



BANK OF THAILAND

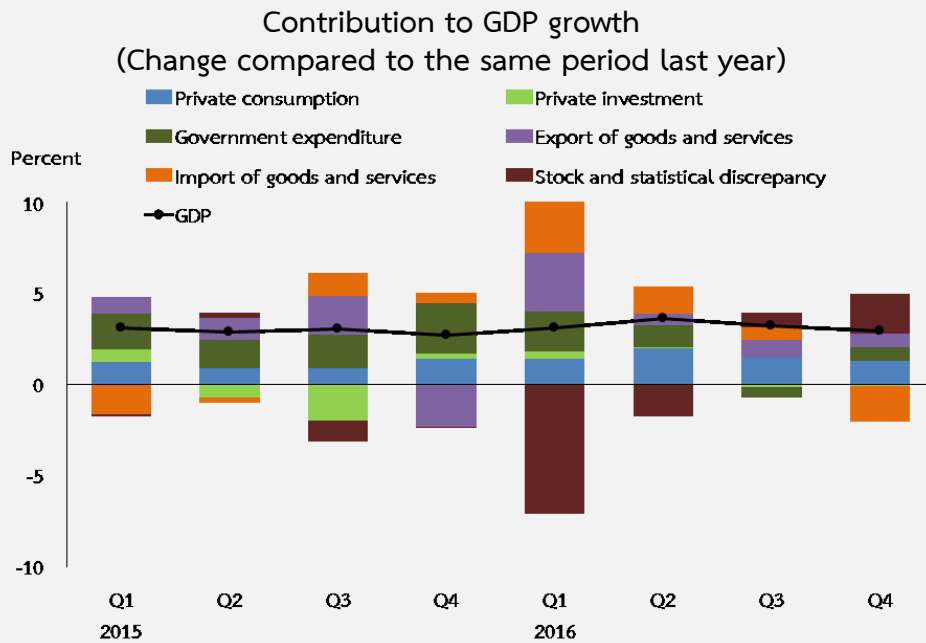
Thailand's Economic Conditions in 2016



BANK OF THAILAND
(1942 - 2017)

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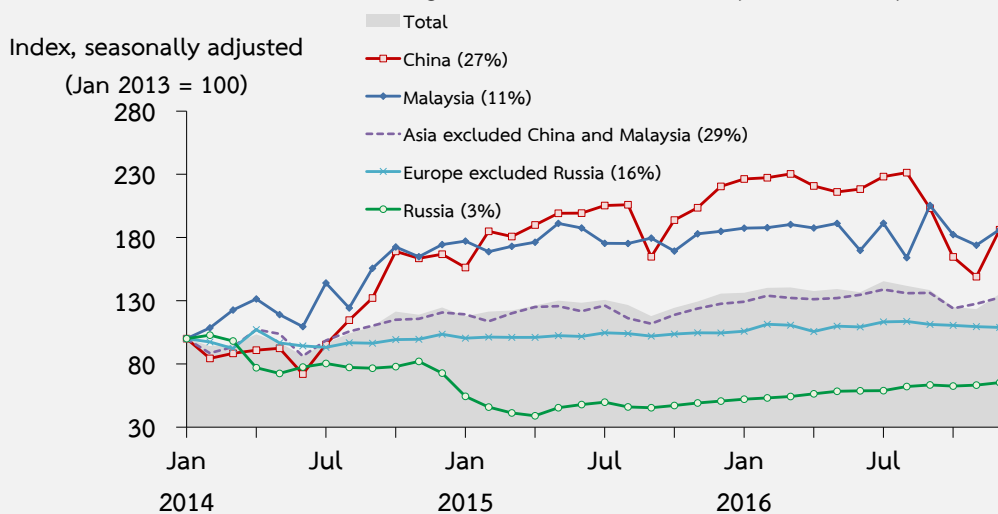
Year 2016 at a Glance and Outlook for 2017



Source: Office of the National Economic and Social Development Board

In 2016, the Thai economy was faced with a number of headwinds: severe drought, subdued exports, domestic uncertainty, dynamics of global politics and heightened volatility in the global financial market at times. Against this backdrop, the Thai economy still managed to register a 3.2% growth. The robust growth in tourism has continued its important role as a growth driver since the previous year. This also enabled tourist-related services to expand despite some slowdown in late 2016 during the government's crackdown on illegal tours and reduced entertainment activities in the mourning period. Private consumption steadily expanded on the back of improving income and employment in tourism-related service sectors. Farm income recovered after the drought had subsided in the second half of the year.

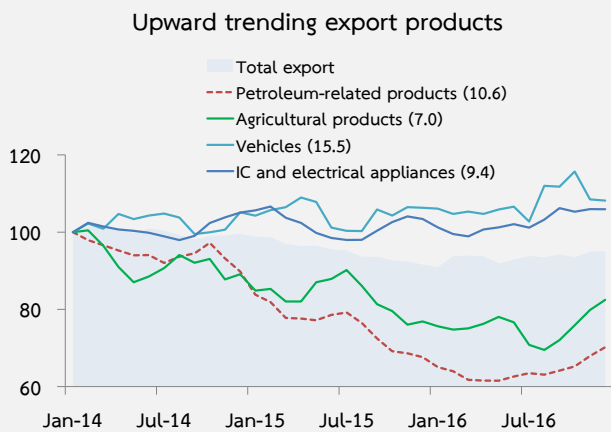
Index of Foreign Tourists Classified by Nationality



Note: Numbers in parentheses represented the ratio of tourists to total tourists
Source: Department of Tourism, index calculations by Bank of Thailand

Consumption was further supported by special factors, namely intense promotional campaigns by several businesses and government's stimulus measures at various times. Moreover, public spending continued to rise especially for public investment in infrastructure projects on transportation with support from measures to boost disbursement efficiency. As a result, overall disbursement rate improved.

The value of merchandise exports stabilized from last year after having contracted for 3 consecutive years. The recovery in exports became more evident in the second half of the year due to three main factors. First, improvement in external demand for various products, such as electrical appliances and electronics (particularly integrated circuits and parts), was in line with regional exports and supported by greater demand from the wave of Internet of Things. Second, some Chinese producers moved their production base to Thailand to avoid anti-dumping measures imposed by the U.S. and the European Union for certain products such as solar panels and vehicle tires. Third, petroleum-related products, whose prices had previously contracted, bounced back in both price and quantity terms. However, slowly recovering global trade volume remained a drag on the overall export recovery. Quantity of exports is therefore expected to gradually improve but will not display a high growth as experienced in the past. Meanwhile, private investment slightly expanded and concentrated in the services sectors and utilities, especially alternative energy businesses that benefited from government measures. Investment also increased in the recovering export-oriented industries.



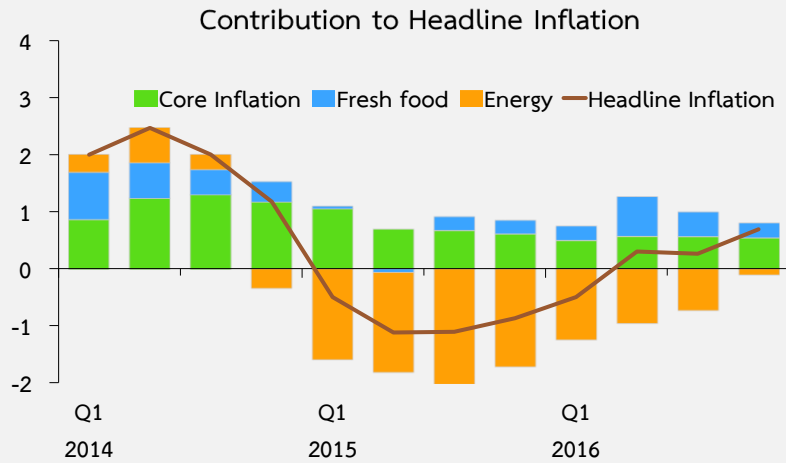
Note: Numbers in parentheses represented the ratio of tourists to total tourists
 Source: Department of Tourism, index calculations by Bank of Thailand

Manufacturing Production Index

Industry (Annual percentage change)	Relative Weight 2015	2015	2016	2016			
				Q1	Q2	Q3	Q4
Food and beverages	18.4	-0.6	0.4	2.3	-2.1	1.2	0.2
Automobiles	19.8	2.2	-1.5	-3.3	12.7	-6.7	-6.5
Rubbers and plastics	10.2	1.5	-0.7	3.3	-4.6	-4.0	2.2
IC & Semiconductor	7.1	0.9	4.7	-2.8	1.7	6.4	13.1
Textiles & Apparels	5.2	-6.9	-12.1	-17.5	-18.4	-10.3	-0.5
Chemicals	5.6	0.4	1.5	3.1	3.3	-1.5	1.0
Cement and construction	4.5	-3.4	0.6	1.2	-3.2	3.5	0.9
Electrical appliances	4.7	-3.2	14.0	8.3	18.5	23.6	6.4
Petroleum	4.9	16.8	3.3	-0.9	1.4	3.9	8.8
Hard Disk Drive	0.9	-22.8	-7.7	-18.5	-13.2	1.1	1.0
Others	18.8	0.2	0.9	-1.8	1.2	0.2	4.3
MPI	100.0	0.3	0.4	-0.9	1.7	-0.3	1.5

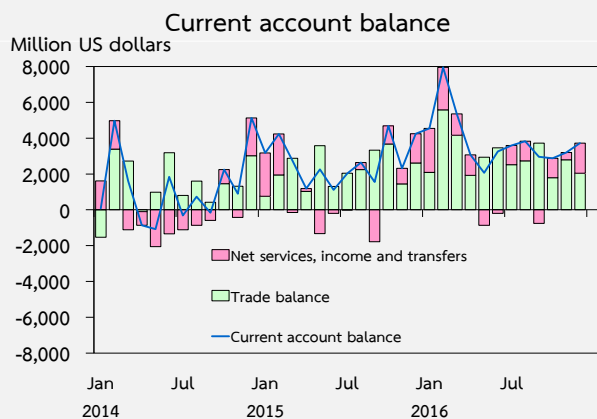
Source: Office of Industrial Economics

On the stability front, headline inflation returned to positive territory as domestic energy prices became more stable and steadily increased in line with higher global oil prices. Nonetheless, core inflation remained low as with last year due to the gradually recovering economic conditions. The unemployment rate stabilized at a low level. Meanwhile, the slow economic recovery led to increased vulnerability in financial stability of households and small enterprises as reflected by their deteriorating debt serviceability. However, overall financial stability remained sound as suggested by sufficiently high loan loss provisions and capital buffers to withstand a potential increase in non-performing loans.

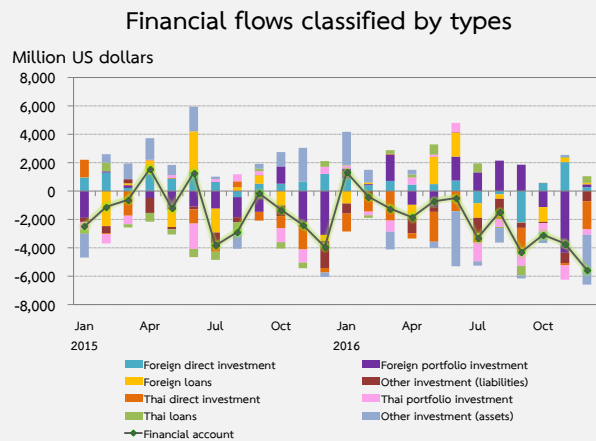


Source: Bureau of Trade and Economic Indices, Ministry of Commerce, calculations by Bank of Thailand

The current account registered a high surplus in both the trade and services, income and transfers accounts. The trade surplus was a result of low imports, especially for energy. The services surplus reflected higher tourism receipts and smaller freight fees in line with low imports. However, the balance of payments posted a smaller surplus due to the deficit in the financial account mainly from outward investment by Thai investors. Outward fund flows by Thai investors consisted of (1) direct investment, especially in energy and services sectors; (2) portfolio investment in equity and debt securities; and (3) deposits abroad by Foreign Investment Fund (FIF). On the other hand, foreign direct investment continued to flow into Thailand for production of computers, electronics and integrated circuits which should benefit exports of such products in the period ahead. There was also foreign direct investment in finance and real estate sectors. Meanwhile, movements of the Thai baht against the U.S. dollar were mostly in line with other regional currencies due to external factors on global economic recovery and monetary policy directions of major advanced economies. But, there were times during which the baht and Nominal Effective Exchange Rate (NEER) appreciated thanks to Thailand's strong external position and better-than-expected economic growth amid several headwinds. Overall, external stability was not a concern due to the high ratio of international reserves to external debt and the low ratio of external debt to GDP.




Source: Bank of Thailand



Source: Bank of Thailand

Monetary conditions remained eased as the policy interest rate was kept stable and low at 1.5 percent throughout the year. Moreover, commercial banks reduced their lending rate by 25 basis points and financing costs in the bond market decreased by 56 basis points. In the first half of the year, medium- and long-term government bond yields fell as a response to heightened concerns of investors on global economic recovery and global political uncertainties. In the second half of the year, government bond yields rose somewhat after investors altered their expectation on the Federal Reserve's monetary policy. However, despite the eased monetary conditions, total corporate financing slightly decelerated. The investment prospect remained subdued amid gradually recovering economy. Loan growth also slowed down partly because some large corporates turned to fundraise in the bond market instead of borrowing by loan. Moreover, financial institutions tightened their lending standard for SMEs.

In 2017, the Thai economy should maintain its growth momentum. Growth drivers are expected to be more balanced between external and domestic demand. On the external front, exports should recover in accordance with trading partners' economies and a supporting factor from rising demand for electronics in the global market. Public spending, private consumption and tourism are expected to grow continuously. In addition, **inflation should gradually rise** according to higher global oil prices and recovering domestic demand.

 Thailand's Economic Conditions in 2016							
	2014	2015			2016		
	Year	H1	H2	Year	H1	H2	Year
<i>(Annual percentage change, unless specified otherwise)</i>							
Gross Domestic Product^{1/}	0.9	3.0	2.9	2.9	3.4	3.1	3.2
Demand (expenditure)							
Private consumption expenditure	0.9	2.0	2.3	2.2	3.4	2.8	3.1
General government consumption expenditure	2.8	1.9	4.1	3.0	5.6	-2.0	1.6
Gross fixed capital formation	-2.2	5.8	3.1	4.4	4.2	1.4	2.8
- Private	-0.8	0.0	-4.4	-2.2	1.4	-0.6	0.4
- Public	-7.1	28.0	30.5	29.3	12.9	7.1	9.9
Exports of goods and services	0.2	1.6	-0.2	0.7	2.9	1.3	2.1
Imports of goods and services	-5.3	1.5	-1.5	0.0	-3.9	1.1	-1.4
Supply (production)							
Agriculture	-0.6	-6.4	-5.0	-5.7	-1.3	2.4	0.6
Manufacturing	0.1	1.3	1.7	1.5	1.0	1.8	1.4
Construction	-2.4	17.4	16.7	17.0	10.8	5.6	8.3
Services and others	1.8	5.0	4.3	4.6	4.9	4.0	4.4
Domestic stability							
Headline Consumer Price Index	1.89	-0.81	-0.99	-0.90	-0.09	0.47	0.19
Core Consumer Price Index (excluding raw food and energy)	1.59	1.22	0.88	1.05	0.73	0.75	0.74
Unemployment (percent of total labor force)	0.8	0.9	0.9	0.9	1.0	1.0	1.0
Public debt (end of period, billion baht)	5,624	5,684	6,005	6,005	5,924	5,922	5,922
Share of GDP (end of period, percent)	42.8	42.7	44.4	44.4	42.8	42.2	42.2
External Stability (billion U.S. dollars)							
Trade balance	17.3	11.5	15.3	26.8	20.1	15.6	35.8
Current account balance	15.1	14.7	17.5	32.1	26.2	20.2	46.4
Capital account balance ^{2/}	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Financial account balance	-16.2	-2.6	-14.5	-17.1	-3.4	-21.4	-24.8
Balance of payments ^{2/}	-1.2	7.3	-1.5	5.9	17.7	-4.8	12.8
Gross international reserves (end of period)	157.1	160.3	156.5	156.5	178.7	171.9	171.9
External debt (end of period)	141.7	139.0	131.4	131.4	143.1	131.5	131.5
International reserves to short-term debt (ratio) ^{2/}	2.8	2.8	3.0	3.0	2.9	3.2	3.2
External debt to GDP (percent)	34.7	33.7	32.1	32.1	35.4	32.5	32.5
External debt to export value (percent)	50.3	49.1	46.7	46.7	51.1	47.1	47.1
Short-term debt to external debt (percent)	40.2	40.7	40.0	40.0	42.5	40.3	40.3
Monetary statistics (end of period) (billion baht)							
Monetary base	1,666.8	1,549.9	1,710.1	1,710.1	1,639.8	1,816.4	1,816.4
Annual percentage change	5.4	2.8	2.6	2.6	5.8	6.2	6.2
Narrow money	1,682.5	1,619.8	1,778.1	1,778.1	1,742.3	1,864.2	1,864.2
Annual percentage change	1.3	2.2	5.7	5.7	7.6	4.8	4.8
Broad money	16,809.1	17,101.6	17,551.7	17,551.7	17,835.2	18,289.4	18,289.4
Annual percentage change	4.7	6.1	4.4	4.4	4.3	4.2	4.2
Financial institutions' deposits including bills of exchange ^{3/}	16,402.1	16,776.4	17,269.4	17,269.4	17,575.3	17,931.5	17,931.5
Annual percentage change	4.0	6.3	5.3	5.3	4.8	3.8	3.8
Financial institutions' private credits ^{3/}	15,309.2	15,651.6	16,154.4	16,154.4	16,350.1	16,721.5	16,721.5
Annual percentage change	4.2	5.3	5.5	5.5	4.5	3.5	3.5
Interest rates (end of period) (percent per annum)							
- Repurchase rate, one-day	2.00	1.50	1.50	1.50	1.50	1.50	1.50
- Overnight interbank rates (mode)	1.90	1.40	1.40	1.40	1.40	1.40	1.40
- Time deposit rate, one year ^{4/}	1.73	1.50	1.40	1.40	1.38	1.38	1.38
- Prime rate (MLR) ^{4/}	6.75	6.51	6.51	6.51	6.26	6.26	6.26
Exchange rate (end of period) (baht per U.S. dollar)	32.90	33.77	36.00	36.00	35.13	35.80	35.80
Nominal Effective Exchange Rate^{5/} (end of period) (2012=100)	109.08	108.84	106.07	106.07	105.11	108.13	108.13

หมายเหตุ: 1/ Chained volume measures

2/ Preliminary data as of 22 February, 2016

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

4/ Average rate of four largest commercial banks

5/ Higher NEER means that the baht appreciated compared to trading partners' and competitors' currencies

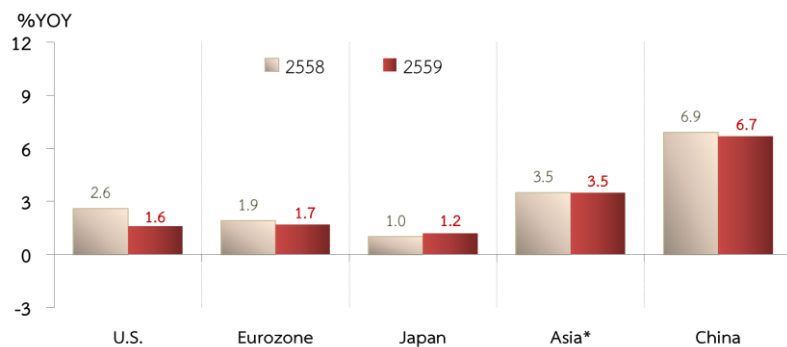
Sources: Office of the National Economic and Social Development Board, Ministry of Commerce, National Statistical Office, Public Debt Management Office and Bank of Thailand



1. Global economies

Thailand's major trading partners grew at a slower pace than last year amid weak global production and trade. The second half of the year saw a clearer recovery signal, especially in Asia with thriving exports.

World's Economic Growth in 2015 and 2016



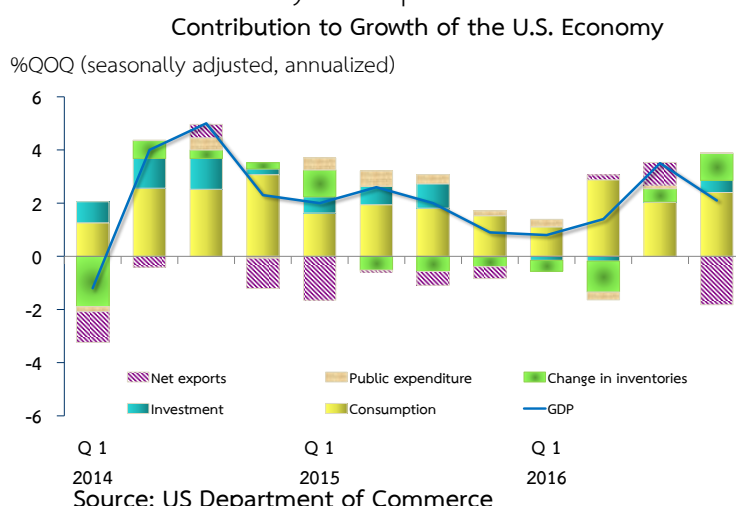
Note: *Calculated using weights according to GDP-PPP of 5 Asian countries including Indonesia, the Philippines, South Korea, Taiwan and Singapore.

Source: Bureau of Economic Analysis (U.S. Department of Commerce), Cabinet Office of Japan, CEIC, Eurostat and calculation by Bank of Thailand

Advanced economies (G3)

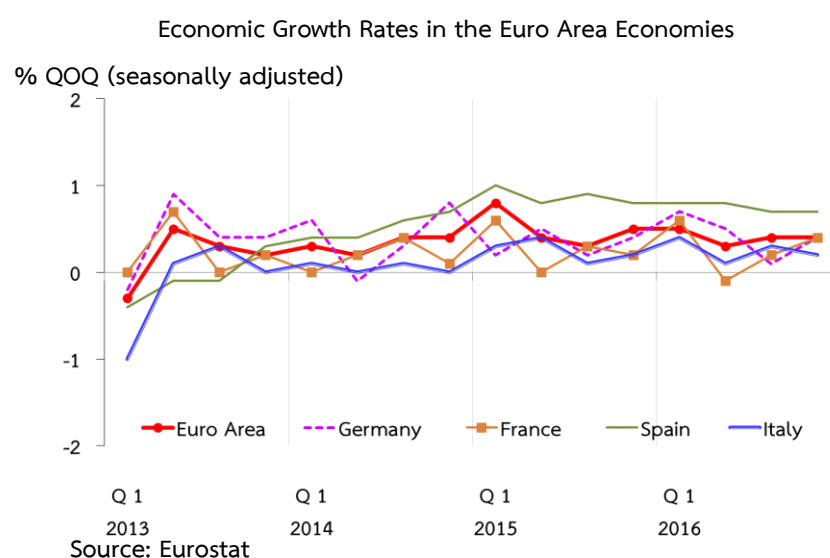
The U.S. economy expanded at a lower rate compared to last year. However, economic fundamentals continued to improve, as reflected by a solid recovery in the labor market and higher inflation. Moreover, investment showed some recovery in the second half of the year in line with improved business confidence.

In 2016, the U.S. economy grew by 1.6 percent, down from 2.6 percent last year. The lower growth rate was attributed to a slowdown in private investment, particularly in the energy sector that faced depressed oil prices. Inventory build-up also lessened for machineries. Despite the drag in the former half of the year, investment recovered somewhat in the latter half. In particular, investment in the energy sector showed some improvement following the global upward trend of crude oil prices. Meanwhile, exports were impacted by the U.S. dollar appreciation and slow global economic recovery. Nonetheless, private consumption continually expanded with support from gradually improving household income, solid labor market conditions, especially employment in services and production for domestic sales, and near full employment level. As a result, the unemployment rate declined to 4.7 percent in late 2016, the level similar to that prior to the Global Financial Crisis. Sentiment of the private sector was also robust. Moreover, inflation trended up to the rate close to the U.S. Federal Reserve's (Fed) target at 2 percent. These conditions led the Fed to hike the interest rate by 25 basis points in December 2016. While economic stimulus measures of the new President, both through taxes and spending, were expected to benefit growth in the short term, and could have implications on the country's financial and fiscal stability in the period ahead.



The euro area¹ economies slowly expanded as private consumption was supported by eased monetary conditions and gradually recovering employment.

In 2016, the euro area economies expanded by 1.7 percent, down slightly from the 1.9 percent growth in the previous year due to export slowdown. Meanwhile, the referendum result for the U.K. to leave the European Union (Brexit) in June 2016 only affected consumer confidence in the euro area in the short term. Gradually improving economic fundamentals and employment as well as eased monetary conditions² enabled private consumption to expand and spearhead this year's growth.



Japan's economy gradually expanded on the back of government stimulus measures.

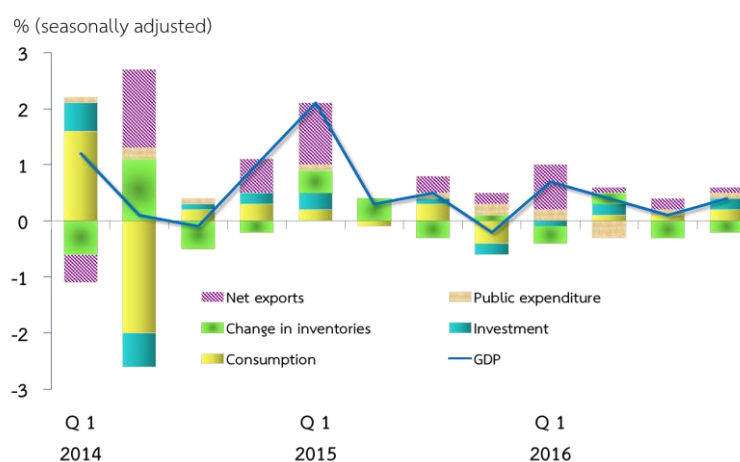
The Japanese economy in 2016 grew by 1.2 percent, up from last year's growth at 1.0 percent. The higher growth came from

¹ The euro area comprises of 19 countries using the euro currency: Greece, Cyprus, the Netherlands, Belgium, Portugal, France, Finland, Malta, Germany, Luxembourg, Latvia, Lithuania, Spain, Slovakia, Austria, Italy, Estonia and Ireland.

² The European Central Bank: ECB announced additional monetary policy easing at its meeting in March 2016: (1) reduce the policy interest rates on main refinancing operations from 0.05 to 0.0 percent, those on deposit facility from -0.3 to -0.4 percent, and those on marginal lending facility from 0.3 to 0.25 percent; (2) increase asset purchasing from 60 to 80 billion euros each month until the end of March 2017 as well as extending the coverage to include corporate bonds (in non-bank sectors); (3) offer low long-term lending rates for the 4-year tenure (TLTRO II). At the meeting in December 2016, the ECB agreed to buy 60 billion euro of assets each month from April to December 2017, or until when inflation is close to the target.

thriving exports following the recovery of Japan's trading partners' demand. Meanwhile, private consumption gradually rose as supported by the annual upward wage revision. Public spending remained an important driver of the economy through both the government's additional economic stimulus measures and spending on reconstruction and repair after the earthquakes in the latter half of the year. Moreover, overall monetary conditions continued to be accommodative and conducive to economic recovery.

Contribution to growth of Japan's economy



Source: Cabinet Office of Japan

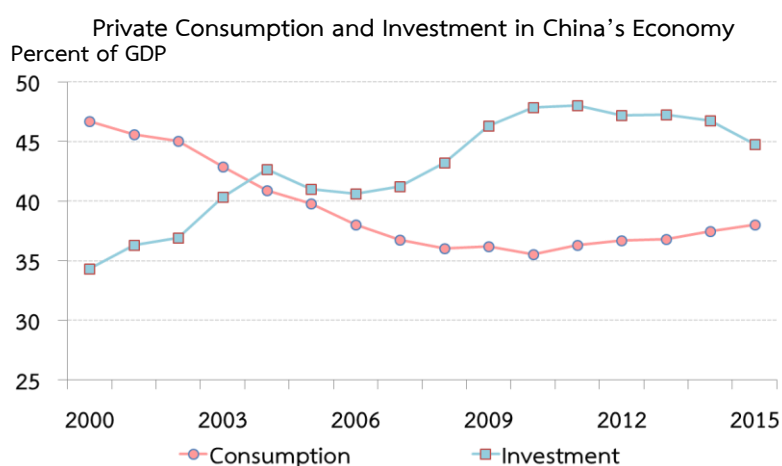
In 2017, overall growth of the G3 economies is expected to continue. The U.S. economy's growth momentum would continue on the back of its solid economic fundamentals while the euro area's and Japanese economies are expected to slowly recover. In particular, the Japanese fiscal stimulus may subside as the government aims to balance the budget.

China's and Asian economies grew at a slower pace. Key economic drivers this year were private consumption and public spending. In the second half of the year, exports showed some sign of recovery.

The Chinese economy grew by 6.7 percent, down from 6.9 percent last year, due to the impact from the government's shifting focus to maintaining financial stability and supporting domestic consumption, rather than exports and investment. However, the slower growth remained within the authority's growth target between 6.5-7.0 percent. Effects from such economic structural reforms, coupled with overall weak global demand from slow economic recovery and structural changes in global trade, resulted

in a contraction of Chinese exports. Moreover, the government's policy to reduce overcapacity especially in heavy industries stalled investment in the manufacturing sector. Meanwhile, the government played a key role in balancing economic growth and reform by pushing through infrastructure projects and announcing measures to curb the supply of real estate. Private consumption expanded and played an important role in driving the economy this year.

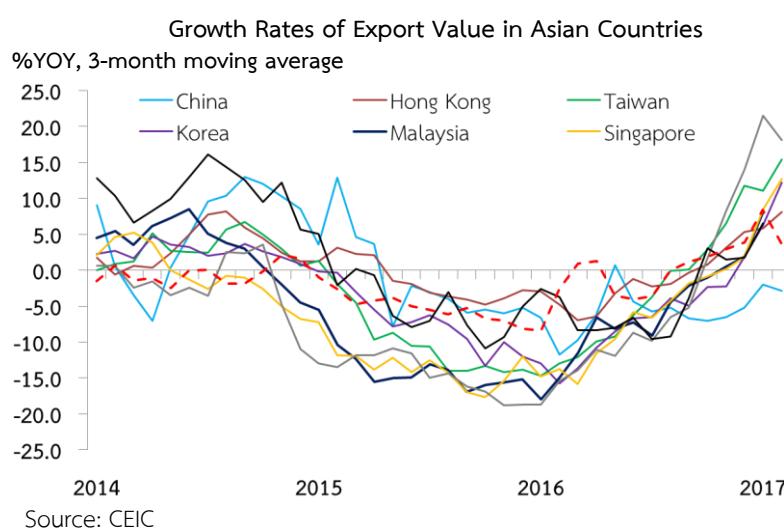
On the stability front, the Chinese government issued several measures to alleviate risks in various areas following concerns by many counterparts about Chinese economy's stability issues. These included 1) measures to surveillance high-level corporate debt and rising number of defaults, 2) measures to curb speculation in real estate market in large cities, 3) measures to control capital outflows, particularly during periods of anticipations about the Fed raising its policy interest rate which resulted in yuan's rapid depreciation, and 4) measures on keeping stock market volatility under control.



Asian economies excluding China grew at a similar rate as the previous year at 3.5 percent. Growth was supported by exports of electronics and commodities whose recovery gained traction in the second half of the year and benefited from the technological cycle and global demand recovery. Nonetheless, merchandise trade continued to be held back by changing global trade structure, especially in China who relies less on imports (Box 1: Determinants of structural changes in global trade). The initial recovery of exports had some positive spillovers on investment

and employment in some economies such as the export-reliant Taiwan. Meanwhile, private consumption moderately expanded thanks to expansionary fiscal policy and monetary policy easing that supported domestic spending.

In 2017, growth outlook of Asian and Chinese economies is expected to strengthen mainly due to the recovery of Asia's exports and its positive effects on domestic demand more evidently. Moreover, monetary and fiscal policies will continue to be supporting factors for the recovery of Asian economies. However, China's growth is expected to slow down as a result of economic structural reforms. In particular, lower investment by heavy industries and stalled retail sales following a vehicle tax increase at the beginning of 2017 could set back the recovery momentum of other Asian economies. The recovery of exports warrants close monitoring going forward.



Overall trading partners' economies—both in G3 and Asia—showed some recovery, as supported by a stronger growth in the U.S. and synchronizing recovery of other economies. **However, overall risks pertaining to Thailand's trading partners' economies increased** on account of several issues that warrant monitoring: (1) expectations on the Fed's policy interest rate hikes; (2) trade policy of the new U.S. President and risks to exports and direct investment abroad; (3) effectiveness of Chinese government's effort on maintaining growth while ensuring financial stability with economic reforms; (4) weak banking sector in Europe, especially Italian banks who faced insufficient capital buffers and

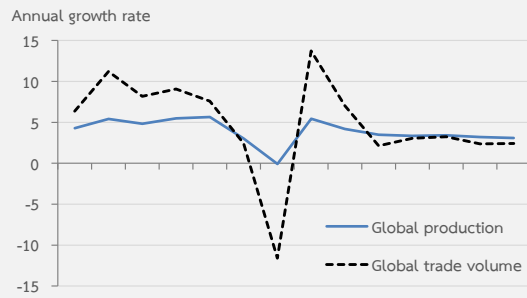
high NPL problems; (5) political uncertainties in many countries, particularly the upcoming elections in France and Germany in 2017, and uncertainties surrounding trade negotiations between the U.K. and the European Union following Brexit; and (6) geopolitical risks such as heightened political tensions following terrorism and immigration situations in some countries.

Such risk factors may induce higher volatility in financial and money markets in many countries, especially those with vulnerable economic stability and a large ratio of foreign asset holdings such as Malaysia, Indonesia and South Korea. These risks may pose barriers to growth momentum of economic recovery in the period ahead. Moreover, Japan may face a risk from yen appreciation following heightened global financial market volatility.

Determinants of Structural Changes in Global Trade

In the aftermath of the economic crisis in 2008, growth in global trade volumes decelerated as a result of 1) cyclical factor, i.e. the global economic slowdown, especially in advanced economies which were major export markets for many countries; 2) structural factor, i.e. shifts in global trade pattern. **The relationship between global economic growth and growth in trade volume has decreased compared to the past** (Chart 1). Shifts in the global trade pattern can be attributed to number of factors including market mechanisms and government policies.

Chart 1: Growth of global output and global trade volume

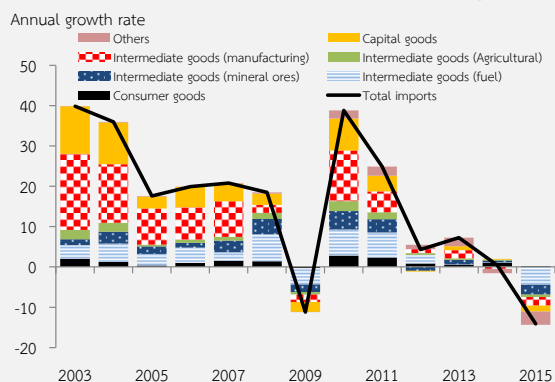


Source: International Monetary Fund (IMF)

1) New normal for the global economy.

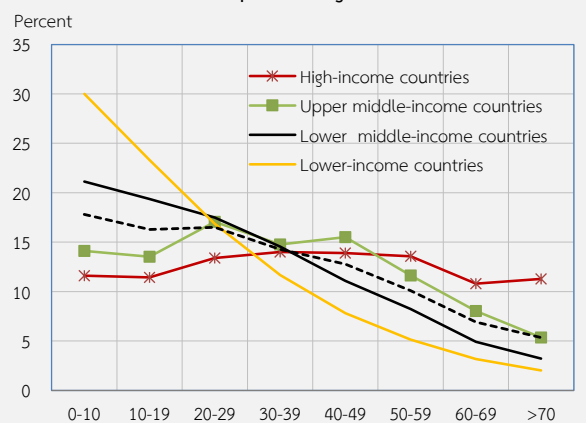
Several countries are experiencing lower economic growth rates than in the past. The reasons are: (1) **Major economies underwent the financial market crisis in 2008** which resulted in closures of a large number of businesses and higher unemployment rates. Furthermore, as some workers were unemployed for a long time and some had new jobs in which they did not have suitable skills, overall productivity declined. Moreover, as several countries faced high debt levels including public debts, there were constraints on using fiscal policy to stimulate their economies. High debt burdens of businesses also limited their ability to accumulate capital. The slowdown in private investment had long-term impact on economic growth of these countries. (2) **China's economic reform policies** are being pushed by the Chinese government to rebalance the economy. The reform places a greater focus on economic stability than on growth, less reliance on exports and investment, particularly in heavy industries where excess supplies exist, to drive the economy. Emphasis is shifted toward domestic consumption and quality investments such as electronics and value-added services. As a result, China's future growth rates will likely be more moderate

Chart 2: China's imports classified by types of goods



Source: Trademap

Chart 3: Population age structure



Note: data as of 2016

Source: UN

than in the past. In addition, China's new drivers from consumption and services sectors are less reliant on imported raw materials and intermediate goods than the export and investment sectors. Hence, China's imports will also tend to slow down (Chart 2). (3) More serious **aging population** problems, particularly in advanced and upper-middle income countries, have led to a slowdown in labor-related economic drivers and aggregate demand (Chart 3).

2) Changes in the global value chain (GVC), especially in case of electronic products where GVC connectedness is high. In the past, China was like the world's manufacturing hub, importing raw materials and intermediate goods for assembly, then exporting finished products to world markets. Most of these activities were contract manufacturing for multi-national companies in advanced countries. However, with the Chinese government's policy to move China up the value chain with China's own brands of comparable product quality but at cheaper prices, China's increasing capability to produce high-technology electronic parts has shortened the value chain in Asia. The change is reflected in the downward trend of the ratio of imports of raw materials and intermediate goods to GDP (Chart 4). The policy to attract leading foreign companies to invest in China also lured American, Japanese, Korea, and Taiwan's electronics brand leaders to shift their production bases to China. In addition, China's own electronic product developments, particularly smart phones, have increased its shares in global trade in recent years. Consequently, countries that lost their competitiveness to China saw their exports decline. (Chart 5).

Chart 4: Ratios of imports to GDP

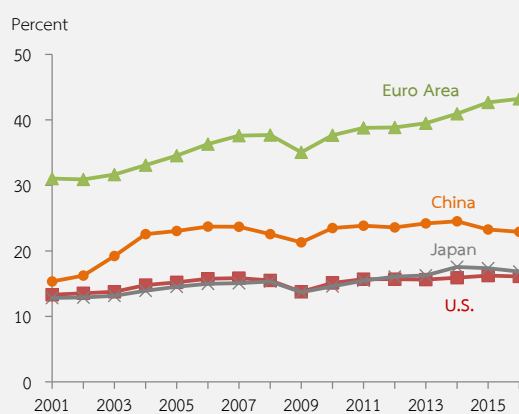
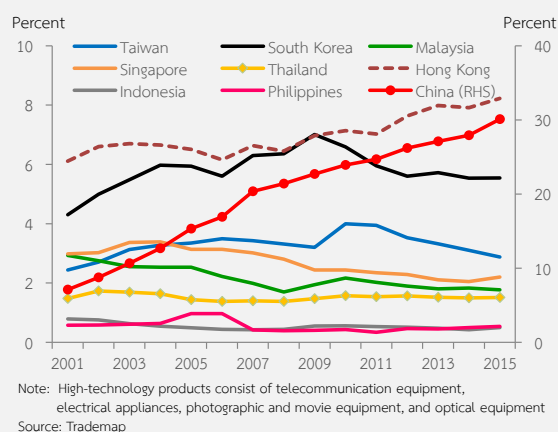


Chart 5: Global shares of high-technology products by country



3) Relocation of production base to advanced countries, following the decline in production cost advantages in Asia due to rising labor costs after the global financial crisis. Moreover, technological advancements contributed to increased substitution of machines for labor. As a result, several multi-national companies in advanced countries decided to relocate their production bases back home or neighboring countries where production costs are lower, such as Mexico and Eastern European countries (Charts 6 and 7).

Chart 6: U.S. imports (excluding fuel) by country of origin
Seasonally adjusted index (Jan 2013=100)

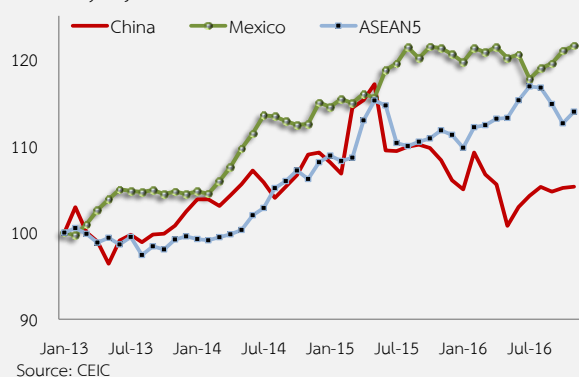
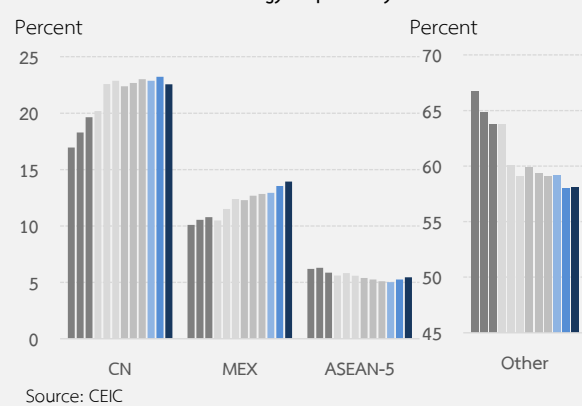


Chart 7: Share of non-energy imports by the U.S. in 2005-2016

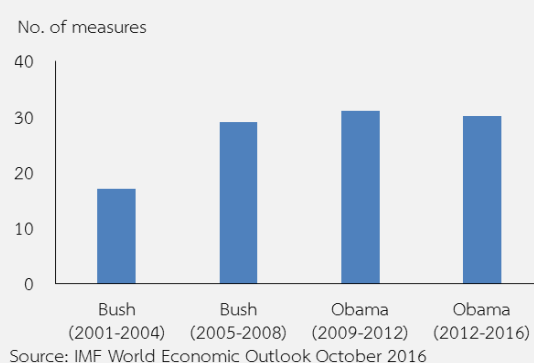


4) Increasing trade protectionism trends. Over the past two decades many regions continued to enter trade negotiations and agreements aimed at bringing down tariff barriers. In practice, however, several countries have increased non-tariff barriers in the midst of the global economic slowdown. In the aftermath of the financial crisis, governments in many advanced countries that saw their industrial sectors facing long periods in the doldrums and subsequent high unemployment have resorted to helping the weak manufacturing sectors and domestic workers. Consequently, there was a rising tendency for companies to engage with measures to protect the domestic economy, as reflected in the rapid rise in the imposition of non-trade barriers since 2014 (Chart 8 and Chart 9). In the periods ahead, trade protectionism is likely to increase with the new U.S. president's "America First" policy, which may further slow down global trade volume.

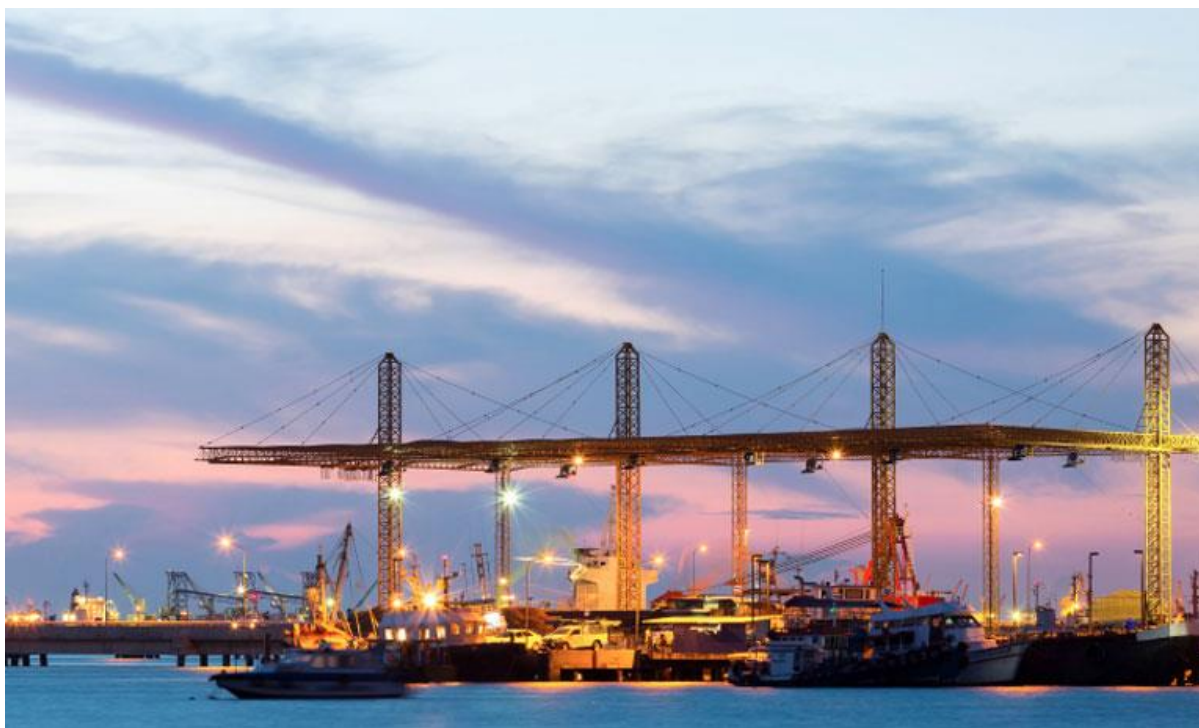
Chart 8: Use of non-tariff barriers in global trade



Chart 9: U.S. non-tariff barriers against China



In conclusion, clear signs of export recovery in many Asian countries during the second half of 2016 would likely to continue in 2017. However, prevailing problems in the global trade pattern, which are likely to intensify in the periods ahead, may prevent global trade volume and exports of many countries from expanding at rates seen in the past. The trend that trade protectionism measures may intensify poses a risk that Thailand and many countries must monitor and adopt measures to deal with the repercussions in the periods ahead.



2. International Trade and Balance of Payments

2.1 Merchandise trade

Merchandise exports

Value of merchandise exports stayed unchanged from last year after having contracted for 3 consecutive years. While export quantity of some products showed some improvement, some drags remained due to slow recoveries of trading partners' economies and existing structural problems.

In 2016, value of merchandise exports stayed unchanged from last year after having contracted for 3 consecutive years. Quantity of exports grew by 0.4 percent, partly on account of gold exports which posted a high growth this year (excluding gold, export quantity growth was 1.3 percent). Gold exports were driven by heightened demand for safe assets amid uncertainties surrounding monetary policies of major advanced economies and the Brexit referendum in the first half of the year. In the latter half, quantity of exports improved, consistent with capacity expansion

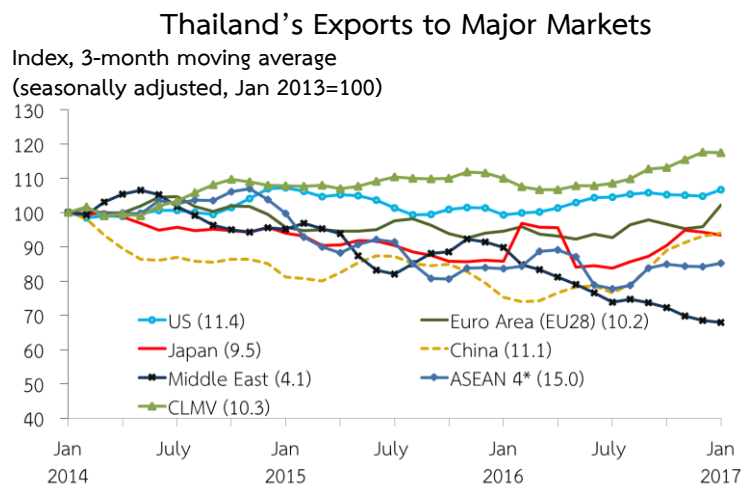
to accommodate the relocation of production base and market penetration of several products, namely (1) solar panels and tyres from new production base in Thailand; (2) vehicle and parts to serve higher demand from China and Australia, as well as increased demand for automotive engines from South Africa, Indonesia and the Philippines; (3) air conditions thanks to rising demand from Europe and Asean markets with warmer-than-usual weather conditions and a real estate boom in some countries; and (4) demand recovery for electronics from the wave of the Internet of Things, which also supported the recovery of exports of many Asian economies. Moreover, export quantity of fishery products expanded due to improved supply of shrimps after disease problems mitigated in Thailand, while competitors still faced limited raw materials from the shrimp disease problems.

However, export prices remained contracted for four years in the row, consistent with global crude oil and commodity prices. As a result, exports of oil-related products fell, namely petroleum, chemicals, petrochemicals, and rubber, altogether accounted for 14.5 percent of total export value. Moreover, export prices of cassava decreased from last year owing to a slowdown in demand from China after the Chinese government's policy switched to support corn usage instead of cassava to produce ethanol.

In addition, Thai export sector was held back by structural problems stemming from (1) changes in global trade structure, in particular from the effects of China's economic reform to upgrade its domestic production by placing more emphasis on more sophisticated production process which resulted in a lower degree of China's reliance on imports. This in turn slowed down demand from China for some Thai exports such as petrochemical, chemical and electronics products; (2) Thailand's own structural issues included limitations on technology development to adapt to changing consumer behaviors. For example, a transition from personal computers (PC) to smartphones and tablets hampered Thailand's exports of hard-disk drives (HDD) in line with the continuous decline in global demand. Moreover, the Thai labor market revealed several limitations such as a shortage of labor in terms of quantity and quality as well as high wages. Lastly, the

withdrawal of Thailand's Generalized Scheme of Preferences (GSP) in the European market prompted a relocation of labor-intensive industries such as textiles and apparels to neighboring countries. Therefore, exports of such products contracted for the third consecutive year.

On the market front, Thai exports to many destinations recovered. The Middle East market was an exception as the high contraction in 2016 was a result of their subdued economic conditions. Exports to G3 markets grew consistent with their economic recoveries. Moreover, exports to Australia significantly rose on account of export of vehicle. However, the China market contracted at a lower rate than the previous year. In fact, exports of optical appliances, vehicle and rubber products registered a high growth in line with China's rising production of smartphones and vehicles and improving real estate market.



Source: CEIC, calculation by Bank of Thailand
 Note: Number in parentheses shows the proportion of Thai exports to those countries in 2015
 *ASEAN 4 consists of the Philippines, Malaysia, Singapore, and Indonesia

In 2017, export value is expected to expand on the back of both higher price and quantity. Export price should trend up according to crude oil and commodity price developments, while export quantity is expected to recover in line with the global economy. In particular, investment recovery in major advanced economies should create greater demand for electronics and electrical appliances. However, Thai exports are still faced with risks from both aforementioned structural issues and uncertainties regarding the U.S. trade policy that could undermine its import demand from Thailand in the future.

Export Value by Categories of Goods (in USD Terms)

Growth from the same period in the previous year (%YOY)	Share in 2016	2015	2016 ^P	2016 ^P			
				Q1	Q2	Q3 ^P	Q4 ^P
Manufacturing goods	87.2	-5.5	-1.3	-2.7	-5.8	0.9	2.6
Automobile	15.5	2.5	3.0	-1.5	6.3	5.7	1.9
Electronics	14.5	-3.7	-2.8	-5.5	-7.6	0.7	0.8
Chemicals, petrochemical and petroleum products	10.7	-21.0	-12.3	-18.9	-19.9	-12.0	3.1
Agro-manufacturing products	12.0	-5.4	0.5	0.9	-1.5	0.6	1.9
Electrical appliances	5.8	-2.1	3.6	-2.7	5.5	8.5	3.4
Metal products	4.3	-4.1	-0.2	-10.8	-1.8	9.6	2.2
Textiles and apparel	3.1	-8.2	-5.5	-6.6	-6.0	-5.3	-3.8
Optical instruments	1.5	29.5	2.9	5.6	2.3	6.5	-1.4
Agricultural goods	7.0	-10.7	-6.3	-7.8	-11.7	-11.9	6.2
Rubber	2.1	-16.0	-12.1	-22.2	-8.4	-27.3	15.0
Rice	2.0	-15.2	-4.6	11.8	-13.2	-12.5	-4.9
Cassava	1.0	-0.7	-19.3	-17.1	-37.0	-11.3	-4.0
Fishery products	1.0	-17.2	15.2	3.3	18.6	22.6	16.2
Other goods	3.6	22.2	75.5	193.5	82.9	17.5	33.4
Total exports	100.0	-5.6	0.0	-1.5	-2.5	0.4	3.6
Total exports (excluding gold)		-6.1	-1.6	-5.2	-4.3	-0.1	3.1

Note: P = Primary data

Source: Ministry of Commerce, and Bank of Thailand

Merchandise imports

The value of merchandise imports contracted as crude oil prices stayed below the level in the previous year and imported raw materials and capital goods remained low. Meanwhile, imports of consumer goods slightly expanded.

In 2016, merchandise import value contracted in many categories. Imports of raw materials and intermediate goods contracted as import prices of fuel, metals and chemicals fell in line with global crude oil and commodity prices. Moreover, imports of electronics parts declined, consistent with the negative growth in exports of electronics products. Excluding aircrafts, capital goods contracted from lower imports of machinery and equipment amid low overall private investment. Value of gold exports fell from last year because domestic demand for gold subsided following higher global gold prices.

Nonetheless, some imports rebounded to show positive growth such as consumer goods, partly due to imports of tuna to be reprocessed as canned fish for exports. Excluding the tuna items, import of consumer goods grew in line with steady growth in private consumption and number of foreign tourists.

Import value by categories of goods (in USD terms)

Growth from the same period in the previous year (%YOY)	Share in 2016	2015	2016 ^P	2016 ^P			
				Q1	Q2	Q3 ^P	Q4 ^P
Raw materials and intermediate goods	52.7	-17.6	-7.6	-19.1	-12.9	-4.7	9.2
Raw materials and intermediate goods excluding fuels	40.6	-6.8	-2.7	-12.3	-4.9	-0.5	8.4
Fuels	12.1	-37.4	-20.9	-38.2	-31.7	-16.6	11.7
Capital goods	26.6	-3.5	-2.5	-0.5	-10.6	2.2	-1.1
Consumer goods	10.9	1.5	5.8	2.7	5.5	8.0	7.1
Nondurable goods	6.9	-0.3	6.2	-2.2	7.0	11.6	8.7
Durable goods	4.0	4.8	5.3	11.8	3.0	2.0	4.4
Other imports	9.8	1.1	3.0	-15.0	17.0	0.6	13.1
Automobile and parts	5.2	-4.2	8.1	-1.7	15.9	10.8	8.7
Total imports	100.0	-10.6	-4.7	-14.7	-7.8	-2.4	6.7
Total imports (excluding gold)		-11.2	-4.3	-12.9	-8.3	-1.5	6.5

Note: P = Primary data

Source: Ministry of Commerce and Bank of Thailand

In 2017, import value is expected to grow on the back of higher crude oil prices and increasing import quantity which is consistent with improving outlook of exports and domestic demand.

2.2 International Trade in Services

Export of services highly expanded on the back of tourism receipts. Import of services, however, contracted because expenses on transportation of goods fell following lower value of merchandise imports.

Foreign tourist arrivals in 2016 amounted to 32.6 million persons, up by 8.9 percent from the previous year. Growth momentum was well maintained prior to the government's measures to regulate illegal tours in the fourth quarter. Chinese tourists (26.9 percent of total tourists) increased by 10.3 percent due to Thailand's popularity and marketing strategies on price promotions to attract tour groups. Other tourists (73.1 percent of total tourists) expanded by 8.4 percent for both ASEAN and European tourists. In particular, those from CLMV benefited from improved income per capita thanks to their economic growth. Russian tourists rebounded to show a positive growth after having contracted for 2 consecutive years, following their economic recovery on the back of higher oil prices and the strong ruble. Moreover, Thailand's tourism sector benefited from route

expansions of low-cost airlines and new routes to Thailand from other countries as well as increased capacity to accommodate more passengers in Don Mueang and Phuket international airports.

In the fourth quarter, however, tourism receipts slowed down due to temporary factor. The number of Chinese tourists fell following the government's measures to regulate illegal tours, which prompted tour operators to delay receiving Chinese tour groups. Also, there was a temporary increase in Visa-on-Arrival¹ fees in Thailand amid intense price competition and visa fee reductions in other destinations. In addition, the tourism sector was affected by a temporary reduction of entertainment activities during the mourning period since October.

Number of foreign tourists and tourism receipts in 2016

Country of origin	Million persons	%YoY	Receipts (million baht)	%YoY
China	8.8	10.3	438,782	15.2
ASEAN	8.7	9.3	254,427	12.7
Europe	6.2	9.6	460,154	13.3
The Americas	1.4	13.8	102,164	18.4
Middle East	0.7	13.5	54,447	15.6
Other	6.8	4.7	331,295	6.5
Total	32.6	8.9	1,641,268	12.6

Source: Department of Tourism

In 2017, the number of foreign tourists is expected to continually expand, despite at a slower rate, as Thai operators previous targeting Chinese groups continue to adjust their business models. The measures to curb illegal tours are expected to benefit both the reputation and tourism receipts in the long run. The Free

^{1/} On 18 August 2016, the Ministry of Foreign Affairs released a statement on fee adjustments for visa on arrival for foreign tourists wishing to visit Thailand. The Immigration Office increased the single entry visa-on-arrival fees from 1,000 to 2,000 baht since 27 September 2016. Later on 22 November 2016, the Cabinet agreed to revert the visa-on-arrival fees from 2,000 to 1,000 baht and to exempt fee visa fees at 19 originating countries for 3 months (December 2016-February 2017). On 7 February 2017, the Cabinet extended the aforementioned visa fee reduction and exemption measures for 6 months (March-August 2017) with a wider coverage of 21 countries.

Independent Traveler group (FIT) from China and other countries is expected to grow, especially those from CLMV where the governments announced tourism campaigns among member countries such as a signed agreement to promote cross-border tourism and joint plans of travel programs and transportation connectivity.

2.3 Balance of Payments

The balance of payments recorded a high surplus due to substantial current account surplus as a result of low levels of imports. Meanwhile, the financial account registered a deficit as Thai investors continued to make direct investment abroad.

Current Account

The current account registered a sizeable surplus of 46.8 billion U.S. dollars in 2016, or around 11.4 percent of GDP, up from the 32.1 billion U.S. dollar surplus in the previous year. This was attributable to the low value of merchandise imports, particularly energy that declined in accordance with crude oil prices. As a result, the trade account recorded a substantial surplus. The services, income and transfer accounts also posted a considerable surplus, mainly from high growth in tourism receipts in line with the increase in number of tourists. Moreover, service expenses contracted due to expenses on transportation of goods.

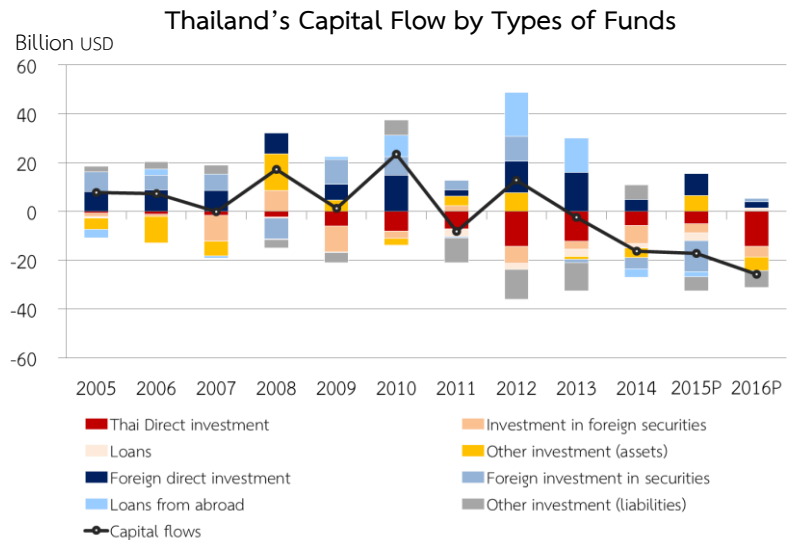
Financial Account and Balance of Payments

In 2016, the financial account recorded a deficit, or an outflow, of 25.7 billion U.S. dollars compared with the 17.1 billion U.S. dollar deficit in the previous year. The deficit was attributable to: (1) Thai Direct Investment (TDI) abroad, particularly in financial services, production of crude oil and natural gas, and wholesale trade businesses, and (2) portfolio investment abroad in debt and equity securities by Thai investors and other investments, especially deposits abroad by Foreign Investment Funds (FIF). Meanwhile, net foreign portfolio investment switched to show a surplus this year, consistent with investment trends in the region, as the Fed delayed their interest rate hike until the end of the

year and many major advanced economies maintained their monetary policy easing.

Foreign direct investment (FDI) declined by 70 percent from the previous year mainly because Thai investors purchased a Thailand-based retail business from foreign investors. Excluding this transaction, FDI did not decrease much as continuous FDI inflows were recorded from Singapore, Hong Kong and Japan, particularly in the real estate, production of food, telecommunication businesses.

The overall balance of payments posted a surplus of 12.8 billion U.S. dollars, a larger surplus from the 5.9 billion U.S. dollars surplus recorded last year.



Note: P = Primary data

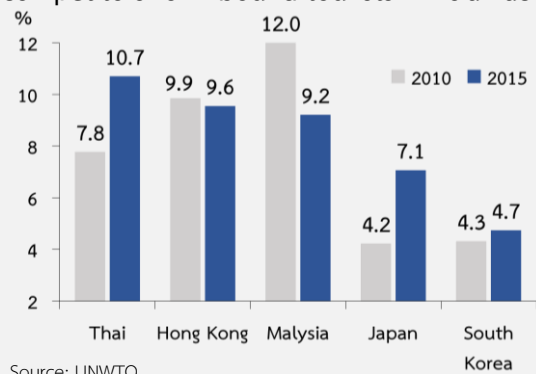
Source: Bank of Thailand

Balance of Payments						
(Units: Million USD)	2015 ^P	2016 ^P	2016 ^P			
			Q 1 ^P	Q 2 ^P	Q 3 ^P	Q 4 ^P
Exports f.o.b.	214,089	214,112	52,737	51,872	54,907	54,596
Δ% YoY	-5.6	0.0	-1.5	-2.5	0.4	3.6
Imports f.o.b.	187,248	178,359	40,898	43,565	45,934	47,963
Δ% YoY	-10.6	-4.7	-14.7	-7.8	-2.4	6.7
Trade balance	26,841	35,752	11,839	8,307	8,973	6,633
Net trade <u>minus</u> gold	30,217	34,463	10,173	7,522	8,459	8,308
Net services, primary income and secondary income	5,308	11,075	6,013	84	1,917	3,062
Current account balance	32,149	46,828	17,852	8,391	10,890	9,695
Current account balance <u>minus</u> gold	35,525	45,538	16,186	7,606	10,376	11,370
Capital account	0	13	0	0	0	13
Capital and financial account	-17,102	-25,735	-300	-3,062	-10,451	-11,923
Assets	-5,357	-22,752	-3,110	-5,621	-8,216	-5,805
Thailand's direct investment abroad	-4,991	-14,228	-4,391	-3,872	-2,929	-3,037
Investment in foreign securities	-3,817	-4,361	-834	1,316	-2,784	-2,059
Loans	-3,063	1,369	122	908	-124	463
Other investment (assets)	6,514	-5,532	1,993	-3,973	-2,380	-1,172
Liabilities	-11,745	-2,983	2,810	2,559	-2,235	-6,117
Foreign direct investment	9,004	2,553	2,022	1,696	-3,929	2,765
Foreign investment in securities	-12,691	1,473	2,590	-419	5,373	-6,071
Loans from abroad	-2,148	0	-742	2,707	-1,357	-609
Other investment (liabilities)	-5,909	-7,010	-1,059	-1,425	-2,322	-2,203
Net errors and omissions	-9,189	-8,261	-3,779	-1,412	338	-3,408
Overall balance	5,859	12,845	13,773	3,917	777	-5,624
Note: P=Primary data						
Source: Bank of Thailand						

Thailand's Tourism Sector: Development towards Sustainability

In recent years, export of tourism services was a major driver of the Thai economy. While merchandise exports and domestic demand were in the doldrums, the tourism sector was able to sustain continuous growth. The number of foreign tourists surged from 15.9 million in 2010 to 32.6 million in 2016. The value of export of tourism services reached 50 billion U.S. dollars in 2016, or about 12.5 percent of GDP. The rate of growth of Thailand's tourism sector has been much faster than the global average¹, which is consistent with Thailand's increasing share of inbound tourists to the Asia-Pacific region from 7.8 percent in 2010 to 10.7 percent in 2015 (Chart 1). However, such increasing dependence on the tourism sector raises a critical question whether the sector's high rate of growth in such a short time is sustainable and can drive the economy in the long term. Also, what is the direction of the sector's development going forward?

Chart 1: Market share of Thailand and its competitors for inbound tourists in Asia-Pacific

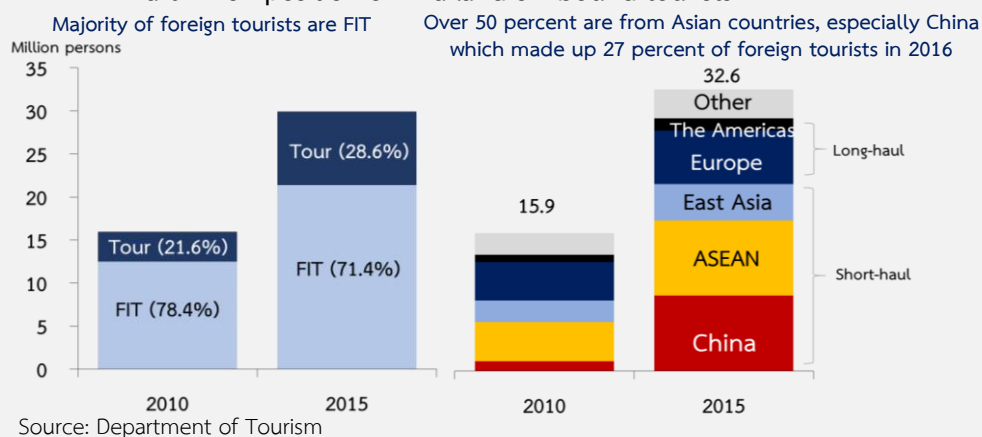


SWOT analysis of Thailand's tourism sector

Strengths

1. **Attractive destinations, culture, food and value for money** are key factors that attract foreign tourists and create good impressions. This is reflected in the ratio of revisitors, who account for 61 percent of tourists.² The majority of foreign tourists who come to Thailand are in the free independent tourist (FIT) category (Chart 2). Besides spending more than those who come in tour groups³, FITs also reach out to local communities more widely, resulting in a better distribution of tourism sector's income and lower impact on the environment.⁴

Chart 2 Composition of Thailand's inbound tourists



¹ Growth of foreign tourist arrivals during 2010-2015 averaged 13.4 percent per year, higher than the global average of 4.5 percent.

² Survey results from 350 tourists during the fourth quarter of 2016 by the Tourism Council of Thailand

³ According to survey results of tourists' spending by the Department of Tourism in 2015, FIT on average spend 4,692 baht/person/day and stay 11 days, totaling 52,353 baht per trip which is higher than an average spending of 39,562 baht per trip by tour group travellers.

⁴ Making Tourism More Sustainable: A Guide for Policy Makers, World Tourism Organization 2005

2. **Competitiveness, particularly in terms of services and geographical advantages**, as reflected in the Travel & Tourism Competitiveness Index (TTCI)⁵ produced by the World Economic Forum. Thailand climbed from 35th place in the global ranking in 2015 to 34th in 2017. Thailand is regarded as an ASEAN's leader and is rated higher than many developed countries including Australia, South Korea, Singapore and Japan in terms of services, human resources, and labor market, as well as its geographical location as an aviation transport hub.

Weaknesses

1. **Safety and security.** In the TTCI for 2017 (Chart 3), Thailand was ranked second last among ASEAN countries in terms of crime and travel safety risks.

2. **Ground and port infrastructure.** According to TTCI, Thailand's ground and port infrastructure is weak. This is consistent with the survey of foreign tourists conducted by the Tourism Council of Thailand, which finds that the quality of public transport is the only factor that foreign tourists are unsatisfied with.

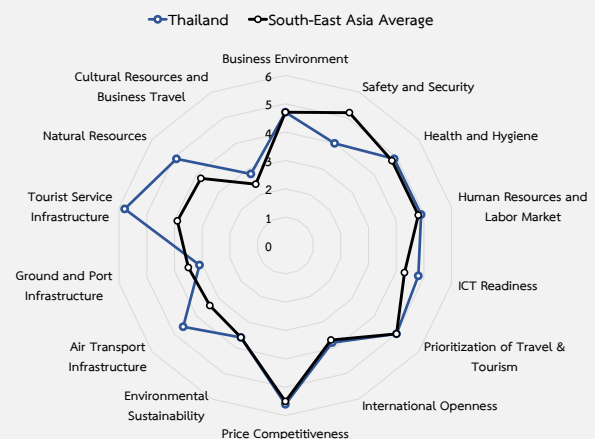
3. **Environmental sustainability.** Thailand and countries in the region have not given serious attention to environmental and natural resource protection, as a result the TTCI's ranking on environmental sustainability is below the global average.

4. **Focus on pricing rather than quality,** especially in case of the Chinese tour market where business networks were built to create monopoly power and pricing advantages to capture mass tourists. This strategy enabled a rapid surge in the number of tourists but operators' profits were on a downward trend.⁶ On the other hand, focus on quality of services would increase value through higher pricing.

Opportunities

1. **New activities and destinations.** The Thai tourism sector mainly relies on natural resources such as sea, mountain, waterfall, and cultural tourism, while investment in new destinations remains limited. Hence, development of new tourism products including man-made destinations, community-based tourism, and activities such as sport competition, food

Chart 3: Thailand's Travel and Tourism Competitiveness Index 2017



Source: *Travel & Tourism Competitiveness Report 2017, WEF*

⁵ Travel & Tourism Competitiveness Index comprises of 4 indicators: enabling environment, policy and enabling conditions, infrastructure, natural and cultural resources

⁶ According to The Association of Thai Travel Agents (ATTA), tour operators in the Chinese market made the highest profits when Chinese tourists reached 7-8 million per year. The growth in quantity of tourists in recent years brought revenues down to losses due to low prices.

festival, and health tourism, which is the government's target industry (first S-curve and new S-curve), will attract more tourists.

2. New markets. Expansion of the foreign tourist market base to potential groups who are high spenders and long stayers, such as Muslim tourists, will increase revenues and mitigate seasonal fluctuations. It would generate continuity of income, employment and investment, and lessen overdependence on a particular market in case of shocks in that market. For example, implementation of measures on illegal tour operators had affected Chinese tourists and led to a decline in overall tourism revenues in the second half of 2016 since Chinese tourists made up about one-third of the total number of foreign tourists.

3. Higher frequency of revisits. As the majority of foreign tourists are short-haul visitors with short advance trip planning, increasing the frequency of trips or revisits is one of the strategies that can be used to generate higher revenues, especially in present circumstances where international flights are more convenient and cost less. Moreover, a high proportion of short-haul tourists will enable the tourism sector to recover faster in case sensitive incidents occur.

Threats

1. Terrorism activities in countries which have serious effects on the atmosphere and confidence of tourists who may cancel their travel plans immediately, and have long-term impact on those who decide against planning trips to Thailand.

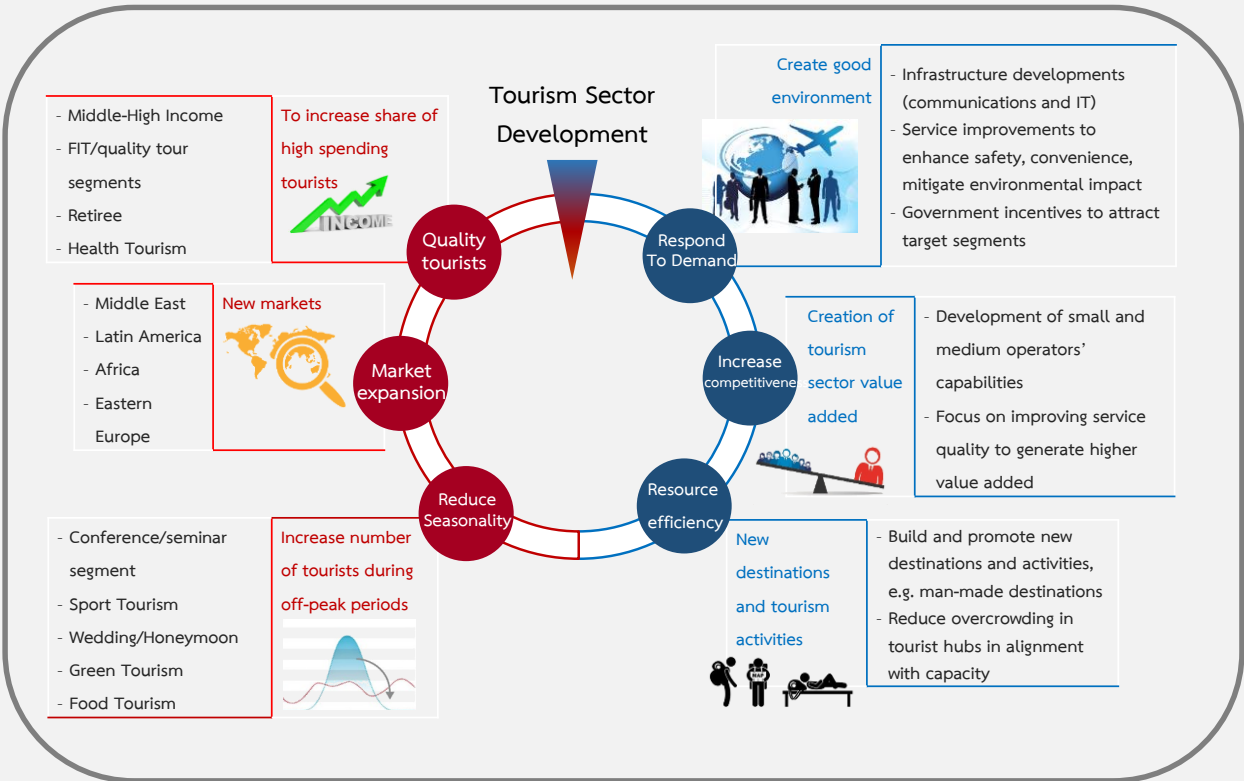
2. Competition from other markets which has intensified in terms of pricing, marketing plan to gain higher market shares, especially offering visa conveniences and additional benefits for foreign tourists. Thailand has to adopt proactive policies and more flexibility to make the measures to attract tourists more effective.

3. Lower income effect and higher cost effect arising from **economic problems and exchange rate fluctuations** in the countries of origin may cause people to postpone travel plans, which are regarded as luxury items.

Tourism sector development for sustainability

For the tourism sector to sustain the economy in the periods ahead, consideration should be given to improving value-added to the sector by drawing on its present strengths to attract quality tourist segments and using the opportunities to develop new tourism products to induce revisits, expand new markets and off-peak tourism. Amidst the threats that Thailand is facing, emphasis should be placed on mitigating weaknesses including the restructure of the Chinese market in accordance with measures to curb illegal tour operations. There may be adverse effects from reduced tourist numbers in the short term, but they would be outweighed by long-term benefits. Critical importance should also be given to increasing Thailand's competitiveness, including improving infrastructures and public services together

with effective resource allocation. Recently, the government has taken measures to support sustainable tourism, notably location developments and tourism activities with the aim to reduce overcrowding and diversify tourism revenues, as well as promotion of destinations in secondary provinces under the “12 provinces you cannot miss” campaign, signing MOUs with other countries to promote tourism exchange, and measures to make Thailand a hub for five tourism markets, namely health, wedding, marine tourisms and inter-ASEAN tourism.





3. Domestic Demand

3.1 Private Consumption

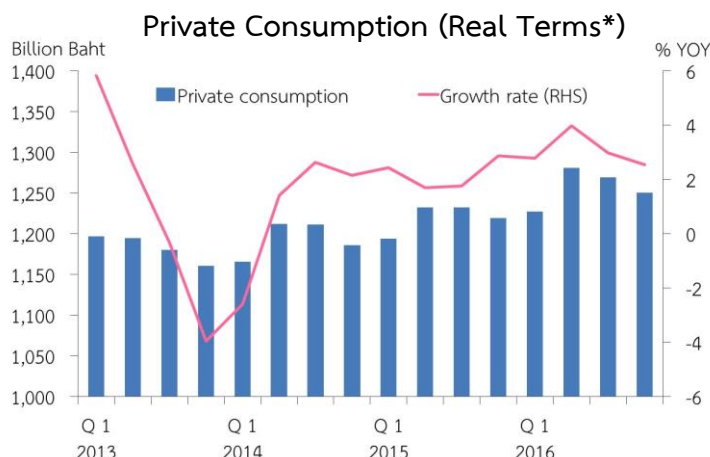
Private Consumption continually expanded from last year and was an important economic driver, as supported by household income and government stimulus measures.

In 2016, private consumption continually expanded, supported by sound fundamental factors. Firstly, farm income rebounded to show positive growth after a two-year contraction. However, income level remained lower than the average level and the improvement only concentrated in certain crops such as fruits and rubber. Secondly, non-farm income grew somewhat, consistent with higher employment in the services sector, particularly those which benefited from tourism. Thirdly, debt burden from the first-car tax rebate scheme gradually subsided. Lastly, low fuel prices partly contributed to higher net household income that was available for consumption.

However, overall purchasing power of households was not yet robust because the recovery of farm income mainly concentrated in certain crop growers. Employment in the manufacturing sector did not recover following periods of subdued exports. This was consistent with an uptrend in the household non-performing as well as low consumer confidence. The government, therefore, occasionally announced stimulus measures to boost consumption, namely tax deduction scheme for tourism expenses in April, subsidy for farmers affected by the drought, and measures to promote living standards at Tambon level (5 million baht per Tambon). At year-end, an additional measure was implemented through a tax deduction scheme for spending on goods and services of less than 15,000 baht per person (Shop for Thailand), which was in effect longer than the similar measure last year. Moreover, private consumption was supported by intense promotional campaigns by various businesses to maintain sales amid a gradual economic growth, particularly in the automobile and consumer goods businesses.

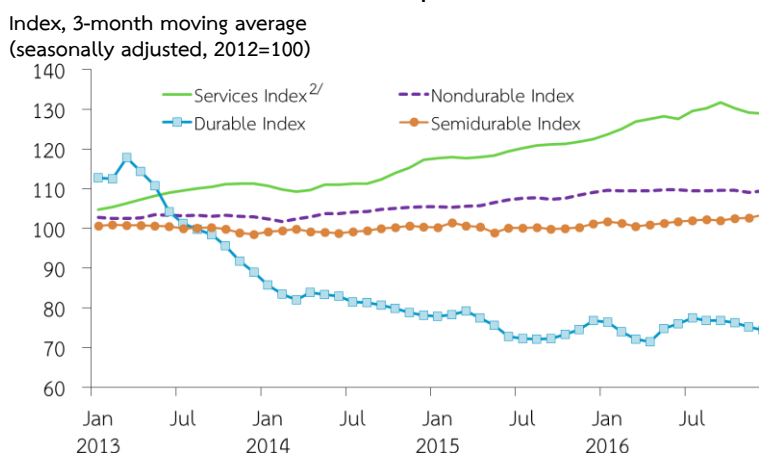
Backed by the growth in income and the abovementioned temporary measures, overall private consumption continually grew, particularly spending on services despite some slowdown during reduced entertainment activities in the mourning period. Meanwhile, spending on non-durable and semi-durable goods remained at a similar level as last year. Spending on durables, as mostly reflected by car purchases, continued to contract for the third consecutive year. This was the result of the earlier acceleration of car purchases during the first-car tax rebate scheme. The contraction was, however, at a lower rate.

Private consumption in 2017 is expected to gradually expand with supporting factors from (1) improving farm and non-farm income, (2) growing confidence as the economy improves and (3) gradual debt relief from the first-car tax rebate scheme. However, household debt lowered but still persisted at a high level, which could hold back private consumption in the periods ahead.



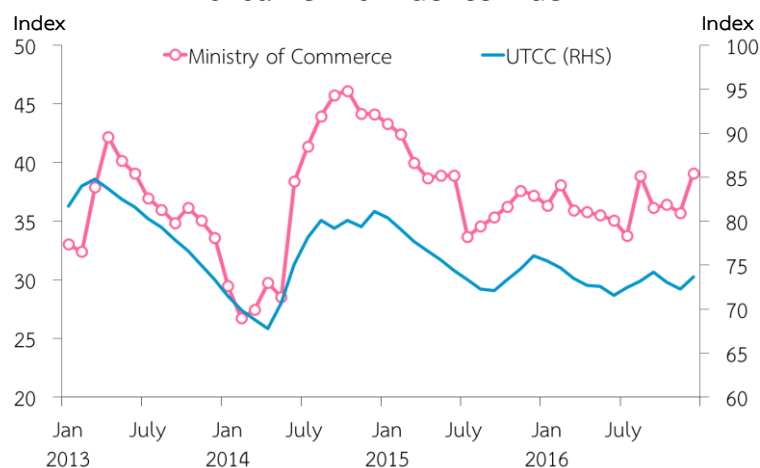
Source: The Office of the National Economics and Social Development Board
 * Real terms, calculated using Chain Volume Measure (CVM) instead of using the constant price method.

Private Consumption Indicators^{1/}



Source: Bank of Thailand
 Note: ^{1/} Constant prices index
^{2/} The service sector index is calculated using VATs in hotels and restaurants, and sales of transport services.

Consumer Confidence Index



Index interpretation:
 Consumer confidence index, Ministry of Commerce:
 The Index close to 100 means consumer confidence in the economic condition is “good”
 The Index close to 0 means consumer confidence in the economic condition is “not good”
 Consumer confidence index, The University of the Thai Chamber of Commerce:
 Index > 100 means consumers deem the condition will improve or is favorable.
 Index = 100 means consumers deem the condition will remain unchanged or stabilizes.
 Index < 100 means consumers deem the condition will worsen or is not favorable.
 Source: Ministry of Commerce and the University of the Thai Chamber of Commerce

3.2 Private Investment

Private investment was broadly at a similar level as last year with concentration in the services and utilities businesses, especially alternative energy. Recovery of investment in manufacturing was only seen in some industries such as electronics, electrical appliances and automotive and parts.

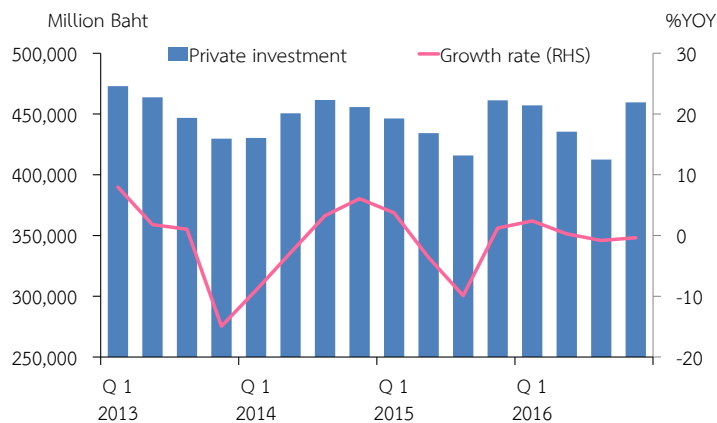
Private investment in 2016 stayed flat for the first time after a three-year contraction, and was still concentrated in the services and utilities sectors. In particular, investment in hotels and trade businesses gained from the growing tourism sector while utilities, especially for alternative energy, continued to benefit from government's support since last year. Such investment was reflected by an expansion of domestic machinery sales, particularly cooling equipment, and imported capital goods such as power generators and motors, consistent with the concentration of new corporate financing in the services and alternative energy sectors in both debt and equity markets.

However, the recovery of overall investment in the manufacturing sector remained weak amid the government's tax relief measures to promote domestic investment, excess production capacity in many industries still weighed on new investment. Meanwhile, investment edged up in the recovering export-oriented sectors namely electronics, electrical appliances and automotive and parts, as reflected by an increase in permitted construction area for manufacturing purposes and imported capital goods by such sectors.

Overall construction investment slightly expanded from last year due to government's measures to promote living standards at the Tambon level (5 million baht per Tambon) at the beginning of the year. The latter half of the year saw some improvements in construction of residences as real estate developers gradually opened new low-rise residential projects.

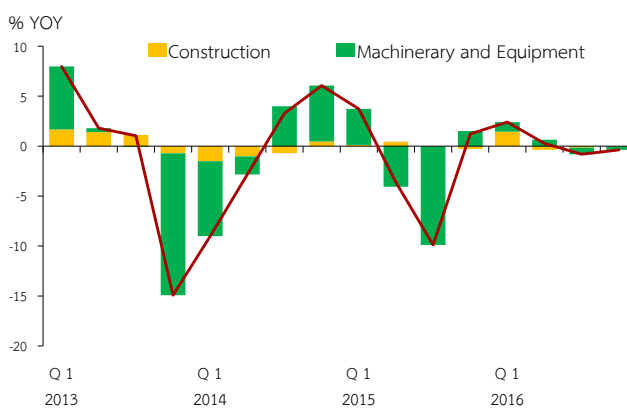
Looking forward, private investment is expected to gain support from large-scale public infrastructure investments which details are more apparent; an extension of investment promotion measures until end-2017; and continued recovery of the export sector. These factors are believed to shore up business confidence and spur up private investment.

Private Investment (real terms*)



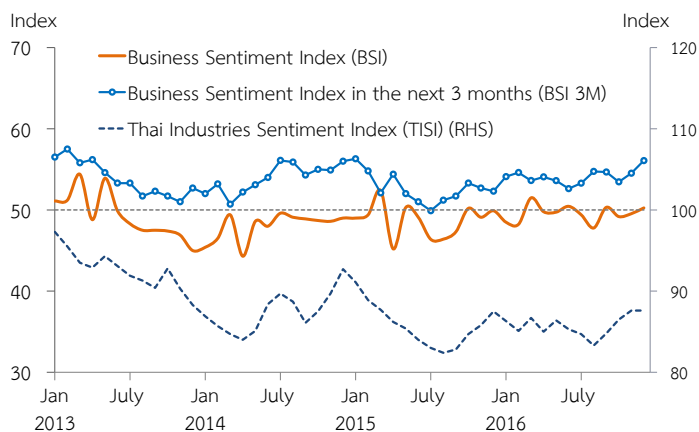
Source: The Office of the National Economics and Social Development Board
 * Real terms, calculated using Chain Volume Measure (CVM) instead of using the constant price method.

Sources of Growth of Private Investment



Source: The Office of the National Economics and Social Development Board, calculation by Bank of Thailand

Business Confidence Indices



Source: The Federation of Thai Industries and Bank of Thailand

3.3 Fiscal Sector

Government expenditure played an important role in supporting the continuity of economic recovery. Capital expenditure accelerated for projects by both the central government and state-owned enterprises (SOE). Economic stimulus measures were also released throughout the year.

The fiscal sector continued to play an important role in supporting the continuity of economic recovery from the previous year. In 2016 fiscal year, the government reported a 390 billion baht deficit with an expenditure of 2,720 billion baht¹ and a mid-year additional budget of 56 billion baht². Altogether, government expenditure amounted to 2,776 billion baht, up by 7.8 percent from last year. Since the beginning of the fiscal year, the budget was well disbursed to stimulate the economy thanks to two main factors. First, measures to boost disbursement efficiency by enabling government agencies to identify contractors prior to the enforcement of the annual budget expenditure act which in turn would expedite the contractual debt obligation and disbursement process. Second, the disbursement of transfers and subsidies used to serve various economic stimulus measures such as measures to strengthen grass-root economies according to Pracharat Projects and measures to upgrade the potential of villages to stimulate grass-route economies.³ **Therefore, overall budget disbursement in fiscal year 2016 totaled 2,579 billion baht, reflecting a disbursement rate of 92.9 of total budget. The disbursement rate was higher than the 92.4 rate last year.**

Disbursement of non-budgetary capital expenditure increased substantially from the financing plan for the water management and road system improvement project (economic

¹ The Annual Budget Expenditure Act for B.E. 2559 (2016) fiscal year was published in the Government Gazette on September 25, 2015

² The Additional Annual Budget Act for B.E. 2559 (2016) was published in the Government Gazette on March 15, 2016. Revenue sources were from receipts of the 900MHz and 1800MHz (4G) auctions and allocated into 3 parts: (1) 33 billion baht to the central budget, (2) 15 billion baht for internet network development, and (3) 8 billion baht as compensation for treasury cash.

³ Measures to strengthen grassroot economies according to the Pracharat Project allocated each village with no more than 500,000 baht for community-level infrastructure projects. Measures to upgrade villages' potential to drive grassroot economies total budget of 15 billion baht, allocated to each village with no more than 200,000 baht for community-level infrastructure investment or public services activities.

stimulus measures phase II) that started in 2015. During 2016 fiscal year, disbursement amounted to 44 billion baht of the total budget of 78 billion baht, up by 10 billion baht from last year. Moreover, the government put forward loan measures to alleviate those adversely affected by the economic conditions including soft loans for small and medium enterprises (SMEs) and tax-based economic stimulus measures such as reduced fees real estate ownership transfers fees and personal income tax deductions for spending on goods and services (Shop for Thailand).

In addition, infrastructure investment by SOEs accelerated especially for investment projects in Thailand's Transportation Infrastructure Development Strategy (2015-2022)⁴ and Transport Infrastructure Investment Action Plan 2016 such as Chachoengsao-Kaeng Khoi and Chira-Khon Kaen dual-track railways, Green Line electric rail and Suvarnabhumi phase II.

On the revenue side, collection exceeded the target by 2.7 percent as non-tax revenue was above projection for (1) receipts from the auction of 900 and 1800 MHz (4G) licenses, (2) realized premium income from bond auctions, and (3) higher-than-projected receipts from SOEs' revenue. On the other hand, tax-revenue fell short of projection, particularly for value added tax on imports and tax on petroleum income that declined in line with lower crude oil prices. Moreover, corporate income tax revenue and value added tax from domestic consumption were below target amid gradual economic recovery. In fiscal year 2016, government revenue totaled 2,412 billion baht, resulting in a cash balance deficit of 382 billion baht, or 2.7 percent of GDP. The deficit was close to last year's 2.6 percent deficit of GDP. Treasury cash balance stood at 441 billion baht at fiscal year-end.

In fiscal year 2017, the government planned to run a budget deficit of 390 billion baht⁵, a similar level as last year. Disbursement continued to gain traction during the first quarter of the budget year due to an accelerated disbursement for small investment projects. The planned budget deficit aimed at supporting the economic

⁴ Cabinet's resolution on March 27, 2016

⁵ The Annual Budget Expenditure Act for B.E. 2560 (2016) fiscal year was published in the Government Gazette on September 23, 2016

recovery and placing emphasis on using the budget for infrastructure projects. Additional 0.19 trillion baht mid-year budget was announced to promote spending in grass-route economies through a budget allocation in 18 provincial groups with an aim of pushing development projects at the provincial level and supporting nation-wide village funds. There were also measures to promote economic and social infrastructure development at the local level by expenditure of the Department of Local Administration.⁶ In addition, to ensure continuity in mega infrastructure projects, the government further released the Transport Infrastructure Investment Plan 2017 to revise and clarify the transportation investment plan previously drafted in 2015-2016.⁷

Fiscal Position^{1/}

(Unit: Billion baht)

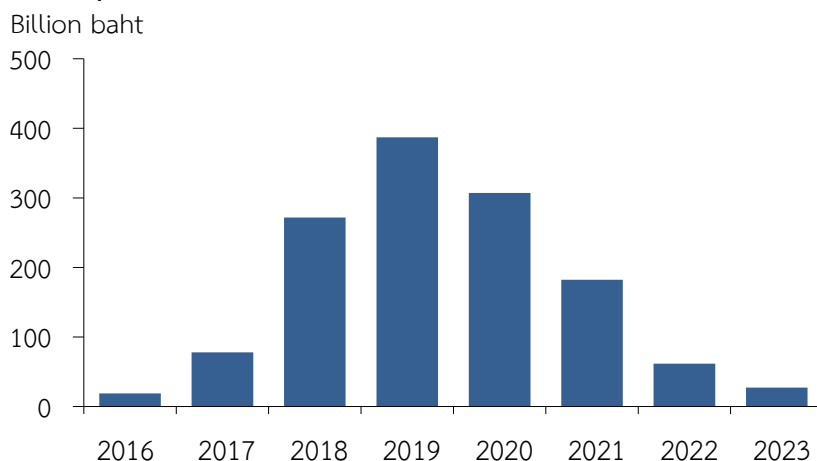
Fiscal year

	2556	2557	2558 ^P	2559 ^P
Revenue ^{2/}	2,163.5	2,075.7	2,207.0	2,411.5
(Percent change from last year)	(9.4)	(-4.1)	(6.3)	(9.3)
Expense ^{3/}	2,106.7	2,147.4	2,165.5	2,735.7
(Percent change from last year)	(6.3)	(1.9)	(0.8)	(9.0)
Fiscal balance	56.8	-71.7	39.0	78.5
Acquisition of non-financial assets	268.4	249.2	342.9	402.7
Budgetary balance	-211.6	-321.0	-303.9	-324.2
Non-budgetary balance	2.4	-12.2	-40.3	-57.7
: Expense on Thai Khem Kang Project	-7.5	-3.3	-13.2	-1.7
Cash balance	-209.2	-333.2	-344.2	-381.9
Net financing	244.6	223.9	274.7	397.0
Use of treasury balance	-35.4	109.3	69.6	-15.1
Treasury balance	605.1	495.7	426.2	441.3
Note:	^{1/} Bank of Thailand's data now uses the GFS 2001 manual instead of the 1986 manual			
	^{2/} cash basis			
	^{3/} excluding loan repayments			
	P = Preliminary			
	Source: Fiscal Policy Office, calculated by Bank of Thailand			

⁶ Consist of 2 measures: (1) measure to promote joint investment by central government and local administrations (Matching Fund) of 9.8 billion baht, where the government provided half of total funding for infrastructure development projects proposed by local administrations, and (2) measure to promote quality of life through spending of accumulated funds of local administrations on education projects.

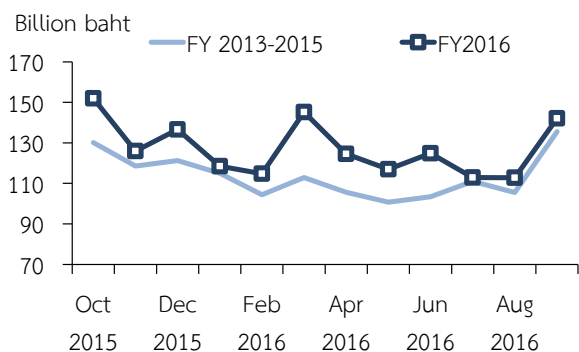
⁷ Cabinet's resolutions on December 13, 2016

Transportation Infrastructure Investment Action Plan 2016

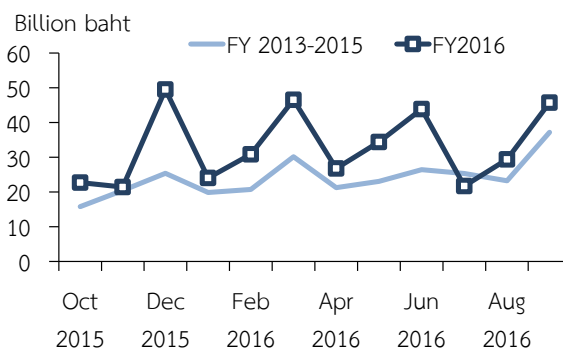


Source: Fiscal Policy Office, Ministry of Finance

Central Government Current Expenditure (Ex. Subsidies/Grants and Other)



Central Government Capital Expenditure (Ex. Subsidies/Grants and Other)



Source: Fiscal Policy Office, Ministry of Finance



4. Supply Side

4.1 Manufacturing Sector

Manufacturing production slightly expanded mainly on the back of production of export-oriented sectors. Meanwhile, production of some industries contracted as they faced supply-side and structural constraints.

Manufacturing production in 2016 slightly expanded due to production of export-oriented sectors. Production of air conditioners expanded on the back of higher demand from the EU market, where the weather was warmer than usual, and the CLMV market, where their economy and real estate market exceeded. Production of electronics grew thanks to greater global market demand for devices which support the Internet of Things and for those used in the automotive industry that now has higher content of electronics parts per car. Buoyant demand in such products prompted businesses to expand production capacity as seen in the Maximum Capacity Index rising by 63.2 and 15.5 percent for air conditioners and electronics parts, respectively.

Production for domestic sales also slightly expanded in line with the gradual domestic demand recovery. Production of

motorcycles increased in tandem with intense promotional offers, more popularity for big bikes as well as recovering farm income after the drought conditions had subsided. **Production of construction materials** marginally expanded in line with an increased supply of low-rise residential units and anticipation of future government investments. Meanwhile, **production of petroleum** grew on the back of higher domestic demand amid low oil prices. However, **production of beverages**, especially soda, fell as households were cautious about spending. This reflected that overall consumer confidence remained soft.

For industries focusing on both domestic and export markets, their production remained at a similar level as last year. Despite a decrease in domestic sales for both passenger and commercial cars, export sales slightly expanded. Moreover, production of several industries contracted due to two reasons. First, supply-side constraints from volatile weather conditions affected sugarcane raw materials for **production of sugar** during the drought. **Production of rubber products** contracted as rubber growers only reached a limited supply of rubber raw materials due to the drought and the floods in the South. **Production of processed seafood** declined as businesses faced raw material shortages following regulations on fishing ships. Second, structural constraints on both domestic and external fronts put pressures on **production of textiles and apparels** to be relocated outside Thailand, and steadily declining **production of hard-disk drives** which were replaced by products with solid-state drives. The

Manufacturing Production (Real Terms*)



Source: Office of the National Economic and Social Development Board

* Real manufacturing production is based on the Chained Volume Measures (CVM) instead of fixed base year previously used.

decline was in fact at a lower rate because some businesses moved their production base from Malaysia to Thailand for cost-saving purposes. However, improved production did not induce much investment due to weak demand for such products in the overall global market.

Manufacturing Production Index (MPI)

Industry (%YOY)	Relative Weight 2015	2015	2016	2016			
				Q1	Q2	Q3	Q4
Food and beverages	18.4	-0.6	0.4	2.3	-2.1	1.2	0.2
Automobile	19.8	2.2	-1.5	-3.3	12.7	-6.7	-6.5
Rubbers and plastics	10.2	1.5	-0.7	3.3	-4.6	-4.0	2.2
Electronics	7.1	0.9	4.7	-2.8	1.7	6.4	13.1
Textiles and apparels	5.2	-6.9	-12.1	-17.5	-18.4	-10.3	-0.5
Chemicals	5.6	0.4	1.5	3.1	3.3	-1.5	1.0
Cement and constructions	4.5	-3.4	0.6	1.2	-3.2	3.5	0.9
Electrical appliances	4.7	-3.2	14.0	8.3	18.5	23.6	6.4
Petroleum	4.9	16.8	3.3	-0.9	1.4	3.9	8.8
Hard disk drive (HDD)	0.9	-22.8	-7.7	-18.5	-13.2	1.1	1.0
Others	18.8	0.2	0.9	-1.8	1.2	0.2	4.3
MPI	100.0	0.3	0.4	-0.9	1.7	-0.3	1.5

Source: Office of Industrial Economics

4.2 Agricultural Sector

Farm income in 2016 expanded for the first time after having contracted for 4 years owing to higher agricultural prices. But, income level remained lower than the 5-year average and improving farm income was only concentrated in certain crops and areas.

In 2016, farm income expanded for the first time after having contracted for 4 years owing to higher agricultural prices. Record-high fruit prices and higher rubber prices were partly an effect of reduced supply following unstable weather conditions as well as higher external demand particularly from China. Moreover, rubber prices rose in line with higher crude oil prices.

Agricultural production still contracted because the weather conditions were unfavorable. The severe and prolonged drought in the first half of the year curbed production of perennial crops such as fruits and rubber. Moreover, rice production continued to contract due to inadequate water level in dams. Despite gradual

drought reliefs in many regions, the heavier-than-usual rainfalls, especially in the South, posed barriers to cultivation of rubber and oil palm. As a result, farmers did not fully benefit from higher agricultural prices.

Even though overall farm income rebounded to show some expansion, the level of income was well below an average of the preceding 5 years. Only farmers of some crops and in certain areas experienced a turnaround as they were not affected by harsh weather conditions, namely fruit growers in the East and rubber planters in the Northeast. However, rice farmers in the Central region were faced with depressed rice prices following an increase in rice supply, especially for jasmine rice, after the drought had mitigated. The government therefore released subsidy measures to help with expenses on cultivation and rice quality improvement, along with credit extension for rice farmers to delay sales of crops for all rice types. These measures aimed at supporting income of rice farmers whose cultivation would take place in the latter half of the year.

Thai Agricultural Prices

Annual percentage change	Share in 2015	2015	2016 ^P	2016 ^P			
				Q1	Q2	Q3	Q4
Agricultural Price Index	100.0	-5.9	3.6	-5.6	5.1	11.5	3.5
Unhusked rice	24.3	-2.4	-3.7	-3.9	0.3	0.4	-11.7
Unsmoked sheet rubber 3	16.0	-19.0	7.7	-20.7	0.6	9.1	49.8
Sugarcane	7.0	-13.2	-5.8	-10.9	-15.5	-8.4	14.4
Cassava	5.5	2.5	-29.4	-17.9	-19.7	-44.0	-36.3
Oil palm	4.0	-5.5	31.9	-4.0	42.3	74.7	30.5
Fruits	14.5	7.2	24.3	2.1	31.9	70.3	-1.8
Livestock	19.8	-7.2	0.9	2.3	3.6	-0.4	-2.0
Fishery	4.1	-19.4	0.3	-8.7	0.9	2.4	8.3

Source: Office of Agricultural Economics, calculations by Bank of Thailand

Agricultural Production

Annual percentage change	Share in 2015	2015	2016 ^P	2016 ^P			
				Q1	Q2	Q3	Q4
Agricultural Production Index	100.0	-4.4	-2.2	-8.1	-4.8	-0.2	2.2
Unhusked rice	24.3	-15.0	-5.3	-42.9	-34.3	-21.8	7.9
Unsmoked sheet rubber 3	16.0	-0.4	-0.7	0.2	0.9	4.9	-6.6
Sugarcane	7.0	1.5	-16.7	-6.5	-96.8	0.0	-34.3
Cassava	5.5	8.8	-1.3	-30.3	124.7	141.7	0.0
Oil palm	4.0	-3.4	-8.7	3.1	-25.1	-10.1	10.2
Fruits	14.5	-16.4	-6.9	0.6	-6.9	-20.7	9.0
Livestock	19.8	5.3	5.8	12.1	3.0	4.0	4.7
Fishery	4.1	6.8	9.9	9.9	9.9	9.9	9.9

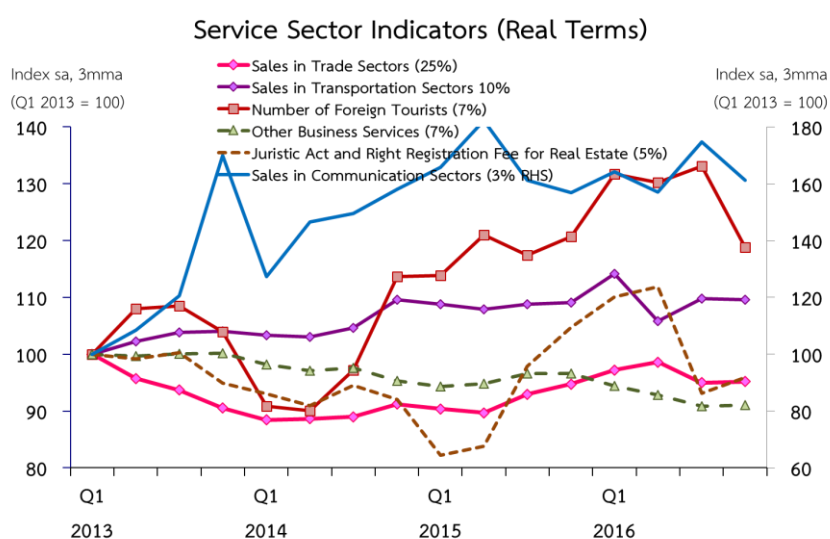
Source: Office of Agricultural Economics, calculations by Bank of Thailand

4.3 Services Sector

Overall services sector continued to expand, particularly for tourism-related services prior to the regulation on illegal tours and reduced entertainment activities during the mourning period.

In 2016, overall services sector continued to expand from last year with growth in almost all sectors. In particular, **tourism-related services** expanded well, for example hotels and restaurants, transportation of passengers as well as wholesale and retail businesses, in tandem with a high growth in foreign tourist arrivals prior to the government's tackle on illegal tours and reduced entertainment activities in the final quarter. Moreover, such businesses benefited from a larger number of Thai travelers due to low gasoline prices and the government's measures to promote tourism. Moreover, wholesale and retail businesses, especially for semi-durable products and department store sales, gained from the gradual recovery of farm income and government measures to boost spending at year-end.

In addition, **businesses in transportation of goods** also expanded in line with the recovery of export-oriented manufacturing sectors and agricultural production after the drought conditions had subsided. **Telecommunications businesses** continued to grow after 4G services were officially offered to customers in the first half of the year. Promotional campaigns were also widespread as businesses competed for a larger market share.



Note: Other Business Services include legal and accounting activities, management consultancy activities, advertising and market research, etc. () indicates share of GDP in 2015

Source: The Revenue Department of the Ministry of Finance and Department of Tourism of the Ministry of Tourism and Sports, seasonally adjusted and calculated by Bank of Thailand

4.4 Real Estate Sector

The real estate sector slowed down from the previous year. Demand for residences only accelerated in periods when government measures were in place. Supply of low-rise residences edged up in the latter half of the year, resulting in an increased supply outstanding. New supply of condominiums remained flat but their outstanding were prevalent in certain areas and for some price range.

In 2016, the real estate sector slowed down from the previous year, in line with the gradual economic recovery. Government measures to stimulate activities in the real estate market only temporarily accelerated demand as consumers rushed to make purchases to receive benefits from the measures. After the measures ended in April 2016¹, demand substantially fell while financial institutions also tightened their credit standards for mortgage loans. This was reflected by an increased rejection rate as financial institutions had concerns regarding a high level of debt. As a result, overall demand in 2016 slowed down, as seen by a 10.8 percent contraction from last year in ownership transfers in Bangkok and its vicinity. The fall was predominantly observed in low-rise residences while transfers of condominiums largely expanded on the back of the stimulus measures.

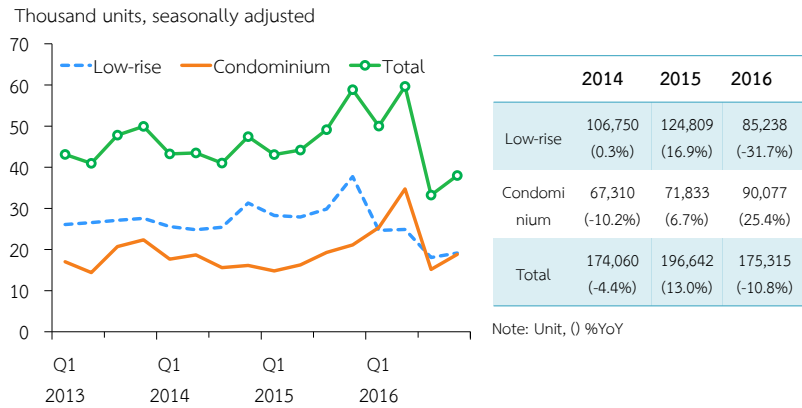
On the supply side, real estate developers adjusted strategies to meet rising demand during the stimulus measures by focusing on selling completed projects and delaying the launch of new projects. In the latter half of the year, developers turned to launch new projects, especially for low-rise residences which expanded for the first time in 4 years, with growth mostly seen in townhouses. As a result, supply outstanding of low-rise residences increased. Meanwhile, the number of new condominium projects contracted for the third consecutive year. Their supply outstanding remained concentrated in the 2-5 million baht price range and along the MRT Purple Line as well as in the below 1 million baht

¹ Measures to reduce ownership registration fees and mortgage registration fees from 2 percent and 1 percent, respectively, to 0.01 percent during October 29, 2015 and April 28, 2016.

price range along the extended MRT Green Line (Bearing-Samutprakan).

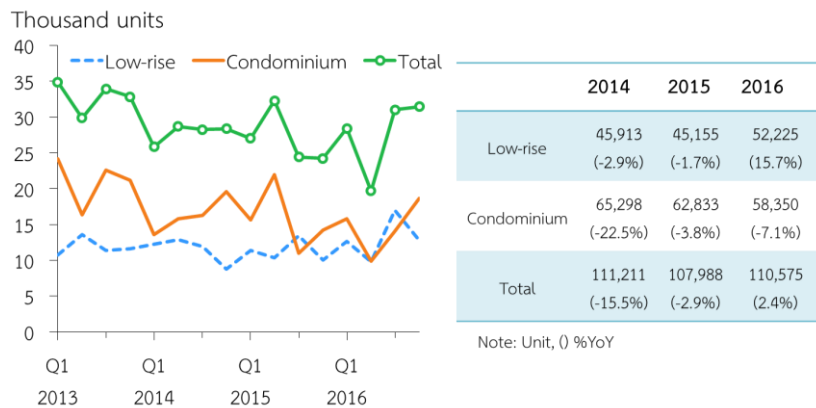
Property prices increased especially for condominiums following higher land prices. Meanwhile, post-financing credit quality slightly deteriorated, as reflected by an increase in the ratio of non-performing loans (NPL) to 2.9 in the fourth quarter of 2016 from 2.6 in the fourth quarter of 2015.

Residential ownership registration in Bangkok and its vicinity

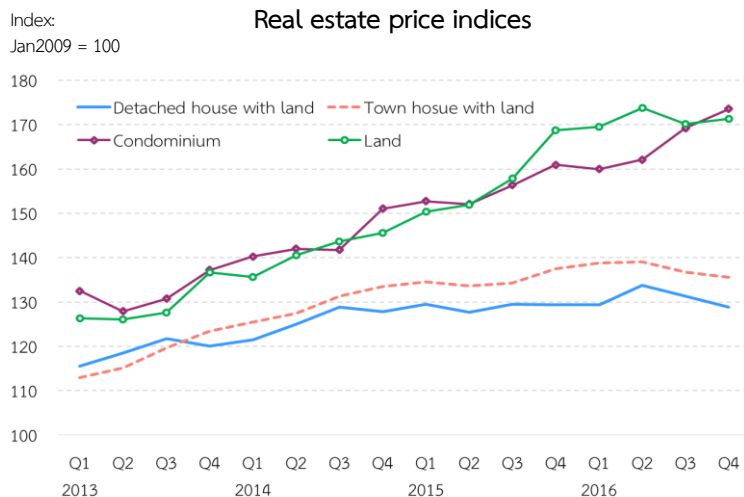


Source: Agency for Real Estate Affairs (AREA), calculated by Bank of Thailand

New residential projects launched in Bangkok and its vicinity

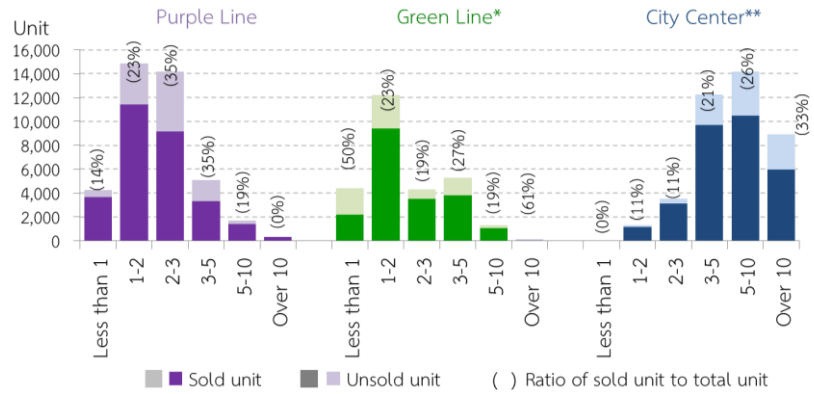


Source: Agency for Real Estate Affairs (AREA), calculated by Bank of Thailand



Source: Bank of Thailand

Unsold condominium units at end of 2016



Note: * Bearing-Samutprakarn

** Phaholyothin, Pathumwan, Sukhmvit, Rama IV, Yarnwana, Silom and Phranakorn

Source: AREA, calculated by Bank of Thailand



5. Monetary Conditions

5.1 Interest Rates and Credits

Overall monetary conditions continued to be accommodative on the back of commercial banks' lending rate reductions and lower average cost of financing in the bond market relative to the previous year. Meanwhile, loan growth moderated in line with the gradual economic recovery and financial institutions' vigilance on issuing loans.

The Monetary Policy Committee (MPC) maintained the policy interest rate throughout 8 meetings. At the end of 2016, the policy interest rate stood at 1.50 percent, unchanged from the level at the end of 2015. The Committee assessed that the monetary policy stance continued to be accommodative and conducive to the economic recovery, given downside risks from both internal and external factors, while at the same time ensuring that public inflation expectations were at an appropriate level and close to the inflation target.

Short-term money market rates and short-term bond yields stabilized in line with the movement of the policy interest rate. At the end of 2016, the overnight interbank rate stood at 1.40 percent, unchanged from the level at the end of 2015. The 1-month government yields edged down 3 basis points from the end of the previous year to 1.47 percent. Medium- and long-term government bond yields were rather volatile, due mainly to external influences. During the first half of 2016, yields decreased on market concerns over the global economic recovery and global political uncertainties. Yields gradually rose toward the year-end after market expectations changed regarding the Fed's monetary policy actions. However, the cost of financing in the bond market was still lower than the previous year's average. Accommodative monetary conditions were reflected in the fall in the average yield on 10-year government bonds to 2.18 percent, down 56 basis points from the previous year's average.

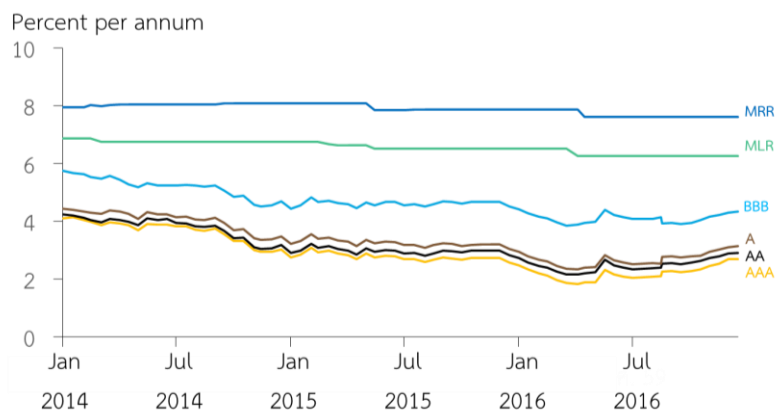
In April 2016, commercial banks reduced their lending rates. At the end of 2016, the average minimum lending rate (MLR) and the minimum retail rate (MRR) of the four largest commercial banks declined 25 basis points from the end of 2015 to 6.26 percent and 7.62 percent, respectively. However, deposit rates were stable; the average 12-month fixed deposit rate of the four largest commercial banks stood at 1.38 percent, close to the previous year's rate.

Private credits at the end of 2016 amounted to 16.6 trillion baht, up 3.3 percent from the previous year. But, the increase was lower than the 5.5 percent growth recorded at the end of 2015 as the economy recovered gradually and financial institutions remained cautious on issuing new credits. New credits¹ were principally extended to telecommunication, alternative energy and wholesale and retail trade businesses. This was consistent with the overall investment picture which was concentrated in certain segments. Credits to the manufacturing sector began to improve in the final quarter, especially those to rubber and plastic product businesses.

¹ New credits are calculated from change in outstanding credits at the end of the year extended by other depository corporations (ODCs), namely commercial banks, finance companies, specialized financial institutions, saving cooperatives, and money market funds.

Credits extended to small and medium enterprises (SMEs) contracted from the level in previous year when the government's soft loan package was provided toward the year-end. Also, with a decline in the overall quality of SME loan portfolios, given that the economic recovery was concentrated in some sectors, financial institutions were more cautious in loan extension. Meanwhile, credits to large corporates moderated slightly as large firms turned to the bond market to raise funds instead of borrowing from banks, following the decline in bond issuance costs. A portion of funds raised was used in local and foreign business mergers, especially in the wholesale and retail trade and food product businesses. Total corporate bonds outstanding at the end of 2016 stood at 2.1 trillion baht, up 22.8 percent from the end of 2015 and also higher than the preceding year's growth at 18.4 percent. In addition, the business sector raised more funds from the equity markets despite a lower average price/earnings ratio compared to the previous year. Equity market funds were mainly raised by firms in the telecommunication and wholesale and retail trade sectors.

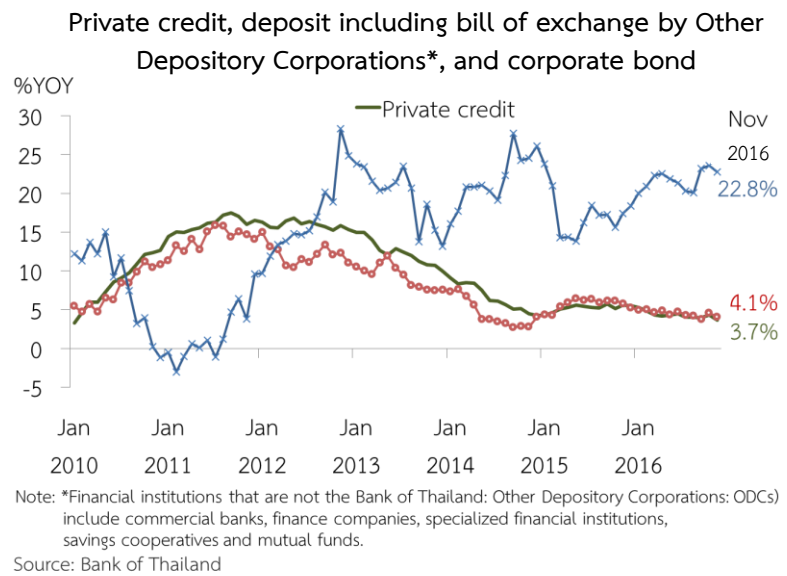
Corporate's financing costs



Note: MLR (Minimum Lending Rate) averaged among 4 large commercial banks
 MRR (Minimum Retail Rate) averaged among 4 large commercial banks
 AAA, AA, A and BBB refer to costs of financing for 5-year bonds with AAA, AA, A and BBB credit ratings, respectively
 Source: Bank of Thailand and Thai Bond Market Association

Credits to the household sector expanded at a slower pace in almost all categories. Mortgage loans slowed down in the second half of the year after the government's real estate sector stimulus package ended. Auto hire purchase loans increased slightly. The slowdown was partly attributed to prevailing high levels of household debts and financial institutions' cautious lending stance.

Total deposits including bills of exchange at the end of 2016 increased 4.1 percent from the previous year, a slower growth compared to the 5.3 percent growth recorded at the end of 2015 and in line with the credit situation. Commercial banks and specialized financial institutions had no need to mobilize more deposits, as reflected in the continuous decline in special deposit products and deposit rate offers. Moreover, under the prolonged low interest rate environment, some savers also switched to higher-yield assets such as money market funds, life insurance policies and mutual investing in both domestic and foreign assets.



5.2 Exchange Rate

The baht-U.S. dollar and the nominal effective exchange rate (NEER) both appreciated on external and domestic influences. Meanwhile, the baht volatility was low relative to regional currencies.

At the end of 2016, the baht closed at 35.80 baht to the U.S. dollar, 0.6 percent stronger than at the end of 2015. The baht continued to appreciate during the first three quarters, in line with the movement of regional currencies, driven mainly by the following external influences: (1) market expectations that the Fed would postpone its policy rate increase, (2) additional monetary policy easing by the European Central Bank and the Bank of Japan at the beginning of the year, and (3) the prevailing low interest rate environment in the major economies prompted continuous inflows of funds into bonds and assets in the Asian region and Thailand. In

addition, the following domestic factors contributed to the baht appreciation against the U.S. dollar: (1) sales of U.S. dollars by gold exporters when gold price rose, (2) results of the referendum to accept the draft constitution², (3) better-than-expected Thai economic figures in the second quarter, and (4) a large current account surplus.

However, the baht depreciated slightly against the U.S. dollar in the fourth quarter primarily due to external factors³ and in line with the direction of regional currencies. The movement was driven by the continuous appreciation of the dollar. Markets expected there was a high probability that the Fed would raise its policy interest rate in December 2016 after the release of US economic figures turned out to be better than expected, coupled with an acceleration of inflation expectations after the U.S. presidential election.⁴ Moreover, the U.S. dollar continued to strengthen after the Fed raised its policy interest rate in December 2016.⁵

The nominal effective exchange rate (NEER) at the end of 2016 edged up 1.9 percent. The real effective exchange rate (REER) rose 1.2 percent, which was less than the NEER's increase as Thailand's inflation was lower than those of its trading partners and competitors. The baht volatility became more pronounced in October 2016 before settling down after the domestic situation became clearer. The average baht volatility declined to 4.4 percent from 5.5 percent in the previous year but it was still low relative to regional currencies.

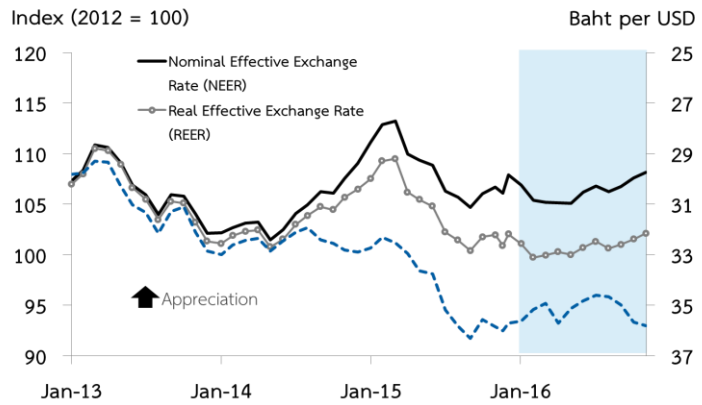
² Gold prices rose on demand for safe haven assets during periods of increasing uncertainties in global financial markets, particularly in February and June 2016. In Thailand, the referendum on the constitution was held on August 7, 2016.

³ Uncertainties in Thailand in October 2016 caused the baht to weaken and fluctuate temporarily.

⁴ The U.S. presidential election was held on November 8, 2016. Investors expected the new U.S. government would increase fiscal stimulus, thereby accelerating inflation.

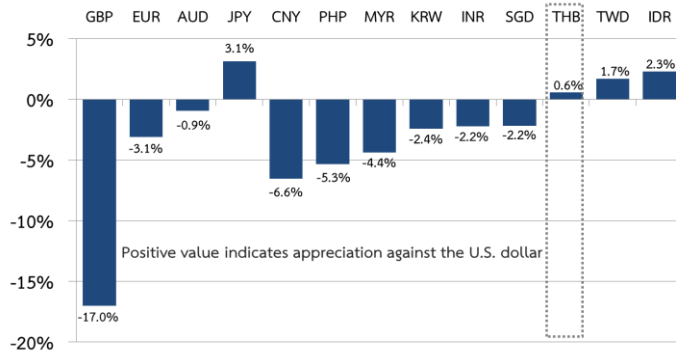
⁵ The Federal Reserve decided to raise its policy interest rate at its meetings on 14-15 December 2016. The new dot plot signaled three interest rate increases in 2017, instead of two indicated earlier.

Movements of the Thai baht and effective exchange rate



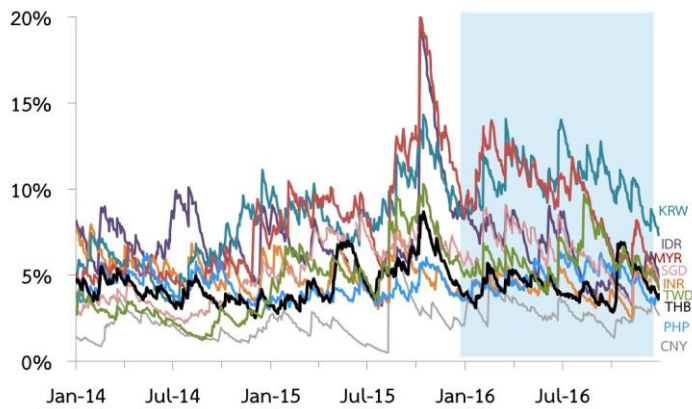
Note: End-of-month data
 Source: Reuters and Bank of Thailand (Data as of 30 December 2016)

Currency movements vis-à-vis the U.S. dollar
 (End of 2016 compared to 2015)



Note: AUD = Australian dollar, CNY = Chinese yuan, EUR = euro, GBP = Pound sterling, JPY = Japanese yen, KRW = Korean won, IDR = Indonesian rupiah, INR = Indian rupee, MYR = Malaysian ringgit, PHP = Philippine peso, SGD = Singaporean dollar, THB = Thai baht, and TWD = Taiwanese dollar
 Source: Reuters and Bank of Thailand (Data as of 30 December 2016)

Volatility of the baht and regional currencies



Note: Volatility calculated by Exponentially Weighted Moving Average (EWMA)
 Source: Reuters and Bank of Thailand



6. Assessment of Thailand's Economic Stability

6.1 Internal Stability

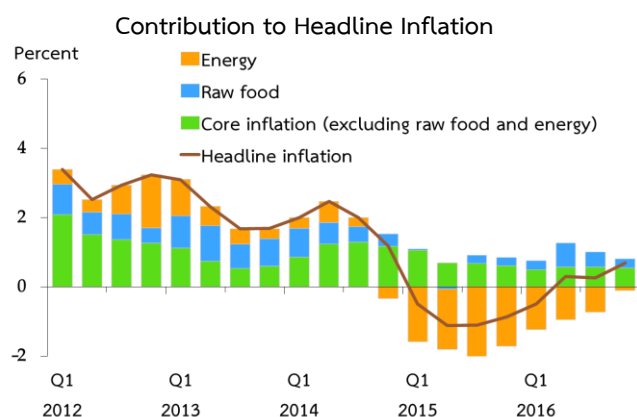
Overall internal stability was well preserved, with low unemployment and inflation rates. Overall fiscal and business stability was both sound, while household stability continued to be vulnerable. Loan portfolio quality deteriorated somewhat but financial institutions maintained sufficient financial positions to cushion against risks.

Inflation

Headline inflation in 2016 averaged 0.19 percent, an increase from the previous year's average of negative 0.90 percent. While headline inflation turned positive for the first time in April 2016 after consecutive falls for 15 months, it was still low and below the lower bound of the monetary policy's 1 percent target. This was attributable to: (1) low domestic energy prices in line with global crude oil prices¹, (2) weak demand-pull pressures in line with the gradual economic recovery, as reflected in the core inflation rate stabilizing at a low 0.75 percent. Annual fresh food prices increased slightly; although severe drought in the first half of the

¹ Global crude oil prices were depressed due to a substantial excess supply, coupled with a structural change in the oil market resulted from developments of shale oil technology in the U.S. This cut down costs of oil production. Meanwhile, demand for oil remained low amid a gradual global economic recovery.

year sent vegetable and fruit prices soaring, fresh food prices successively fell after the drought abated, vegetable prices in particular given their short growing cycles. However, headline inflation returned to the lower bound of the monetary policy's 1 percent target in December 2016. Meanwhile, long-term inflation expectations of professional economists remained close to the inflation target of 2.5 percent.



Source: Bureau of Trade and Economic Indices, Ministry of Commerce, calculated by Bank of Thailand



Source: Business Sentiment Survey (BSI) of Bank of Thailand, Asia Pacific Consensus Forecast and calculations based on macro-finance term structure model with bond yield and macroeconomic data

Employment

Overall employment in 2016 declined slightly from the previous year due to the fall in agricultural employment resulting from climatic fluctuations throughout the year. During the drought, most agricultural workers moved to jobs the services sector, such as hotels and restaurants and trading businesses which saw healthy growth on the back of the tourism sector. As a result, employment in the services sector increased along with employment in the food product and sugar industries. However, as certain part of agriculture workers could not move to other sectors, and the floods in the south toward the

end of the year caused a decline in the number of rubber plantation workers, agricultural employment on a full-year basis declined compared to the previous year.

Employment in the manufacturing sector declined on a full-year basis, mainly due to the decline of temporary workers. This was in line with the decline in working hours resulted from persistently subdued export performance. Despite signs of a rebound of exports in the second half of the year, which led to increased employment in the electrical appliance and food processing industries, the rebound was at an initial stage and could not compensate for the decline in employment in earlier periods.

As a result of the decline in agricultural and manufacturing employment, the unemployment rate for 2016 rose slightly from the previous year to 1.0 percent. However, it remained at a low level.

Labor Market Indicators

%YoY	2015	2016	2016			
			Q1	Q2	Q3	Q4
Employment	-0.2	-0.9	0.2	-0.9	-0.2	-2.5
Agriculture	-3.6	-4.3	-2.7	-6.2	-2.3	-6.0
Non-agriculture	1.6	0.8	1.5	1.4	0.9	-0.7
Manufacturing	0.9	-2.6	-2.2	-1.7	-1.9	-4.4
Construction	0.6	3.1	5.8	5.4	0.1	0.2
Trade	-0.1	-0.1	2.9	1.4	3.9	1.9
Services	3.1	3.1	2.0	2.3	1.1	-0.1
Hours worked (non-agriculture)	-0.4	0.4	1.7	0.4	1.7	-1.3
Manufacturing	-0.7	-0.3	-1.3	-2.5	-1.2	-4.9
Construction	-1.1	1.4	5.3	3.7	0.5	-0.9
Trade	-2.1	0.8	3.3	0.1	4.2	1.7
Services	1.2	0.5	1.9	1.9	2.5	-0.7
Unemployed (thousand)	340.6	377.5	369.9	411.1	362.5	366.3
Unemployment rate	0.9	1.0	1.0	1.1	0.9	1.0
Under-employed (thousand)	272.5	274.9	292.9	351.8	217.4	237.5
Under-employment rate	0.7	0.7	0.8	0.9	0.6	0.6

Note: Services excluding construction and trade

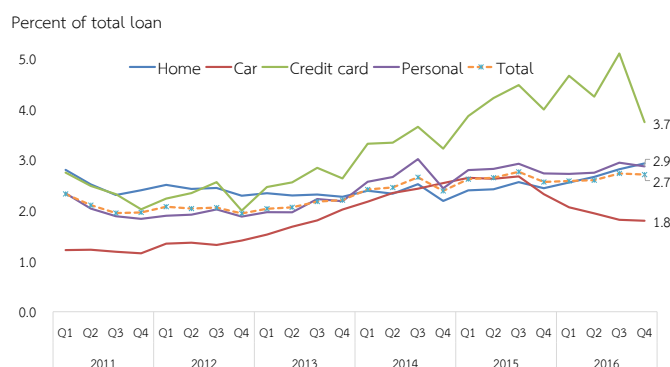
Source: National Statistical Office

Household Stability

Household financial stability remained vulnerable due to high levels of household debt and gradual economic recovery. Higher unemployment rate also dented households' debt service ability. This was reflected in an increase in the NPL ratio of consumer loans to 2.7 at the end of 2016 compared to 2.6 at the end of 2015. Increases were recorded in almost all loan categories except auto loans. The NPL ratio at the end of 2016 was lower than the rate at the end of the third quarter thanks to commercial banks' management of non-performing loans in the credit card and personal loan categories, which was a seasonal factor.

The ratio of household debt to GDP declined from 81.2 percent at the end of 2015 to 79.9 percent at the end of 2016, thanks to a slowdown in household debts and GDP improvement. However, given still high household debt levels, households needed time to make financial adjustments and to build financial discipline.

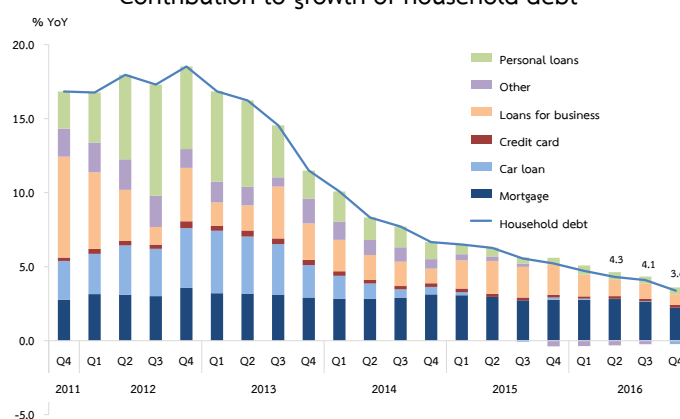
Share of non-performing loans of commercial banks



Note: Ratio to total non-performing loans (at Q4 2016) was 15.0% for mortgage loan, 4.1% for car loan, 6.1% for personal loan and 2.2% for credit card.

Source: Bank of Thailand

Contribution to growth of household debt^{1/}



Note: ^{1/}Loans given to households by financial institutions

Source: Bank of Thailand

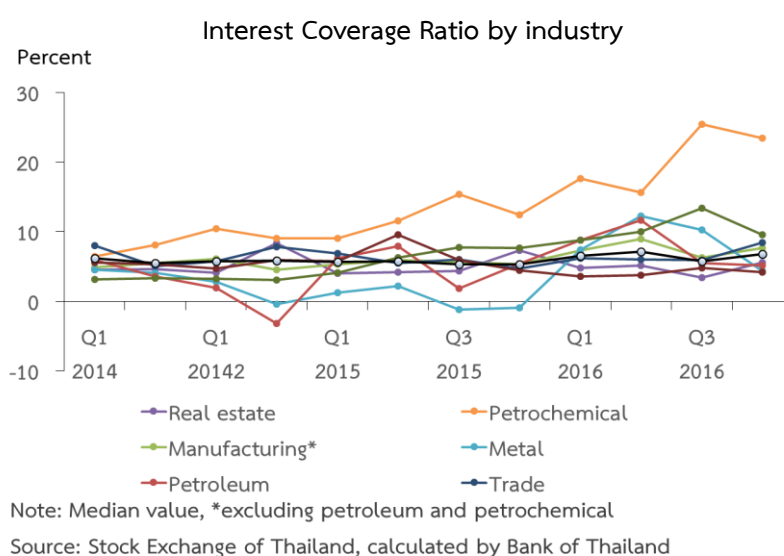
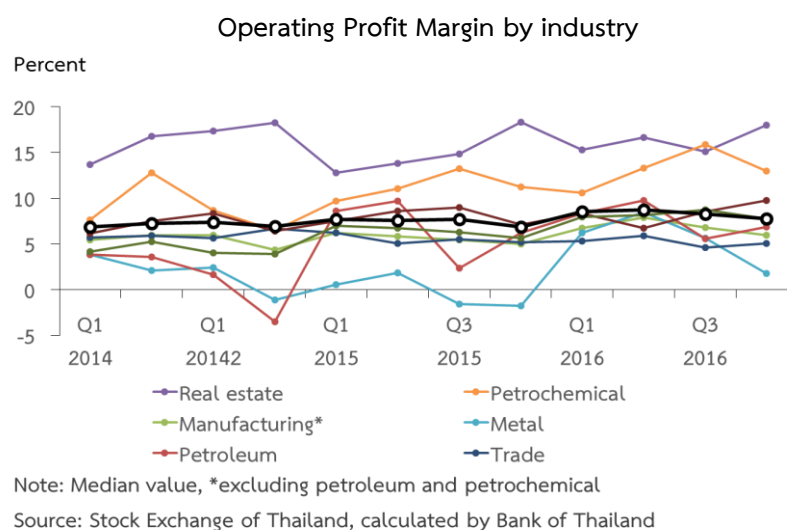
Non-financial Sector Stability

Stability of the overall business sector was not a concern. Although business sales were partially affected by the slow economic recovery, performances of non-financial companies listed on the Stock Exchange of Thailand (SET) and the Market for Alternative Investments (mai) at the end of 2016 showed improvements in profits, as reflected in an increase in operating profit margin to 7.8 per cent from 6.9 percent in the previous year. However, such improvements were concentrated in certain industries, notably the oil-related industries such as petroleum, petrochemicals, rubber and plastics where companies could manage costs more effectively. Revenue of petroleum businesses also rose on the back of global oil price increases. The steel industry's profits improved after being hit by price slumps in the previous year. Steel prices rose since the beginning of the year mainly from the rebound in China's demand driven by investment in infrastructure projects, while China's steel production remained constrained by the Chinese government's policy to reduce excess domestic steel production capacity. Profit performances in the services sector slowed down in the second half of 2016 owing to measures to curb illegal tour operators and reduced entertainment activities toward the year-end. Profit performances in the real estate sector declined after the government stimulus package ended in April 2019.

Overall debt servicing ability of the business sector remained sound, as reflected in the interest coverage ratio which rose from 5.3 per cent at the end of 2015 to 6.8 percent at the end of 2016. Business debt levels did not increase and the liquidity position was healthy, as reflected in the debt/equity ratio and the current ratio which hovered around 0.7 and 1.7 times, respectively.

Notwithstanding the overall sound financial position of the business sector, the outlook for global and Thailand's economic recovery needs to be monitored continuously as it may have implications on debt service ability of firms, particularly in the case of small firms with fragile financial positions and limited ability to adjust. This concern was reflected in the continuing deterioration of commercial banks' SME loan portfolio quality, for businesses in food products, auto products, rubber and plastic products, and

wholesale and retail trade. In addition, monitoring was needed on risks associated with some large companies which had incurred high debts, since they might be vulnerable in the event of economic shocks.



Financial institutions' Stability

Thai financial institutions' stability remained well preserved despite the deterioration in loan portfolio quality amid the gradual economic recovery. NPL ratio at the end of 2016 rose to 2.8 from 2.6 at the end of 2015. This was attributed to the deterioration of both consumer loan and business loan quality. Particularly in the case of SME loans, NPL ratio continuously rose in the services, wholesale and retail trade, and agricultural and construction segments. However, the overall financial position of financial institutions was solid, as reflected in the actual/regulatory loan loss provision ratio which remained at a high 159.6 percent, up

from 156.3 percent at the end of 2015. The capital adequacy ratio also continued to rise to 18.0, well above the regulatory requirement of 8.5.

With regard to overall profit performance, the commercial banking system recorded satisfactory operating profit growth, mainly thanks to lower interest expenses. Banks' net profits in 2016 increased slightly to 199.2 billion baht from 192.1 billion baht at the end of 2015.

Fiscal Stability

Overall fiscal stability remained solid, with the public debt/GDP ratio at the end of 2016 declining to 42.2 percent, down slightly from 44.4 percent at the end of 2015. The ratio was well below the 60 percent benchmark for fiscal sustainability. The decline in the public debt/GDP ratio was attributed to debt repayment by non-financial state enterprises, redemption of matured government-guaranteed bonds issued by specialized financial institutions (SFIs), and exchange rate valuation changes. However, in the periods ahead, pressures on fiscal stability would likely increase in line with the need to pursue a fiscal deficit to stimulate the economy while the other drivers have yet to gain momentum. Moreover, the deficit could stem from the planned public investment in large infrastructure projects, rising public spending in the wake of the ageing society and constrained revenue collection efficiency.

6.2 External Stability

External stability was well maintained, with liquidity and debt repayment ability indicators at high levels and sufficient to withstand volatilities in global financial markets.

External stability was well maintained, with liquidity and debt repayment ability indicators at high levels compared to international standards. Outstanding external debt declined slightly from the previous year due to: (1) repayment of trade credit by non-financial corporates, and (2) repayment of long-term loans by other depository institutions. Meanwhile, due to valuation changes, outstanding external debt increased 0.9 billion U.S. dollars in line with the depreciation of the US dollar against the baht and the yen.

External Stability Indicators

	International benchmarks	2015 ^P	2016 ^P	2016 ^P			
				Q1	Q2	Q3	Q4
Indicators of debt servicing ability percent							
- Current account balance ^{1/} to GDP	> -2	8.1	11.4	17.9	8.4	10.1	9.4
- External debt to GDP ^{2/}	48-80 ^{4/}	32.1	32.5	34.3	35.4	34.5	32.5
- External debt to value of exports of goods and services ^{1/ 2/}	132-220 ^{4/}	46.7	47.0	49.5	51.1	49.8	47.0
- Debt service ratio ^{3/}	< 20	6.3	6.3	4.2	7.0	10.2	6.7
Indicators of liquidity							
- Gross reserves to short-term external debt	> 1 times	3.0	3.3	3.0	2.9	3.2	3.3
- Gross reserves to import value (months)	> 3-4 months	10.0	11.6	11.7	12.1	12.3	11.6
- Short-term external debt to total external debt (percent)	n.a.	40.0	40.2	42.3	42.5	40.2	40.2

Note: ^{1/} Since October 2006, "Reinvested Earning" has been recorded as part of direct investment in the financial account and its contra entry recorded as "Investment Income" in the current account.

^{2/} Outstanding debt divided by averaged quarterly GDP or export values for the last three years starting from the quarter considered.

^{3/} Principals and interest payments both short and long terms of external debt divided by value of exports of goods and services.

^{4/} Benchmark for middle-income countries, i.e. with GDP per capita of 756 – 9,265 US dollars per year.

Source: Bank of Thailand

7. Important Policies and Measures

Interest Rate Policy

Policy Interest Rate

1.50 percent per annum



Monetary Policy Committee (MPC) Meetings in 2016

Source: BOT News No. 5/2016, 12/2016, 23/2016, 33/2016, 44/2016, 48/2016, 57/2016 and 66/2016

At MPC meetings in 2016, the Committee unanimously voted to maintain the policy interest rate at 1.50 percent. Developments of economic growth and inflation did not significantly change as the Thai economy remained on a recovery path, though contributions to growth differed at the end of the year. However, growth still concentrated in sectors which benefited from a special or temporary factor while facing further downside risks from both internal and external factors. Headline inflation gradually increased to reach the inflation target band whose pace would primarily depend on petroleum and fresh food prices. Meanwhile, medium-term inflation expectations of the public remained close to the mid point of the inflation target. Overall monetary conditions remained accommodative and conducive to economic recovery. The appreciation of the baht against major trading partners and competitors at times would not be beneficial to the Thai economic recovery. Moreover, financial stability remained sound to withstand financial and economic volatility. Nonetheless, pockets of risks emerged and needed to be closely monitored going forward.

The Committee placed emphasis on maintaining policy space amidst uncertainties on the external front. The Committee would therefore closely monitor developments of such risks and assess their impact on the Thai economy for monetary policy to be conducive to the Thai economic recovery without having to unnecessarily accumulate financial vulnerabilities.

Financial Market Measures

1. Foreign Exchange Control

Measure	Key Content	Effective Date
1. Relaxation of regulations for commercial banks to issue and	1. Permit commercial banks to issue structured products in baht that is linked with an exchange rate for no more than 5 million U.S. dollar per customer.	18 April 2016

Measure	Key Content	Effective Date
sell securities that are linked to exchange rates	<p>The threshold covers foreign currency deposits with commercial banks without collaterals. (previously only allowed commercial banks to sell such products to customers faced with exchange rate risks)</p> <p>2. Permit commercial banks to issue foreign currency structured products that are referenced with international variables (previously only allowed such products to be offered in baht term).</p> <p>3. Permit commercial banks to conduct derivatives transactions that are referenced to other currencies other than the baht (previously only allowed commercial banks to conduct such transactions with customers faced with exchange rate risks).</p>	
2. Relaxation of requirements and regulations for monetary transfer agents	<p>1. Allow the following agencies to apply to be a money transfer agent</p> <ul style="list-style-type: none"> a. Permitted agency to provide e-payment services according to the E-Payment Act b. Telecommunication provider c. Money changer d. Company whose at least three quarters of its total shareholders are money changers <p>Applicants with the aforementioned requirement must bear paid up capital of at least 100 million baht and engage with a credible international transfer service network.</p> <p>2. Allow businesses to conduct electronic international money transfers such as via website applications and cellphones.</p> <p>3. Extend the daily outward transfer limit for each customer to 200,000 baht/person/day (previously 2,000 U.S. dollars/person/day).</p>	18 April 2016
3. Relaxation for securities companies to net out foreign currency transactions that are related to customers' securities investment prior to settling foreign currency transactions with commercial banks	Permit securities companies wishing to represent Thai or foreign customers in making foreign currency buy/sell transactions with commercial banks to apply for permission to net out foreign currency transactions related to customers' securities investment, prior to buying/selling foreign currencies with commercial banks based on the net figure.	18 April 2016

Measure	Key Content	Effective Date
4. Relaxation of investment in foreign securities	Permit Qualified Investor with combined deposits or securities investment of at least 100 million baht to invest overseas without going through an intermediary. Each transaction must not exceed 5 million U.S. dollars/person/year. Investment must be in ASEAN countries or countries whose regulators are members of the IOSCO ¹ and is required to submit monthly investment reports to the Bank of Thailand.	20 July 2016
5. Relaxation of regulation on treasury center	<ol style="list-style-type: none"> 1. Allow a treasury center to fundraise by issuing foreign currency securities both domestically and abroad. 2. Allow a treasury center to invest in foreign currency dominated securities that are issued in Thailand (previously only allowed to invest in securities issued abroad). 	28 July 2016
6. Relaxation of regulation on foreign currency transactions	Permit corporates wishing to offer foreign currency transaction services of 50,000 U.S. dollars and above to submit such transaction electronically (previously only allowed on paper).	20 December 2016
<p>Source: 1.-3. Bank of Thailand News 19/2016 dated 1 April 2016 4.-5. Bank of Thailand News 41/2559 dated 5 July 2016 6. Bank of Thailand Circular FMD(21) W.52/2016 dated 20 December 2016</p>		

¹ International Organization of Securities Commissions: IOSCO (www.iosco.org)



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