domestic market.

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

		Unit : Million baht
	2012	2011
Bank of Thailand Bonds Remaining Maturity :		
- 1 year or less	2,113,161.9	1,694,658.9
- over 1 year	993,588.5	933,572.5
Less : Held by the BOT	(37,513.5)	-
	3,069,236.9	2,628,231.4
Other BOT Debt Securities (remaining maturity less than 1 year)	786,500.0	588,400.0
Total	3,855,736.9	3,216,631.4

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 2012, the interest paid presented as a part of interest expense, amount of B91,217.8 million was paid on the BOT bonds and B22,021.2 million was paid on the BOT debt securities.

The BOT bonds held by the BOT occurred from repurchasing of the BOT bonds to help liquidity management in the money market efficiently.

## 13. Other Liabilities

		Unit : Million baht
	2012	2011
IMF Current Accounts No. 1 and 2	9,913.1	11,394.1
Promissory Notes Payable to IMF	37,581.9	37,817.5
Liabilities from Derivatives Revaluation	254.8	50.5
Obligations to return Debt Securities	-	164,174.3
Liabilities from Forward Contracts under Resale Agreements	803.3	1,680.3
Employee Benefit Obligations	3,800.4	3,579.3
Accrued Expenses	18,901.8	19,273.1
Others	1,351.5	1,622.5
Total	72,606.8	239,591.6

Employee Benefit Obligations as at December 31, 2012 included the obligation from pension plan amount of B3,128.0 million and the obligation from post-employment medical plan amount of B672.4 million. Changes in the present value of the employee benefits obligations present as follows:

	2012	2011
Employee Benefit Obligations as at January 1	3,579.3	3,560.2
Current service cost and interest cost	214.7	187.1
Benefit paid during the year	(327.1)	(294.7)
Net employee benefit obligations transferred	(9.3)	21.7
Actuarial loss	342.8	105.0
Employee Benefit Obligations as at December 31	3,800.4	3,579.3

Unit · Million baht

## 14. Statutory Appropriation

In 2002, B165,000.0 million was transferred from the Special Reserve Account of the Currency Reserve to the BOT in accordance with the Emergency Decree on the Partial Transfer of Assets from the Special Reserve Account, B.E. 2545 in order to compensate for the accumulated losses and to enhance the stability of the BOT. The residual amount, after deducted by the accumulated losses, of B27,307.9 million was presented as Statutory Appropriation. Since 2002, there has been no movement in this account.

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

As at December 31, 2012, 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.

## 16. Assets and Liabilities Revaluation Reserve

		Unit : Million baht
	2012	2011
Unrealized Losses from Foreign Exchange Revaluation		
of Assets and Liabilities	(150,494.2)	(62,387.2)
Unrealized Gains from Price Revaluation of Investments	34,739.5	45,704.1
Unrealized Losses from Revaluation of Derivatives	(232.0)	(0.4)
Unrealized Losses from Revaluation of Forward		
Contracts under Resale Agreements	(481.9)	(1,273.5)
Total	(116,468.6)	(17,957.0)

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

## 17. Accumulated Losses

As at December 31, 2012 and 2011, the outstanding balances of Accumulated Losses were B333,375.8 million and B202,661.6 million, respectively. Movements of the Accumulated Losses are set out in the Statement of Changes in Equity.

The losses are due to foreign exchange rates and interest payments from liquidity-absorbing monetary policy operations.

## 18. Other Revenues

		Unit : Million baht
	2012	2011
Gains from Disposal of Investments	25,670.4	15,624.3
Others	385.5	367.7
Total	26,055.9	15,992.0

## 19. Remuneration of Key Management Personnel

The key management personnel of the BOT refer to Deputy Governors, Governor and members of the boards established in the BOT Act who have responsibility for planning, directing and controlling the activities of the BOT. In 2012 and 2011, the remunerations paid to key management personnel were B69.2 million and B64.0 million, respectively.

## 20. Commitments and Contingencies

As at December 31, 2012, 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 sell USD27.0 million, due in 2013.

## 20.1.2 Cross Currency Forward Contracts

The BOT had net position of outstanding cross currency forward contracts to buy USD541.6 million, JPY4,113.1 million, SGD187.7 million and to sell GBP376.6 million, KRW53,365.1 million, NOK0.9 million, MYR272.8 million, due in 2013.

## 20.1.3 Forward Contracts under Resale Agreements

The BOT had the obligations under Resale Agreements to sell JPY7,529.5 million, due in 2013-2020.

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

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#### 20.2 Foreign Exchange Swap Contracts

As at December 31, 2012, the BOT had outstanding obligations under foreign exchange swap to buy USD8,831.5 million, GBP2,132.3 million, EUR10,133.1 million, AUD64.3 million, SEK 17,373.1 million, CHF2,468.0 million, NOK15,251.3 million and to sell CAD1,366.1 million, JPY582,019.8 million, KRW780,653.0 million, MYR295.4 million, due in 2013.

The net outstanding of such foreign exchange swap contracts are presented in Note 8 (Other Assets) or Note 13 (Other Liabilities).

#### 20.3 Futures Contracts

As at December 31, 2012, the BOT had outstanding obligations under bond futures contracts to buy GBP10.0 million, KRW148,500 million and to sell USD54.0 million, EUR255.6 million, due in 2013. Moreover, the BOT had outstanding obligations under interest rate futures contracts to sell USD50.0 million, due in 2014.

#### 20.4 ASEAN Swap Arrangement (ASA)

The BOT entered into the ASA, an arrangement to provide short-term liquidity support among the ASEAN member countries. Under this two-year arrangement, expiring on November 16, 2013, the BOT is obliged to contribute up to USD300.0 million and may request up to 2 times of contribution, or USD600.0 million. In 2012, neither the BOT nor its counterparties activated the arrangement.

#### 20.5 Chiang Mai Initiative Multilateralisation Agreement (CMIM agreement)

The BOT together with the Ministry of Finance of Thailand are parties in the CMIM agreement, an arrangement to provide liquidity support through currency swap transactions among the ASEAN member countries, China, Japan and South Korea. The CMIM agreement became effective on March 24, 2010 and is subject to revision every 5 years. Under the CMIM agreement, parties facing liquidity problem may request to activate swap mechanism. In this regard, the BOT is obliged 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. In 2012, neither the BOT nor its counterparties activated the agreement.

#### 20.6 Chinese Yuan/Thai Baht Bilateral Currency Swap Arrangement (BSA)

The BOT entered into the BSA with the People's Bank of China to support the availability of the local currencies for the payment of trade and investment with the total amount of CNY70,000 million or B320,000 million. This three-year arrangement will be terminated on December 22, 2014 and subject to extension by mutual agreement. In 2012, neither the BOT nor its counterparty activated the arrangement.

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

The BOT, with consent from the Finance Minister, has an obligation to contribute up to SDR340.0 million under the IMF's New Arrangements to Borrow (NAB), a supplementary source of funds when the quota resources prove insufficient. The IMF made partial call on the NAB arrangement with the BOT as presented in Note 6 (Loans).

#### 20.8 Lawsuits

As at December 31, 2012, the BOT, in the normal course of business, was taken legal actions at the amount of the claims totalling B4,677.4 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

The BOT's risk management scheme adheres to the principles of good governance, where risk management processes and conducts are managed and closely monitored by a number of risk committees such as Risk Management Committee, chaired by the governor, and Financial Risk Management Sub-Committee, chaired by the deputy governor for monetary stability. In addition, the BOT Board has established Risk Oversight Committee, consisting of non-executive Board members, whose duties are to assist the Board in overseeing BOT's overall risk management scheme and processes as well as ensuring the Board's awareness of significant risk that BOT is facing. The Enterprise Risk Management Department is a key unit to implement BOT's risk management scheme according to BOT's and other committees' policies.

#### 21.1 Financial Risk Management

### 21.1.1 BOT's Financial Risk

The key financial risks that affect the BOT's financial statements are:

#### 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 the implementation of monetary and exchange rate policy to ensure 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, namely market risk, credit risk and liquidity risk. In current environment where major government bond yields are low and credit risk increases, the BOT has studied and prepared for expanding the investment universe to add new asset classes and markets. Reserve management principles of safety, liquidity, return as well as risk management are still upheld.

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 that financial risks of the international reserves are within an acceptable level, and that risk is well diversified.

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 the investment, which involves setting asset and currency allocations with optimal risk/return trade-off according to each portfolio's objectives and within the BOT Board's risk tolerance. Investment benchmark is constructed by international standard methods to obtain optimal asset and currency allocations which yield the highest return at a given total risk level. In addition, tracking error limits are then set to ensure that risk from active management is within an acceptable level. The BOT also performs risk analysis by carrying out stress tests to estimate potential impacts of various market scenarios on the reserves.

## 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, credit 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

In recent years, the number of natural disasters and political upheavals has been rising dramatically and creating broader impact. As one of the supervisors of the financial system, the BOT needs to prepare for proper alternative site for its operations to ensure the continuity of financial operations during the crisis under various circumstances.

Therefore, in 2012, the BOT has launched the study program on the Improvement of Business Continuity Plan (BCP) for the Thai financial system. The study included a risk assessment of various events and their consequences as well as the reassessment of the current backup site's functioning ability under such kinds of events.

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The efforts also aimed to enhance the alignment of the BCP for the Thai financial system. Accordingly, the BOT conducted surveys from financial institutions to review the promptness of the current BCP and to inquire their opinions on how to develop BCP for the Thai financial system.

At present, the BOT has approved the construction of the additional backup site to cover more broadening types of disasters. Subsequently, the BOT will discuss with the financial institutions and other relevant stakeholders for further proceeding.

## 22. Approval of the Financial Statements

On March 21, 2013, the BOT Board has authorized to issue these financial statements.



# Management and Personnel

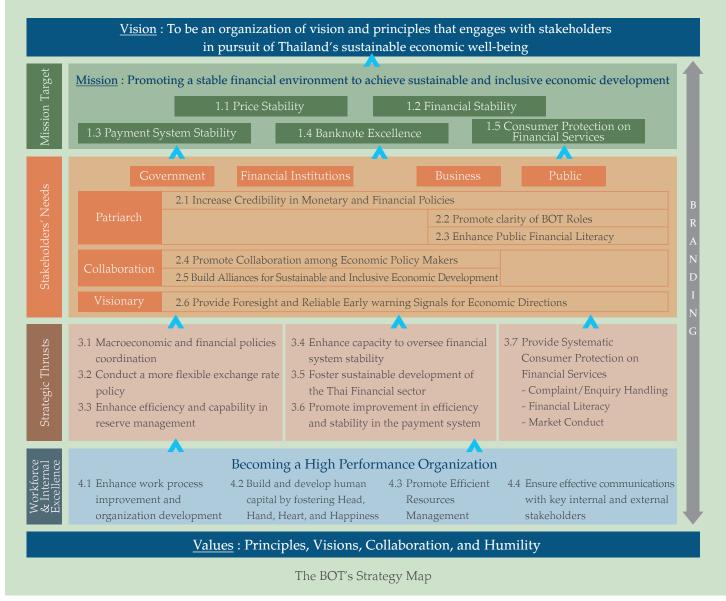
## Strategic Plans and Corporate Governance

## 1. Strategic Plans

Since 2011, the BOT has adopted the Balanced Scorecard (BSC) as a strategic management framework to drive its strategic priorities and ensure achievement of its mandates. In 2012, the BOT conducted a review of the 5-year strategic plan (2012-2016) along with an assessment of strategic objectives of the BOT's Balanced Scorecard (BSC) which consists of four perspectives as follows:

- 1) Mission Targets Perspective
- 2) Stakeholders' Needs Perspective
- 3) Strategic Thrust Perspective
- 4) Workforce and Internal Excellence Perspective

The Strategy Map below illustrates these four perspectives and their relationships.



The BOT performance in 2012 can thus be assessed within the four perspectives of Balanced Scorecard (BSC) as follows:

## 1. Mission Targets Perspective

#### 1) Price Stability

The BOT has sought to maintain core inflation at an appropriate level with low volatility conducive to economic growth. On the exchange rate front, the Bank has pushed for a review of approaches and policies to ensure that foreign exchange rate movements are driven by market mechanism as well as developed the code of conduct, audit procedure and database system to guard against foreign exchange speculation. The Bank has also sought to preserve the value of foreign exchange reserves, ensure sufficient liquidity to support monetary policies and foreign exchange operations as well as achieve appropriate return.

## 2) Financial Stability

The BOT has regulated and supervised individual financial institutions and the Thai financial system to ensure its safety and soundness, efficiency, ability to service its debt, and that no individual financial institution becomes insolvent and adversely affects the economy. In addition, the BOT has instituted a number of measures to assure that the real sector gains adequate and fair access to financial services at appropriate fee as well as developed financial infrastructure to support the private sector's debt issuance.

#### 3) Payment System Stability

The BOT was able to support the continuous functioning of payment systems to ensure availability of access to customers. Working towards safer and more efficient payment and settlement systems, the BOT has enhanced its risk management processes, set standards and established risk management measures to reduce payment systems risk and ensure full compliance of member institutions. Furthermore, the Bank pushed forward to set up the Local Switching system to promote domestic electronic payment usage by passing local rule for scheme debit cards.

#### 4) Banknote Excellence

The BOT has ensured that banknotes in circulation are of good condition, clean, and difficult to counterfeit and sufficient to meet commercial banks' demand of banknotes within the necessary legal constraint.

## 5) Consumer Protection on Financial Services

The BOT has promoted better public and SMEs financial literacy and fair treatment in financial dealings, sought to resolve complaints and set minimum requirement on information disclosure for financial institutions in their product proposal and services offering, and met with Office of the Consumer Protection Board (OCPB) and Permanent Secretary of the Prime Minister's office to exchange information regarding guidelines on financial product consumers' protection and possibility of easing guidelines in order to align with commercial requirement.

## 2. Stakeholders' Needs Perspective

The BOT has continued its efforts to raise public awareness of its mandates and to expand its communication channels with public agencies and private organizations. The bank has focused its efforts in gaining better understandings of key stakeholders' needs and implementing effective outreach program to build alliance with other authorities and the country's thought leaders to gain their supports to cope with and overcome challenges in pursuing its mission. Moreover, the BOT has pressed on the BOT Branding project to continually and sustainably enhance its identity and promote its corporate value in a systematic manner.

#### 3. Strategic Thrust Perspective

All major projects supporting the Bank's strategic priorities progressed as planned. The key achievements in 2012 are as follows:

- Macroeconomic and financial policies coordination: The bank arranged several workshops and meetings with pertinent parties to derive "common visions" and to clarify each party's specific roles and responsibilities in helping the country overcome macroeconomic and financial challenges. Apart from this, the bank also utilized modern media to increase the public awareness of the roles and the importance of monetary policy in building a long-term sustainable economy.
- 2) More flexible exchange rate policy: The BOT has updated its tools and mechanisms to prepare for the increased capital mobility and to guard against short-term excessive volatility that could bring instability problems.
- 3) Reserve management capacity and capability enhancement to raise longer-term returns: To support the recently expanded assets universe, the Bank has enhanced its risk management practices, streamlined its physical and information technology infrastructure and strengthened the internal capability.
- 4) Enhanced capacity to oversee financial system stability: The bank strengthened its surveillance mechanisms by identifying information gaps and capability gaps, and setting out both short-term and longer-term strategies for filling these gaps. The Bank also worked more closely with other regulatory agencies to coordinate surveillance efforts and regularly exchanged tactical information.
- 5) Promoting sustainable development of the Thai financial sector development: Adhering to the Financial Sector Master Plan II, the BOT continued to focus its effort to promote a financial sector that is able to efficiently serve the real sector's needs, competitive and delivers adequate access and fair financial services at an affordable cost to the entire population.
- 6) Fostering development of domestic and cross-border payment system: The bank continued to promote e-Payment usage and enhance risk management mechanisms to improve efficiency and stability of the cross-border payment systems.
- 7) More systematic consumer protection: With the establishment of the Financial Consumer Protection Center, the BOT was able to provide better consumer protection through taking financial complaints and enquiries and equipping consumers with financial knowledge and understanding of the BOT's roles in this area.

## 4. Workforce and Internal Excellence Perspective

In continuing to advance towards a high-performance organization, the Bank embarked on several initiatives to strengthen its internal capacity and capability. For example, the bank has moved ahead with the Succession Planning Project and commenced on the Job Evaluation and Job Structure Redesign Project. Furthermore, the bank has also introduced variety of training methods such as the job-rotation program, the work-exchange program and the leadership program and identified strategies to spur employee engagement. To ensure a high level of effectiveness and efficiency, the Bank's priority was placed on improving budget management process, expanding the IT infrastructure and strengthening governance and risk management processes.

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

The BOT has continuously improved organizational structure, work systems and work process in order to achieve the 5-year strategic plan (2012-2016) of being a High Performance Organization (HPO). The ultimate aim of the plan is to strengthen the financial stability in responding to the volatile global economic and financial environment, and to conduce to the sustainable well-being of Thailand. In 2012, several work processes, consequently, were revised which can be divided into three main objectives: 1) to comply with the Emergency Decree; 2) to be in accordance with the BOT's strategic plan; and, 3) to enhance efficiency and effectiveness of the BOT's internal management systems. They are as follows:

## 2.1 The Adjustments of Organizational Structure to Comply with the Emergency Decree

#### 2.1.1 An Ad-Hoc Credit

In 2011, Thailand encountered the severe and widespread flooding causing tremendous losses to people and affecting the economy. To relieve the damages of the flood victims, "The Emergency Decree on Financial Aids for Person Damaged by Flood, B.E. 2555 (2012)" was, thus, issued. According to the Law, the BOT shall have the power to provide specific lending to financial institution such as commercial banks and Special Financial Institutions (SFIs) in order to provide subsequently as loan for the person damaged by flood.

With responding to the Emergency Decree, the Ad-Hoc Credit Team was set up to be responsible for issuing regulations related to financial aids; analyzing, allocating and adjusting credit line granted to each financial institution; regulating and examining financial institutions' credit approval process; and, setting up data base on credit, and implementing related information technology systems.

## 2.1.2 Financial Institutions Development Fund (FIDF) Management

According to the Emergency Decree on reorganizing loan debt management which the Ministry of Finance made as a financial support to Financial Institution Development Fund B.E. 2555 (2012) (The reorganizing loan debt Law), the FIDF Management Department was regrouped and restructured by setting up the Legal and Claims Management Office and Business and Liability Management Office to be responsible for legal proceedings and claims management; and asset and liability management of the Fund.

# 2.2 The Adjustments of Organizational Structure to be in Accordance with the BOT's Strategic Plan

## 2.2.1 Payment and Debt Instruments

To comply with the BOT's strategic direction on payment systems development, the works related to payment systems development and analysis were centralized. Moreover, risk management tasks were introduced aiming to monitor and control risk opportunity of the payment and bond systems that may occur from the systems themselves and from the users. In addition, operation offices were merged, and the deposit and BAHTNET department was set up to screen the work and focus on diverse jobs including solving the complicated problems.

#### 2.2.2 Macroeconomic and Monetary Policy

In accordance with the strategic plan on the macroeconomic and financial policies coordination, the BOT has strengthened the work related to macroeconomic and monetary policy by focusing on studying, analyzing and developing economic indicator tools; such as, analyzing effects and advising on financial stability policy, developing tools for monitoring and assessing risks of real estate and household sectors, collaborating with external stakeholders to derive "common visions" that help guide coordination among pertinent parties in meeting the country's macroeconomic and financial policy challenges in pursuit of Thailand's sustainable economic well-being.

#### 2.2.3 Financial Consumer Protection

The Financial Consumer Protection Center was officially established in November 2011 in accordance with the 5-year strategic plan to protect the rights and fairness of financial service consumers. The strategic objective of the center is to obtain the work process of financial consumer protection to be systematically and to be able to co-operate with other authorities. Since the centre was set up, the number of financial complaints has continuously increased. The BOT, therefore, redesigned the complaint and enquiry handling office to perform in full function of call centre (the one-stop service) for faster and more efficient services. The quality control of the call centre is also applied.

#### 2.2.4 Corporate Communications Management

The ultimate aim of the strategic plan on the internal and external communications is to communicate efficiently, through a system that promotes clarity, implement effective outreach, and is responsive to the needs of stakeholders (internal and external), in order to help the BOT achieve its missions successfully. The Corporate Communications Department, consequently, was reorganized by adding a task that is specifically and clearly responsible for driving each strategic area. Furthermore, similar and related tasks were grouped under the same division in order to work, control and operate smoothly.

## 2.2.5 Human Resources and Organization Development

To align with the human resources and organization development strategic plan, the BOT has built and developed human capital and improved work processes in order to make the BOT a sustainably High Performance Organization (HPO). Hence, tasks and responsibilities that are closely related were grouped together. Human Resources Business Partner Office was introduced to support executives of each group to achieve strategic human resources management, and to connect with a strategic performance management tool (the Balanced Scorecard, BSC) adopted to drive through the BOT's visions and strategies.

# 2.3 The Adjustments of Organizational Structure to Enhance Efficiency and Effectiveness of the BOT's Internal Management Systems

## 2.3.1 Information Technology

Technology has played a powerful role in promoting financial stability in Thailand. The BOT has, thus, proactively driven all information technology tasks to align with its strategic direction such as the works on IT security and quality assurance.

#### 2.3.2 Internal Audit

As a managerial tool to prevent damages that may occur to the BOT, the Compliance Department was established to supervise, examine and monitor operations of all departments within the BOT both day-to-day and ongoing monitoring in accordance with laws and regulations. An internal audit, as a 3<sup>rd</sup> line of defense in risk management, however, is still performed to reassure that the BOT has effective risk management in highly important work processes, particularly, the controlling systems of the BOT.

#### 2.3.3 Corporate Services

A new organizational structure of the corporate services department was introduced as a property management unit of the BOT. The workplace improvement tasks were transferred to be under responsibility of the Facilities Management Office. In addition, the Customer Relation Team was set up to be a single point of contact to handle, follow up and coordinate all requests.

## 3. Corporate Governance and Risk Management

#### 3.1 Corporate Governance

According to the Bank of Thailand (BOT) Act B.E. 2485 as amended by the BOT Act (Issue 4) B.E. 2551, roles and responsibilities of the BOT and the BOT Board are indicated as supervising overall activities of the BOT, with the objectives of maintaining monetary stability, financial institutions system stability and payment system stability, including planning, budgeting and the management of the assets. The BOT is also responsible for the formulation and implementation of monetary policy, financial institutions policy and payment system policy under the boards having authorities and responsibilities for specific policy lines such as the Monetary Policy Board, the Financial Institutions Policy Board and the Payment System Board. To provide policy coordination among the different boards, the BOT has work system that promotes collaboration in the form of sub-committee such as Financial System Stability Sub-Committee.

In addition, the Audit Committee, appointed by the BOT Board, acts as a mechanism of the BOT Board in overseeing the BOT's business for good corporate governance, proper risk management, as well as efficient internal control and audit system. In B.E 2555 the BOT revised its Internal Audit Group by setting up the Internal Audit and Compliance Department, which consists of Internal Audit Department and Compliance Department. The newly established Compliance Department has the functions of monitoring the operations of each department to ensure that the business and operations of the BOT are carried out in accordance with laws, regulations, and procedures in a sufficient and effective manner.

As for the risk management, appointed by the BOT Board, the Risk Oversight Committee (ROC), whose members are the board members who are not BOT executives, assists the BOT Board in overseeing risk management so that the BOT operates in accordance with good governance principles.

#### 3.2 Enterprise Risk Management

Relevant risk management committees at the BOT consists of the Risk Management Committee (RMC), chaired by the Governor, and the Financial Risk Management Sub-committee (FRMC), chaired by Deputy Governor on Monetary Stability. The Enterprise Risk Management Department acts as the primary agent to ensure that risk management in the organization is in compliance with policies prescribed by the BOT and the relevant committees, covering policy and strategic risk, financial risk, operational risk, and reputational risk.

## 3.2.1 Integrated Risk Management

In B.E. 2555, an executive workshop was carried out to identify and assess significant risks to the organization and determine proper controls for these risks. This risk management process aims to help enhance the operations of the BOT. It also helps ensure that the BOT is aware of major risks that could significantly affect its operations, and possesses appropriate plans and controls for managing those risks. The enterprise risk information has also been used for the BOT's strategic planning for the year B.E. 2556.

In addition, in B.E. 2555 the BOT has established a working group to evaluate the impact of BOT's financial position on its operations and on Thailand's economic system, and to come up with appropriate measures to improve the financial position, given the objectives and mandate of the Bank of Thailand as the core.

## 3.2.2 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 policies, 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 and 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 risk management frameworks into policy setting and implementation process.

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

- 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 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 Risk Oversight Committee (ROC): The Committee assists the Board in overseeing the BOT's entire risk management process to ensure that risk assessment, risk tolerance setting, risk monitoring, reporting and controlling are all appropriately established.
- 4) The Risk Management Committee (RMC): The Committee sets out the BOT's overall risk management policies and frameworks for enterprise, operational and financial risk management, as well as asset and liability management. The Committee is also authorized to undertake duties within its entrusted authority.
- 5) The Financial Risk Management Sub-Committee (FRMC): The Sub-committee screens and submits financial risk management guidelines for the international reserves management and the implementation of monetary and exchange rate policies to the Risk Management Committee and the Board for approval. The Sub-committee is also authorized to undertake duties within its entrusted authority.
- 6) The Financial Markets Operation Sub-committee: The Sub-committee oversees the implementation of monetary and exchange rate policies and, in coordination with the FRMC, ensures that it accords with the financial risk management framework set forth by the Risk Management Committee. The Sub-committee is also authorized to undertake duties within its entrusted authority.

The Financial Risk Management Office of the Enterprise Risk Management Department is responsible for carrying out the risk policy implementations as set out by the committees. To uphold the principle of duty segregation as well as check and balance, the Enterprise Risk Management Department, which performs the risk management and compliance duties, is completely segregated from the Reserve Management Department, which operates the front office functions. The reporting line is also separated in that the Enterprise Risk Management Department reports directly to the Deputy Governor on Corporate Support Services whilst the Reserve Management Department directly reports to the Deputy Governor on Monetary Stability. The Financial Risk Management Office evaluates, oversees and monitors the management of international reserves via a straight-through-processing system, Finance Kit (FK). In addition to its compliance, access and audit trail systems, FK can measure risks in real-time.

In B.E. 2555, the BOT continued a project which started in B.E. 2553 to upgrade its FK system to a new version, namely the Wall Street Suite (WSS) system. The upgrade has improved the system's functionalities, flexibility, and coverage. The project was completed and the upgraded system began its full operation in June.

The BOT annually reviews benchmarks of international reserve portfolios 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 for both financial assets and currencies.

#### 3.2.3 Operational Risk Management

1) Control Self-Assessment (CSA)

In B.E. 2555, all departments in the BOT have conducted Control Self-Assessment (CSA) to comply with the BOT's regulation, which requires all departments to complete CSA process at least once a year in order to improve work processes to be more efficient and effective. The Risk Management System (RMS) was also used as a supporting tool to assist in the BOT's operational risk management process.

## 2) Business Continuity Plan (BCP)

At Present, the BOT has developed Business Continuity Plans (BCP) under various scenarios that could pose potential risks on the BOT's operations, including disaster, political unrest and Influenza pandemic.

As the number of natural disasters and political upheavals has been rising dramatically and has been creating broader impact, therefore, the BOT has launched the study program on the improvement of BCP for the Thai Financial System. The study included the risk assessment of various probable events and their consequences as well as the reassessment of the current backup site's functioning ability under such kinds of events. The efforts also aimed to enhance the alignment of the BCP for the Thai financial system. Next step, the BOT has plans for the construction of the additional backup site to cover more broadening types of disasters.

## 4. Human Resource Management

## 4.1 Workforce Status

As of December 31, 2012, the BOT employed 3,585 personnel. In this workforce, the ratio of male to female is 46:54. There were 124 people (3.58 percent) more compared to the previous year. There were the turnover of 92 personnel: 49 people retired, the remaining 43 people resigned, dismissed, passed away, and took early retirement. There are 182 new employees: 22.22 percent in Financial Markets Operations Group and Enterprise Risk Management Department, 13.33 percent in Monetary Policy Group, 11.11 percent in Supervision Group, 10 percent in Financial Institutions Policy Group and 43.33 percent in other groups.

In term of education level, there are 42.45 percent employees with Bachelor Degrees, 42.74 percent employees with Master Degree and 1.88 percent employees with Doctorate Degrees.

## 4.2 Human Resource Management

The BOT has formulated the ultimate goal of human resource management, focusing on both the quality of people and the organization development, to be the direction of setting up the Human Resource and Organization Development (HR & OD) Master Plan. It is the framework of implementing human resource systems in the period of 2012-2016 which is composed of six areas: Strategic Staffing and Talent Sourcing, Development & Retention, Quality of Leadership, Performance Management & Reward System, Employee Engagement and Work Process & Organization Design.

Strategic staffing is an important human resources system of the BOT to manage workforces with talent sourcing, rotation, and employee development. In 2012, the BOT has enhanced external talent sourcing strategy by launching the Campus Visit Program at some universities in Thailand. Besides recruiting, this program was implemented on the purpose of building the BOT branding and extending the network with universities and students.

Regarding internal talent sourcing, the BOT continued to feeding successors, the high qualified employees, to the pipeline of executives for the next three years due to the retirement of top management, especially at the director level and upper.

In the area of the development & retention strategy, the BOT has implemented the development policy aiming to retain employees by providing employees with various kinds of development. In 2012, it emphasized on enhancing employees to have working experience in the real business world. An example was the secondment program with other organizations both in Thailand and abroad. This program has been enhanced in terms of signing the memorandum of understanding (MOU) with other organizations continually in order to increase more employees exposing to other organizations. For the first MOU, the BOT will sign with the organizations of financial institute supervision in Thailand. In addition to the development policy, the BOT has reviewed the job values of every job positions for designing the new job grade structure, which is more appropriate and aligned with the BOT's changed mission. The BOT will also do a salary survey for reviewing the compensation structure aiming to benchmark with the market and to be more competitive.

The Performance and Compensation Management System is implemented as a tool to attract, retain and motivate high potential performers by linking the pay-for-performance principle to enhance both the employee's effectiveness and efficiency. Pay-for-performance will definitely create the continuous development to leverage both the employee's and organization's performance and will ultimately lead to increased personal and national prosperity. In 2013, the BOT strategic plans have been cascaded down to the individual goals and aligned through the organization; thus, all of employees perceive clear direction. They well understand their roles and responsibilities as the significant mechanism to push the organization forward. This makes employees feel proud and motivated to work as their best.

In addition, the BOT has emphasized the development of knowledge, skill and behavior to achieve both good and smart performers. The core value behavior indicators framework (Integrity, Vision, Outreach and Humility) is an initiative to be considered in annual performance evaluation and in development. Furthermore, the Performance Improvement Plan (PIP) is established for developing the under-performers to become standard performers. Last but not least, the market compensation movement is closely monitored to ensure that the BOT pay structure is competitive.

## 4.3 Employee Training and Development

Learning and Development Institute of Bank of Thailand has designed the training programs to serve and align with BOT human resources and organization development master plan. We aim for our staffs to achieve their high competencies and also be well-prepared to accomplish BOT mission and objectives, as well as to be a role model for the organization and society.

During 2012, employees from all levels were trained and developed under various programs either operated by BOT itself (In-house Training Program) or external institutes both inside and outside the country (External Program). Additionally, we encouraged the collaboration in work processes to promote knowledge sharing among staffs.

In 2012, in response to BOT's strategic plan to promote macroeconomics and financial policies coordination among related countries, BOT initiated and hosted the first High-level Central Banking Seminar for executives from BOT and the regional group 'CLMV'. The purpose of the seminar is to encourage capacity building and to strengthen the regional monetary system. The seminar was highly successful and BOT plans to further develop the program for next year.

Apart from the employee development program implemented by Learning and Development Institute, BOT has allocated the training budget for each department to plan and carry out their own training needs.

The BOT's average training days for the year 2012 was 10 man-days.

## 4.4 Human Resources and Organization Development

The BOT has continuously restructured and Improved its work processes by adhering with its principles of being a high performance organization and an organization of choice since the implementation of the 5-year strategic plan (2012-2016) aiming to be more flexible and strategy-focused.

Pursuing Sustainable Economic Well-Being

# The Bank of Thailand Board Members and Executives



# The Bank of Thailand Board As of 31 December 2012



Mr. Virabongsa	Ramangkura
Mr. Prasarn	Trairatvorakul
Mr. Krirk	Vanikkul
Mrs. Tongurai	Limpiti
Mrs. Pongpen	Ruengvirayudh
Mr. Nontaphon	Nimsomboon
Mr. Arkhom	Termpittayapaisith
Mr. Ampon	Kittiampon
Mr. Borwornsak	Uwanno
Mr. Kanit	Sangsubhan
Mr. Siri	Ganjarerndee
Mr. Somchai	Sujjapongse

Chairman Deputy-Chairman Member Member Member Member Member Member Member Member

## Executives of the Bank of Thailand As of 31 December 2012

## Governor

Deputy Governor, Monetary Stability Deputy Governor, Financial Institutions Stability Deputy Governor, Corporate Support Services and Banknote Management Assistant Governor, Monetary Policy Group Assistant Governor, Financial Markets Operations Group Assistant Governor, Financial Institutions Policy Group Assistant Governor, Supervision Group Assistant Governor, Information Technology Group Assistant Governor, Management Assistance Group Assistant Governor, Planning and Budgeting Group Assistant Governor, Internal Audit Group Assistant Governor, Internal Audit Group Assistant Governor, Human Resources and Organization Development Group

## Deputy Governor, Monetary Stability

Assistant Governor, Monetary Policy Group Senior Director, Macroeconomic and Monetary Policy Department Director, Monetary Policy Office Director, Macroeconomic Analysis Office Senior Director, International Department Director, International Economic Policy Office Director, Economic Research Department

## Assistant Governor, Financial Markets Operations Group

Senior Director, Financial Markets Department Senior Advisor, Financial Markets Operations Group Director, Financial Markets Office Senior Director, Reserve Management Department Director, Investment Strategy Office Director, Investment Management Office Director, Foreign Exchange Administration and Policy Department Mr. Prasarn Trairatvorakul Mrs. Pongpen Ruengvirayudh Mr. Krirk Vanikkul Mrs. Tongurai Limpiti

Mr. Paiboon Kittisrikangwan Mrs. Chantavarn Sucharitakul Mrs. Ruchukorn Siriyodhin Mrs. Salinee Wangtal Miss Sibporn Thavornchan Mr. Chanchai Boonritchaisri Mrs. Amara Sriphayak Mr. Nopporn Pramojaney Miss Nawaporn Maharagkaga Mr. Nutavoot Pongsiri

## Mrs. Pongpen Ruengvirayudh

Mr. Paiboon Kittisrikangwan Mr. Mathee Supapongse

Mr. Songtum Pinto Mrs. Roong Mallikamas Mr. Parisun Chantanahom Mr. Supatpong Navaratana Mr. Piti Disyatat

## Mrs. Chantavarn Sucharitakul

Mrs. Alisara Mahasandana Mr. Singhachai Boonyayotin Miss Kuda Rananand Miss Vachira Arromdee Miss Mathinee Subhaswadikul Mr. Santi Rungsiyaphornratana Mrs. Suthasinee Nimitkul

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## **Overseas Representative Offices**

Chief, London Representative Office Chief, New York Representative Office Chief, Beijing Representative Office

## Deputy Governor, Financial Institutions Stability

Assistant Governor, Financial Institutions Policy Group Senior Director, Prudential Policy Department Director, Risk Management Policy Office Director, FI Business and Accounting Policy Office Senior Director, Financial Institutions Strategy Department Director, Financial Analysis and International Strategy Office Senior Director, Payment Systems Policy Department Director, Payment Systems Policy Department

## Assistant Governor, Supervision Group

Senior Director, Onsite Examination Department 1 Director, Onsite Examination Department 1 Senior Director, Onsite Examination Department 2 Director, Onsite Examination Department 2 Senior Director, Financial Institutions Monitoring and Analysis Department Director, Financial Institutions Monitoring and Analysis Department Director, Risk Management and Information System Examination Department Director, Planning and Development Department Director, Specialized Financial Institutions and Non-bank Examination Department Director, Financial Institutions

Senior Director, FIDF Management Department Director, Asset and Liability Management Office Director, Legal and Claims Management Office Miss Prisadee Jindahra Mr. Wikran Nakasiri Mr. Supat Ampaitanakorn

## Mr. Krirk Vanikkul

Mrs. Ruchukorn Siriyodhin Mr. Somboon Chitphentom Mrs. Wajeetip Pongpech Miss Preyanuch Chuengprasert Mr. Anupap Kuvinichkul Mr. Somchai Lertlarpwasin Mr. Jaturong Jantarangs Mrs. Nisarat Trairatvorakul

## Mrs. Salinee Wangtal

Mr. Ronadol Numnonda Mr. Wipas Isariyaphan Miss Siritida Panomwon Na Ayudhya Mr. Montchai Ratanastien Mrs. Nawaron Dejsuvan

2nd Lieutenant Kamthon Prasertsom

Mr. Buncha Manoonkunchai

Miss Sunadda Paripunna Mr. Yanyong Likhitcharoen

Mrs. Vireka Suntapuntu

Mrs. Povongtip Poramapojn Miss Siriporn Eamrungroj Mrs. Chirarat Tankulrat

## Deputy Governor, Corporate Support Services and Banknote Management

Senior Director, Enterprise Risk Management Department Director, Integrated and Operational Risk Management Office Director, Financial Risk Management Office

## Assistant Governor, Information Technology Group

Senior Director, Payment and Debt Instruments Department Director, Deposit and Debt Instruments Office Director, Payment Systems Development and Settlement Office Senior Director, Statistic and Information Systems Department Director, Data Management Development and Planning Office Director, Statistics Office Senior Director, Information Technology Department Director, IT Operation Office Director, Business Solution Delivery Office 1 Director, Business Integration & Technical Management Office

## Assistant Governor, Management Assistance Group

Special Advisor to Assistant Governor, Management Assistance Group Senior Director, Legal and Litigation Department Director, Legal Office Director, Litigation Office Senior Director, Corporate Communications Department Director, Office of the Governor Director, Communications and Relations Office Director, General Administration and Procurement Office Director, Building Construction Projects and Maintenance Department Director, Security Department

## Assistant Governor, Human Resources and Organization Development Group

Senior Director, Human Resources Department Chief Specialist, Human Resources Department Director, Manpower Management Office

## Mrs. Tongurai Limpiti

Mr. Amporn Sangmanee Mrs. Waraporn Subhangkasen Mr. Prasat Somchitnug

## Miss Sibporn Thavornchan

Mrs. Bhusadi Muhpayak Mrs. Pornvadee Tapasanan Mrs. Sureeratana Luckananit Mrs. Pusadee Ganjarerndee Miss Prapaporn Thanomvongthai Mrs. Somsajee Siksamat Mr. Permsuk Sutthinoon Mrs. Nuansiri Reantongcome Miss Siripan Issariyaperk Mr. Teera Pattitakorn Mrs. Wasna Nimityongskul

## Mr. Chanchai Boonritchaisri Mr. Weerachat Sribunma

Mr. Satorn Topothai Mr. Oros Phetchareon Miss Wannee Pornsomboonsiri Mr. Chirathep Senivongs Na Ayudhya Mrs. Somruedee Rungsiyaphornratana Mr. Nuntawat Sunglaw Mr. Sanya Chamnong Mrs. Montira Pattanakul

## Mr. Somchai Youngyoo

## Mr. Nutavoot Pongsiri

Mrs. Thanyanit Niyomkarn Miss Nongluk Kachornvachara Miss Usanee Piyapolrungroj

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Director, Human Resources Management Office Director, Organization Development Department Director, Learning and Development Institute

Assistant Governor, Planning and Budgeting Group Senior Director, Finance and Accounting Department Director, Finance and Accounting Office Director, Strategic Services Department Director, Library Archives and Museum Director, Financial Consumer Protection Center Senior Director, Northern Region Office Director, Northern Region Office Senior Director, Northeastern Region Office Director, Northeastern Region Office Senior Director, Southern Region Office Director, Southern Region Office

## 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, Internal Audit Group

Senior Director, Internal Audit and Compliance Department Director, Internal Audit Department Director, Compliance Department

Senior Director, Office of Corporate Strategy Director, Office of Corporate Strategy Mr. Boonlert Tangjitcharoen Mrs. Chutima Vibulsuk Miss Matana Waitayakomol

## Mrs. Amara Sriphayak

Miss Wongwatoo Potirat Mrs. Patchara Vinayavekhin Mrs. Suree Jeraratanasopa Mrs. Jinda Chotewattanakul Mrs. Chanatip Jariyawiroj Mrs. Supawadee Punsri Mr. Somsak Wongpanyathaworn Mr. Pichit Patrawimolpon Mr. Thanedchai Angwarawong Mr. Pruettipong Srimachand Mr. Boonchai Karnchanapimai

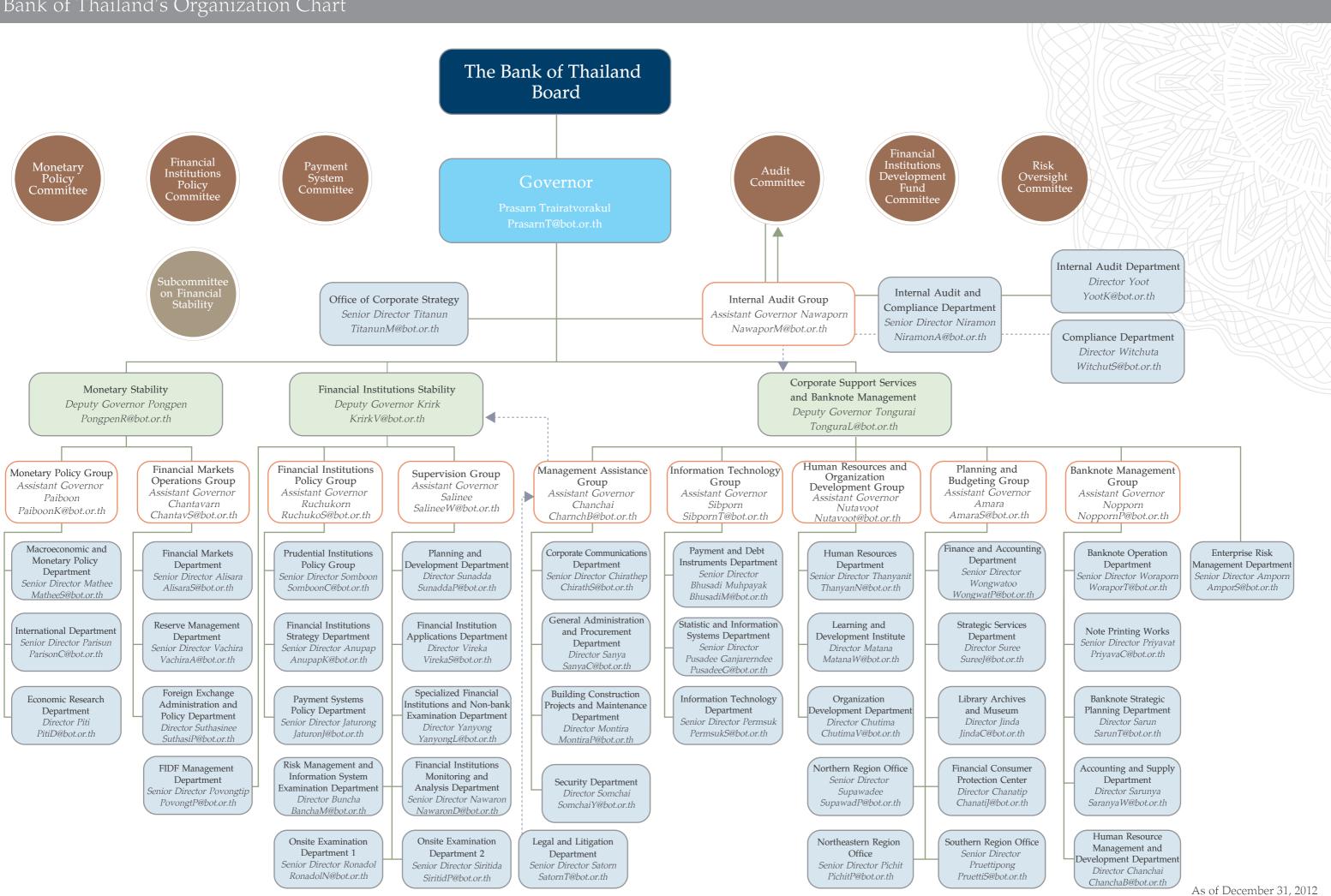
## Mr. Nopporn Pramojaney

Mr. Woraporn Tangsaghasaksri Mrs. Temmas Chutinimitkul Mr. Priyavat Chainuvat Mrs. Srinoi Leckuthai Mr. Wirat Kitipipat Mr. Sarun Thamrongrat Mrs. Saranya Wajananawat Mr. Chanchai Buratavorn

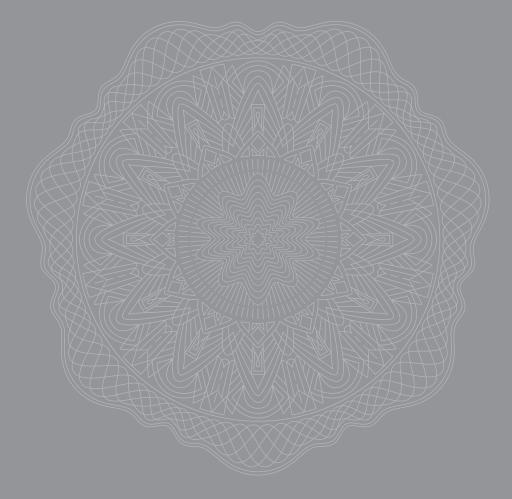
**Miss Nawaporn Maharagkaga** Mrs. Niramon Asavamanee Mr. Yoot Khunsihapak Mrs. Witchuta Sanguthai

Mr. Titanun Mallikamas Mr. Tharith Panpiemras Pursuing Sustainable Economic Well-Being

Bank of Thailand's Organization Chart







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