NESDB ECONOMIC REPORT

Thai Economic Performance in Q3 and Outlook for 2017 - 2018

Macroeconomic Strategy and Planning Office

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Economic Projection of 2017 - 2018

(%YoY)	2016	2017		Projection	
	Year	Q2	Q3	2017	2018
GDP (CVM)	3.2	3.8	4.3	3.9	3.6-4.6
Total Investment	2.8	0.4	1.2	2.0	5.5
Private	0.4	3.2	2.9	2.2	3.7
Public	9.9	-7.0	-2.6	1.8	11.8
Private Consumption	3.1	3.0	3.1	3.2	3.1
Public Consumption	1.7	2.6	2.8	2.0	2.7
Export of Goods[1]	0.1	7.9	12.5	8.6	5.0
Volume[1]	0.5	5.0	8.7	5.5	4.0
Import of Goods[1]	-5.1	14.2	13.0	13.0	7.0
Volume[1]	-2.5	9.2	8.8	7.9	5.5
Current Account to GDP (%)	11.9	6.8	12.0	10.4	8.1
Inflation	0.2	0.1	0.4	0.7	0.9-1.9

Note: [1] base on the Bank of Thailand's data

- **The Thai economy in the third quarter of 2017** grew by 4.3 percent, speeding up from 3.8 percent in the previous quarter. After seasonally adjusted, the Thai economy in the third quarter expanded by 1.0 percent from the second quarter (%QoQ_sa). In the first 9 months of 2017, the Thai economy expanded by 3.8 percent.
- **On the expenditure side**, the expansion was supported by the acceleration of exports and the continual expansions of private consumption, government spending and total investment. **On the production side**, the production of the manufacturing, the wholesale & retail trade, the electricity, gas & water supply, as well as the fishery sectors expanded at accelerated rates. The agricultural sector maintained a high growth pace while the transportation & communication and the hotel & restaurants sectors favorably expanded. Nevertheless, the construction sector declined.
- **The Thai economy in 2017**: it is expected that the growth will be 3.9 percent. Export value is expected to expand by 8.6 percent while private consumption and total investment will grow by 3.2 and 2.0 percent respectively. The headline inflation will be averaged at 0.7 percent and the current account is forecasted to register a surplus of 10.4 percent of GDP.
- **The Thai economic outlook for 2018:** it is forecasted that the economy will expand in the range of 3.6 – 4.6 percent, supported mainly by (i) a favorable growth of the global economy, (ii) an acceleration of public investment which will be supported by the progress of key investment projects and higher capital budget framework, (iii) the improving trend of private investment, (iv) the continual expansion of key production sectors, and (v) the improvement of employment and household income conditions. In all, it is expected that export value of goods will expand by 5.0 percent, private consumption and total investment will grow by 3.1 and 5.5 percent respectively. The headline inflation will be in the range of 0.9 – 1.9 percent and the current account will register a surplus of 8.1 percent of GDP.
- **Economic management for the remainder of 2017 and the year 2018** should emphasize on **(1) Promoting non-agricultural sectors for offsetting the slowdown of agricultural production** by: (i) fostering export sectors to its full potential as it helps contribute to higher growth of manufacturing sector and overall economic expansion; (ii) bolstering private investment by implementing key investment projects, encouraging private sectors to invest in the country's strategic sectors, raising business competitiveness and building up investors' confidence regarding the continuation of key government policies after the general election; (iii) supporting the expansion of tourism sector together with emphasizing on distribution of tourism income to local communities. **(2) Expediting the public investment to sufficiently meet the economic growth target** by: (i) expediting procurement process in the rest of the year as well as speeding up the capital budget disbursement of the government and the state-owned enterprises not to be lower than 75.0 and 80.0 percent respectively, (ii) expediting the key infrastructure projects under the 2016-2017 Prioritized Transportation Action Plans to continually enter the construction phase, (iii) propelling the Eastern Economic Corridor (EEC) project and targeted special economic zones, (iv) progressing regional and provincial transportation and logistics infrastructure projects. **(3) Supporting small farmers and low income groups together with strengthening the SMEs and local economies** by focusing on agricultural production and farm income; financial and fiscal measures for small farmers, low-income people, SMEs entrepreneurs and local enterprises and; measures for strengthening SMEs. **(4) Arranging labor force to facilitate an expansion of economic activities** covering high- and semi-skilled labors as well as expatriate workers.

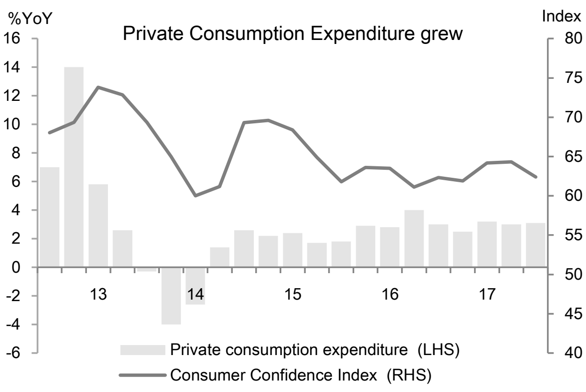
1. The Thai Economy in Q3/2017

Expenditure side:

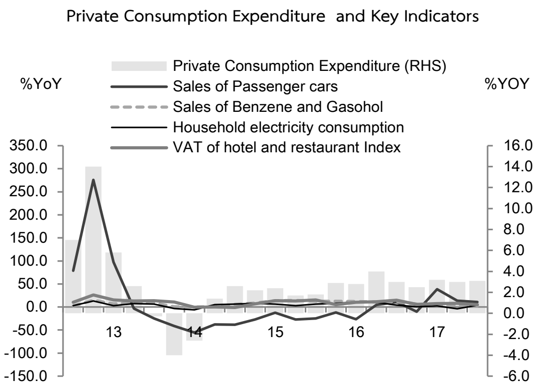
Private consumption expenditure favorably expanded in line with the improvement of income condition. In the third quarter of 2017, private consumption expenditure continually grew by 3.1 percent, slightly picked up from a 3.0 percent growth in the previous quarter. The continuous growth for private consumption expenditure was in line with the expansion of passenger cars sales, the VAT of hotel and restaurant index (at 2010 price), import of textiles (at 2010 price), which were at 10.9, 5.1, and 5.1 percent, respectively. Sales of diesel and sales of beer grew by 4.5 and 15.2 percent, respectively. The expansion of private consumption expenditure in this quarter was driven by the increasing income of the overall economy, together with consistently low inflation and low interest rates. Consumer Confidence Index pertaining the overall economic situation stood at 62.4.

In the third quarter of 2017, private consumption expenditure gradually picked up. Exports of goods accelerated and increasingly contributed to GDP's expansion. Private investment continually expanded in contrast with the decline in public investment.

Private consumption expenditure expanded by 3.1 percent, continually improved from 3.0 percent growth last quarter .



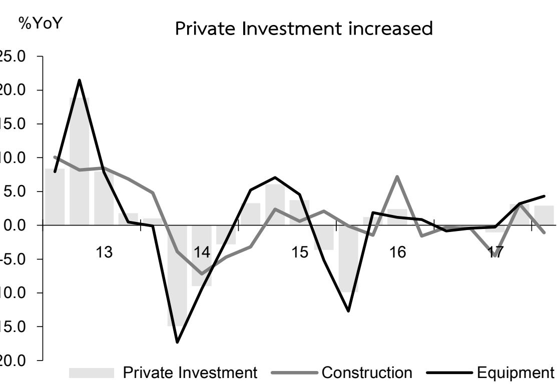
Source: NESDB, University of the Thai Chamber of Commerce



Source: NESDB, BOT, Department of Energy Business

Private investment continually improved, supported by the expansion of investment in machinery and equipment. In the third quarter of 2017, private investment still expanded by 2.9 percent. **The investment in machinery and equipment** grew by 4.3 percent. This was consistent with a 4.4 and 13.1 percent growth of the import of capital goods and commercial car sales, respectively. **The investment in construction** contracted by 1.1 percent, in line with the reduction of permitted construction areas in municipal zone. The Business Sentiment Index (BSI) stood at 51.1.

Private investment expanded by 2.9 percent, supported by the expansion of investment in machinery & equipment while investment in construction contracted.



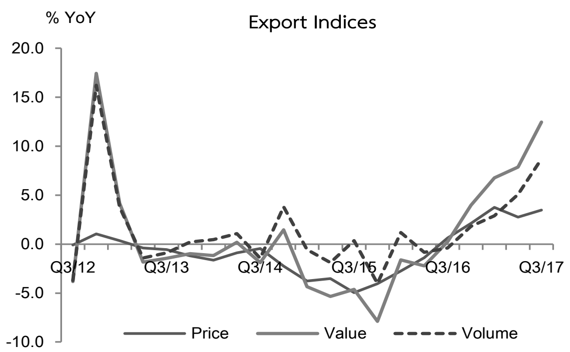
Source: NESDB

Exports in US dollar term accelerated in accordance with the accelerated economic expansion in key trading partners, and the increased commodity prices in world market. Export value in the third quarter of 2017 was recorded at 61.6 billion US dollars, representing a 12.5 percent growth, which was the highest growth rate in 19 consecutive quarters. The export quantity increased by 8.7 percent, due to the increase in all export categories, particularly agricultural products (16.6 percent) and manufacturing products (6.5 percent). The export price increased by 3.5 percent, mostly reflected the increase in price of crude oil, refined fuel, chemicals, plastic beads, rubber products, and rubber. Excluding unwrought gold, export value grew by 11.2 percent. In baht term, the export value increased by 7.7 percent.

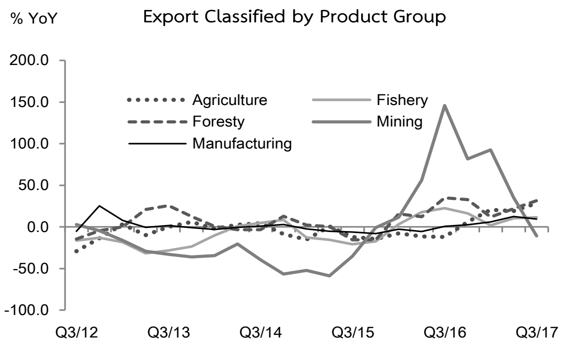
Exports in US dollar term grew by 12.5 percent, the highest growth rate in 19 quarters. Export value excluding unwrought gold increased by 11.2 percent.

The export quantity increased by 8.7 percent and export price increased by 3.5 percent.

In baht term, export value increased by 7.7 percent.



Source: Bank of Thailand



Source: Bank of Thailand

Export value of agricultural commodities remarkably expanded by 28.4 percent, which was the highest growth in 24 quarters. **Export value of manufacturing products** expanded by 9.6 percent, driven by the increasing global demand for manufacturing products following a continued global economic recovery. **Export value of fishery products** and other products increased by 11.5 and 49.8 percent, respectively. **Export items with increased value** included rice, tapioca, rubber, sugar, telecommunication equipment, rubber products, vehicle parts & accessories, and machinery & equipment. On the other hand, **export items with decreased value** were passenger cars, pick up & trucks, and air conditioning machines.

Export value of all categories increased, particularly the acceleration of agricultural products and favorable expansion of manufacturing products.

Export Value of Major Product in US Dollar Term

%YoY	2016					2017			Share
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q3/17 (%)
Agriculture	**-6.2**	**-7.5**	**-11.5**	**-11.9**	**6.1**	**20.5**	**19.2**	**28.4**	**7.2**
Rice	-4.4	12.1	-12.9	-12.4	-4.8	-7.2	19.3	43.9	2.1
Rubber	-12.1	-22.1	-8.4	-27.3	15.0	78.3	37.9	22.9	2.1
Tapioca	-19.0	-16.4	-37.0	-11.3	-3.9	-18.5	-13.7	5.8	0.7
Manufacturing	**-1.2**	**-2.7**	**-5.5**	**0.8**	**2.6**	**5.9**	**12.5**	**9.6**	**86.4**
Sugar	-8.6	39.1	-4.2	-33.2	-23.4	-19.3	32.0	26.0	1.1
Crustaceans canned, prepared, or preserved	-3.9	-17.5	1.3	-4.2	2.8	21.7	11.6	4.7	0.5
Rubber products	8.1	0.9	0.5	23.4	9.5	51.5	32.4	37.1	2.2
Apparels and Textile Materials	-5.5	-6.7	-6.0	-5.2	-3.9	3.2	1.1	3.9	2.8
Electronics	-2.8	-5.5	-7.6	0.6	0.7	10.3	16.5	11.3	14.9
- Computer parts & accessories	-8.6	-7.5	-12.7	-4.1	-10.2	-0.8	4.4	2.5	5.8
- Integrated circuits & parts	-0.1	-3.4	-0.4	0.7	2.0	11.7	11.1	3.4	3.6
- Printed circuits	-6.9	-12.7	-9.3	-1.9	-4.1	13.9	9.7	4.0	0.6
- Telecommunication equipment	1.5	-2.5	-9.8	2.9	15.0	21.6	71.6	49.6	2.2
Electrical appliances	3.5	-2.7	5.5	8.5	3.3	9.5	4.1	3.1	5.3
Metal & steel	-0.2	-10.7	-1.2	9.1	2.2	17.3	16.1	8.6	4.4
Automotive	3.2	-1.5	8.1	4.9	1.9	2.6	2.3	2.6	14.8
- Passenger car	22.8	74.8	59.1	4.3	-9.5	-19.1	-9.8	-10.8	4.6
- Pick up and trucks	-20.9	-42.5	-24.0	1.7	-3.5	15.8	4.3	-1.8	2.9
- Vehicle parts & accessories	5.2	-1.6	2.3	6.9	13.8	13.4	9.7	14.4	6.6
Machinery & equipment	-0.3	-0.9	-9.3	2.5	6.8	4.2	11.5	13.2	8.8
Chemicals	-5.0	-15.7	-10.4	-1.0	9.5	23.1	14.4	24.8	3.0
Petro-chemical products	-3.7	-5.6	-7.7	-5.9	4.8	7.3	16.1	10.9	5.1
Petroleum products	-30.9	-43.6	-43.7	-29.2	-4.8	43.0	36.7	29.7	3.2
Fishery	**15.1**	**3.3**	**17.8**	**22.7**	**16.3**	**2.1**	**10.4**	**11.5**	**1.0**
Crustaceans	38.5	22.3	64.2	50.7	23.5	-4.8	8.4	17.8	0.5
Other Exports	**75.5**	**193.5**	**82.9**	**17.5**	**33.4**	**-35.0**	**-44.3**	**49.8**	**4.2**
Non-monetary gold (excl. articles of goldsmiths)	89.8	230.7	110.9	20.7	38.0	-37.5	-45.4	52.7	4.0
Total Exports (Customs basis)	**0.5**	**1.0**	**-3.8**	**1.0**	**3.8**	**4.9**	**10.9**	**12.0**	**100.0**
Exports, f.o.b. (BOP basis)	**0.1**	**-1.6**	**-2.2**	**0.3**	**4.0**	**6.8**	**7.9**	**12.5**	**99.6**
Export Value (exclude gold)	**-1.6**	**-5.3**	**-4.1**	**-0.3**	**3.5**	**9.2**	**9.8**	**11.2**	**95.5**

Source: Bank of Thailand

Export markets: exports to the US, EU (15), China, Japan, ASEAN (9), and the Middle East (15) expanded, while exports to Australia slightly declined. Export to the US, China, Japan, and EU (15) increased by 8.1, 21.7, 10.4, and 4.5 percent, respectively, following the improvement of the US, China, Japan, and EU economies. Exports to ASEAN (9) expanded by 9.6 percent, due to the expansion of export to ASEAN (5) of 5.3 percent and CLMV countries of 16.2 percent. Exports to the Middle East (15) expanded for the first time in 13 quarters by 0.7 percent, due to the expansion in phones & devices and rice export. Meanwhile, exports to Australia slightly fell by 0.1 percent, due to the contraction in gold and iron & steel export.

Exports to the US, EU (15), China, Japan and ASEAN (9) expanded favorably. Meanwhile, exports to the Middle East (15) increased for the first time in 13 quarters.

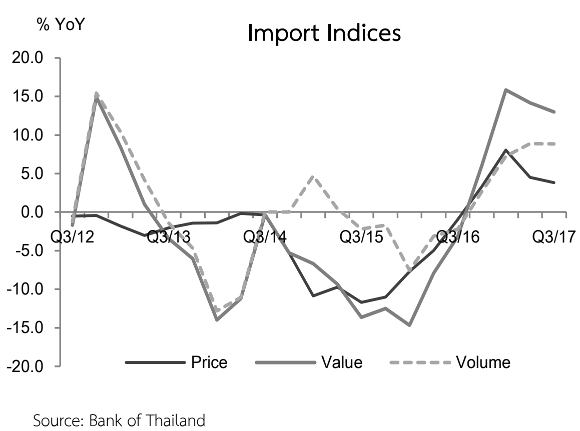
Export Value to Key Markets in US Dollar Term

%YOY	2016					2017			Share Q3/17 (%)
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Total Exports (Mil US$) (Customs basis)	215,388	53,844	51,458	55,247	54,838	56,456	57,090	61,888	100.0
(%YoY)	0.5	1.0	-3.8	1.0	3.8	4.9	10.9	12.0	
United States	1.8	-3.2	0.7	7.0	2.7	7.4	7.0	8.1	11.4
Japan	2.1	5.5	-8.4	0.5	11.4	-2.5	20.1	10.4	8.9
EU (15)	1.0	-1.0	-0.3	2.7	2.5	9.2	5.5	4.5	8.7
China	0.3	-6.1	-10.3	-0.3	17.1	36.5	26.0	21.7	12.1
ASEAN (9)	-0.7	4.3	-9.7	-0.4	3.6	0.0	15.0	9.6	24.1
- ASEAN (5)*	-1.1	9.6	-13.7	0.5	0.1	-8.9	17.2	5.3	14.0
- CLMV**	-0.0	-3.8	-3.2	-1.9	8.1	15.3	11.8	16.2	10.1
Middle East (15)	-15.1	-11.1	-7.8	-16.5	-24.5	-23.1	-0.4	0.7	3.5
Australia	5.5	6.9	13.9	10.6	-8.4	-3.0	-4.8	-0.1	4.6
Hong Kong	-3.0	0.6	-8.1	-4.5	-0.3	6.3	13.0	7.7	5.4
India	-2.6	-9.1	-2.4	-1.9	4.1	18.3	13.3	27.3	2.7
South Korea	-0.7	-8.4	-6.9	1.1	12.1	24.2	24.2	11.3	1.9
Taiwan	-4.5	-17.8	-0.5	-2.8	4.5	15.9	22.1	23.3	1.7

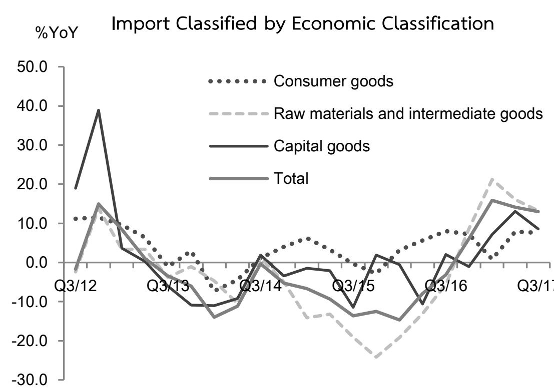
Note: * ASEAN (5) consist of Brunei, Indonesia, Malaysia, Philippines, and Singapore
** CLMV consist of Cambodia, Laos, Myanmar, and Vietnam
Source: Bank of Thailand

Import value in US dollar term expanded along with the improvement of domestic demand and export conditions. In the third quarter of 2017, the value of import was recorded at 51.5 billion US dollars, grew by 13.0 percent. Import price and quantity increased by 3.8 and 8.8 percent, respectively. The import volume of consumer goods, raw materials & intermediate goods, and capital goods increased, associated with an expansion of exports and domestic demand. The import value excluding unwrought gold expanded by 9.5 percent. **In Thai baht term,** the import value increased by 8.3 percent.

Imports in US dollar term expanded by 13.0 percent due to the increase of both quantity and price, by 8.8 and 3.8 percent, respectively.



Source: Bank of Thailand



Source: Bank of Thailand

Overall, import value of all categories increased. Import value of raw materials and intermediate goods expanded by 13.2 percent. Import of capital goods expanded by 8.6 percent, driven by the improvement in private investment. Import of consumer goods and other imports expanded by 7.6 and 46.8 percent, respectively. Import items with increased value were crude oil, integrated circuits & parts, materials of base metal, chemicals, other machinery & mechanical appliances & parts, and non-monetary gold.

Import quantity of all categories increased, which is consistent with the acceleration of export sector, the improvement in private investment, and the continued expansion of domestic demand.

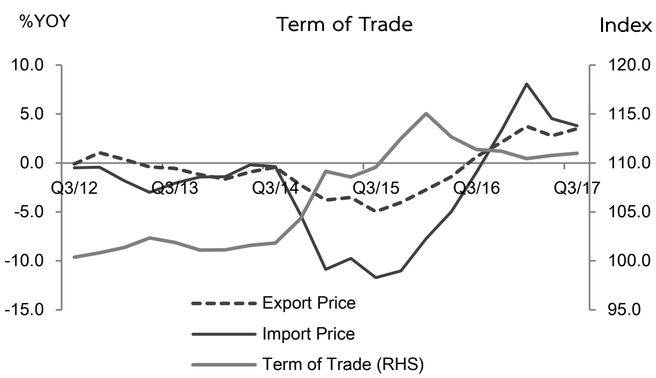
Import Value of Major Product in US Dollar Term

%YoY	2016					2017			Share Q3/17 (%)
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Consumer goods	6.0	3.1	5.6	8.0	7.2	0.8	7.8	7.6	10.2
Raw materials and intermediate goods	-8.0	-19.2	-13.1	-5.6	8.6	21.2	16.1	13.2	53.0
Capital goods	-2.6	-0.5	-10.6	2.0	-1.1	7.2	13.0	8.6	25.5
Other Imports	3.0	-15.0	17.0	0.6	13.1	19.1	24.8	46.8	11.3
Total Imports (Customs basis)	-4.2	-12.0	-8.5	-1.7	6.2	14.8	15.2	14.3	100.0
Imports, f.o.b. (BOP basis)	-5.1	-14.7	-7.9	-3.2	6.1	15.9	14.2	13.0	90.9

Source: Bank of Thailand

Term of trade decreased from the same period last year as export price increased by 3.5 percent, slower than the increase in import price of 3.8 percent. Thus, the term of trade decreased from 111.4 in the same quarter last year to 111.0 in the third quarter of 2017.

Term of trade decreased, compared with the same period last year.



Source: Bank of Thailand

Trade balance recorded a surplus.

Trade balance recorded a surplus of 10.1 billion US dollars (equivalent to 337.4 billion baht), compared with a surplus of 9.2 billion US dollars (equivalent to 321.6 billion baht) in the same quarter of last year.

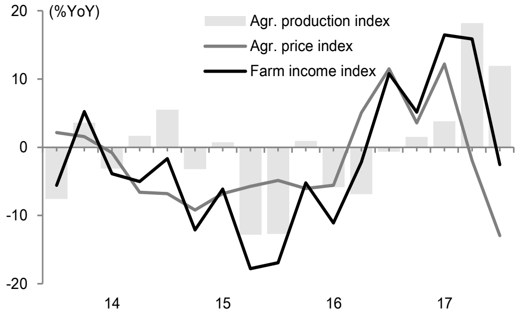
Production side:

Manufacturing, Electricity, gas and water supply, Wholesale and retail trade, and Fishery sector accelerated, and Agricultural, Transport, storage & communication, and Hotels & restaurants sector maintained favorable growth rate. Meanwhile, Construction sector declined.

Agricultural sector maintained high growth rate while agricultural price declined; from high base due to the drought in the same period of last year; leading to a minor decline in farm income. In the third quarter of 2017, agricultural sector highly expanded by 9.9 percent, compared with 16.1 percent growth in the previous quarter. This was due to the expansion of 10.1 percent in agriculture and 8.6 percent in fishery. The improvement of agricultural sector was in line with the strong increase in Agricultural Product Index of 11.9 percent**. Agricultural Product Index with positive growth** included in-season paddy, cassava, maize, rubber, and fruits in tandem with growth in livestock and fishery production; particularly white shrimps. **Agricultural Price Index decreased** by 12.9 percent partly due to the increasing of agricultural products and high price base due to the drought in the same period of last year. **Agricultural Price Index with negative growth** included paddy, oil palm, maize, cassava, as well as livestock and fishery products (white shrimp in particular). However, price of rubber and sugarcane increased. Farm income's Index decreased by 2.6 percent mainly due to the decrease in agricultural price index.

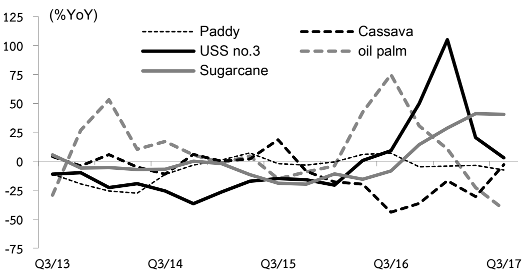
Agricultural sector expanded by 9.9 percent owing to 10.1 and 8.6 percent expansion in agricultural and fishery, respectively. The production of all agricultural categories expanded. However, the agricultural price declined.

Farmer's Income Index decreased by 2.6 percent reflecting the reduction in prices



Source: Office of Agricultural Economics

The prices of paddy, cassava and oil palm declined while prices of rubber and sugarcane increased.

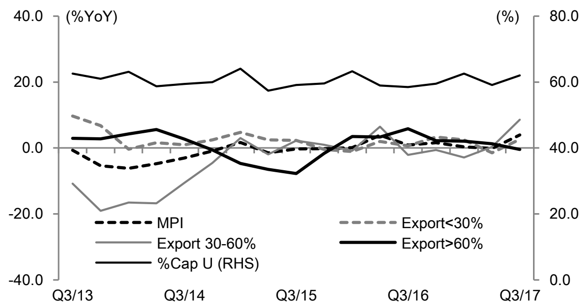


Source: Office of Agricultural Economics

Manufacturing sector favorably improved by 4.3 percent in tandem with the high expansion in export and the improvement domestic demand.

Manufacturing sector expanded by 4.3 percent, the highest growth rate in 18 quarters, in tandem with the strong expansion in export and the improvement of domestic demand. In the third quarter of 2017, manufacturing sector expanded by 4.3 percent, remarkably accelerated from 1.1 percent growth in the previous quarter along with the expansion of Manufacturing Production Index. **Manufacturing Production Index of the industries with 30-60 percent export share to total production** grew by 8.6 percent, accelerated from 0.4 percent in previous quarter. **Manufacturing Production Index of the domestic-oriented industry** (with export share of less than 30 percent to total production) expanded by 2.6 percent, improved from the 1.4 percent contraction in previous quarter. This is due to an increase in production of key industries such as liquor & ethyl-alcohol products and vegetable oil, animal oil & animal fat. While, **Manufacturing Production Index of the export-oriented industries** (with export share of more than 60 percent to total production) contracted by 0.4, mostly owing to the decline in the production of machinery for general purpose while most of other productions expanded. The average capacity utilization rate stood at 62.0 percent, improved from 58.5 percent in the same quarter last year. **Manufacturing Production Index** of most of key industries expanded including automotive parts & engine, vehicle, integrated circuit (IC), petroleum and coal, rubber & plastic product, other rubber products, and food & beverage. **Manufacturing Production Index with negative growth** included machinery for general purpose, jewelry, ornaments, & related items, and fabric fiber preparation and textile, etc.

Manufacturing Production Index increased by 4.0 percent and the capacity utilization rate averaged at 62.0 percent.



Source : Office of Industrial Economics (OIE)

Electricity, gas and water supply sector grew by 3.5 percent following the increased consumption in manufacturing, wholesale and retail trade, as well as hotel and restaurant sector.

Electricity, gas and water supply sector improved in line with an expansion of economic activities. In the third quarter of 2017, electricity, gas and water supply sector grew by 3.5 percent, accelerated from a contraction of 1.3 percent in the previous quarter. **Production and sale of electricity generation** increased by 4.4 percent due to the increase in consumption from large-scale manufacturing such as (i) food, beverage and tobacco, and (ii) fundamental metal product, along with wholesale and retail trade, as well as hotel and restaurant sector. **Water supply production and distribution** increased by 2.0 percent, following a 2.3 percent increase in the number of regional water users. Meanwhile, gas separation declined due to a deceleration in the supply of natural gas.

Construction sector contracted by 1.7 percent following contraction in both public and private construction which dropped by 2.2 and 1.1 percent, respectively.

Construction sector declined following contraction in both public and private construction. In the third quarter of 2017, construction sector declined by 1.7 percent improved from a contraction of 6.2 percent in the previous quarter. The public construction decreased by 2.2 percent, compared to a 12.8 percent decline in the previous quarter. Meanwhile, the private construction decreased by 1.1 percent, compared with 3.1 percent growth in the previous quarter. Construction of residential buildings decreased by 1.6 percent. However, construction of office and commercial buildings grew by 3.4 percent. **Construction Materials Price Index** increased by 3.0 percent following an expansion in prices of wood and wood product as well as others construction materials, especially metal and metal products which grew by 14.9 percent.

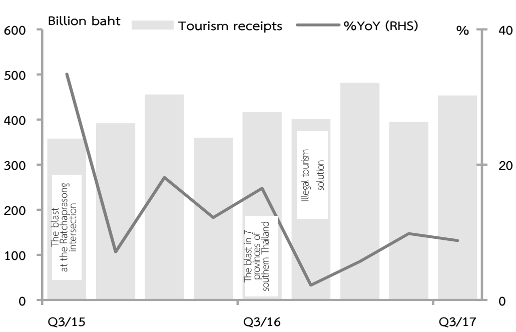
Wholesale and retail trade sector expanded by 6.4 percent, in tandem with the expansion of household consumption and the favorable increase in the number of foreign tourists.

Wholesale and retail trade sector accelerated in line with the expansion of household expenditures and the increase in the number of foreign tourists. In the third quarter of 2017, wholesale and retail trade sector expanded by 6.4 percent, accelerating from 6.0 percent growth in the previous quarter. **Wholesales Index grew by 5.8 percent** due to expansion in wholesale-volume of non-durable goods (such as food, pharmaceutical and medical goods, cosmetic and toilet preparations), durable goods (such as electric household appliances and consumer electronics), and intermediate goods. **Retail Sales Index grew by 8.6 percent,** owing to the increase in all categories, mainly driven by retail sale volume of; (i) non-durable goods (such as beverages in specialized stores, tobacco products in specialized stores); (ii) durable goods (such as beverages in specialized stores, tobacco products in specialized stores); (iii) department stores, supermarkets, and general stores (such as stalls and markets of food, beverages and tobacco products); (iv) motor vehicles sale, motor repairing service, and automotive fuel sector, and; (v) other retailing sector.

The hotels and restaurants sector expanded by 6.7 percent, in tandem with 8.8 percent growth of foreign tourism receipts and 11.0 percent growth of Thai tourism receipts.

Hotels and restaurants sector expanded steadily. In the third quarter of 2017, hotels and restaurants sector expanded by 6.7 percent, compared to an increase of 7.5 percent in the previous quarter. The total tourism receipt was at 693.4 billion baht, increased by 9.5 percent, attributed by (i) **foreign tourism receipts** which were at 453.4 billion baht, grew by 8.8 percent growth comparing with 9.8 percent in the previous quarter. In particular, it was mainly contributed by Chinese, South Korean, Indian and US tourists; and (ii) **Thai tourism receipts** which were at 240.0 billion baht, increased by 11.0 percent. **The average occupancy rate** in the third quarter was at 63.71 percent, increased from 61.90 percent in the same quarter last year.

Income from foreign tourists for Q3/2017 stood at 453.4 billion baht or grew by 8.8 percent



Source: Ministry of Tourism and Sports

Transport, storage and communication sector favorably expanded following the improvement in the number of tourists, agricultural & manufacturing production, and international trade activities. In the third quarter of 2017, transport, storage and communication sector grew by 8.1 percent, compared to 8.7 percent in the previous quarter. **Transport service** grew by 8.6 percent, comparing with 8.9 percent in the previous quarter, attributed by (i) 6.3 percent growth in land transport, (ii) 14.6 percent growth in air transport as air flights increased by 9.2 percent, and (iii) 3.0 percent growth in water transport. **Telecommunication** service expanded by 6.3 percent, comparing with 8.1 percent growth in the previous quarter, in accordance with the better earnings performance of telecommunication service providers, especially the fiber-optic internet services.

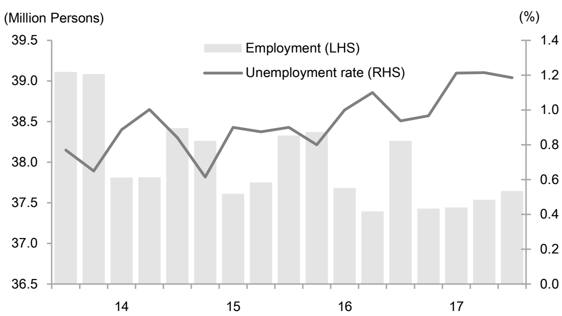
Employment declined following the contraction in both agricultural and non-agricultural employment; however unemployment rate remained low. In the third quarter of 2017, employment decreased by 1.6 percent comparing with 0.4 percent growth in the previous quarter. **The agricultural employment** declined by 1.2 percent following the contracted employment particularly in cassava, maize, as well as dairy cattle and beef cattle production. **The non-agricultural employment** decreased by 1.8 percent due to the decline in employment of: (i) manufacturing sector of 4.0 percent, caused by lower employment in clothing and fundamental metal industries; (ii) Wholesale and retail trade & motor repairing service sector of 2.6 percent and; (iii) construction sector of 6.8 percent.

Unemployment in the third quarter was recorded at 452,590 persons and the **unemployment rate** was at 1.2 percent.

Transport, storage and communication sector grew by 8.1 percent, in tandem with the expansion of tourist numbers, agricultural & manufacturing production, and international trade activities.

Employment decreased by 1.6 percent following the contraction in both agricultural and non-agricultural employment, while unemployment rate remained low at 1.2 percent.

Employment declined by 1.6 percent following the contracted employment in both agricultural and non-agricultural sectors. Unemployment rate was low at 1.2 percent.



Source: National Statistics Office (NSO)

Employed Persons by Industry

%YOY	Shared Q3/17	2016					2017		
		Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Employed	**100.0**	**-0.9**	**0.2**	**-0.9**	**-0.2**	**-2.5**	**-0.6**	**0.4**	**-1.6**
- Agricultural	**33.4**	**-4.3**	**-2.7**	**-6.2**	**-2.3**	**-6.0**	**-1.4**	**6.3**	**-1.2**
- Non-Agricultural	**66.6**	**0.8**	**1.5**	**1.4**	**0.9**	**-0.7**	**-0.3**	**-2.1**	**-1.8**
Manufacturing	15.9	-2.6	-2.2	-1.7	-1.9	-4.4	-1.5	-4.2	-4.0
Construction	5.4	3.1	5.8	5.4	0.1	0.2	-8.7	-11.8	-6.8
Wholesale and retail trade; repair of motor vehicles and motorcycles	16.4	2.5	2.9	1.4	3.9	1.9	0.9	1.0	-2.6
Accommodation and food service activities	7.2	3.2	2.9	4.0	6.1	0.1	4.2	-2.7	-1.0
Unemployment (Hundred thousand persons)		**3.8**	**3.7**	**4.1**	**3.6**	**3.7**	**4.6**	**4.6**	**4.5**
Unemployment Rate (%)		**1.0**	**1.0**	**1.1**	**0.9**	**1.0**	**1.2**	**1.2**	**1.2**

Source: NSO

Fiscal Conditions:

On the revenue side, in the fourth quarter of the fiscal year 2017 (July - September 2017) the net government revenue collection stood at 612.4 billion baht, which was higher than the same quarter of last year by 2.3 percent. This was due to (i) revenue collection from VAT and custom revenue increased by 7.0 percent and 1.6 percent respectively, caused by the expansion of import value, (ii) the specific tax increased 9.4 percent due to an increasing of transfer of ownership in the real estate sector, and (iii) the excise tax revenue collection increased by 13.1 percent because of the rising excise tax rate on alcohol beverage and tobacco. However, the tax revenues collection from income tax decreased by 4.5 percent and corporate income tax decreased by 1.4 percent.

The net government revenues collections increased by 2.3 percent. This was due to the increasing of revenue collection from VAT, excise tax and specific business tax.

For the whole fiscal year 2017, the net government revenue collection decreased by 1.8 percent from the same period last year, but remained higher than the projection by 0.3 percent.

Government Revenue

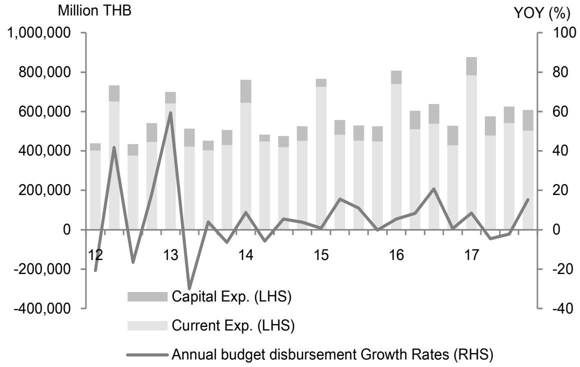
Fiscal Year (Billion Baht)	2015	2016					2017				
	Year	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4
Net Government Revenue	2,213.4	2,394.6	586.0	492.6	717.3	598.8	2,350.6	548.2	500.1	689.9	612.4
Compared with the target (%)	-4.8	0.4	13.4	-0.6	2.1	-10.8	0.3	4.4	-1.5	-1.4	0.4
YOY (%)	6.7	8.2	15.5	4.8	9.9	2.6	-1.8	-6.5	1.5	-3.8	2.3

Source: Ministry of Finance

On the expenditure side, the total budget disbursement in the fourth quarter of the fiscal year 2017 was at 713.5 billion baht, increased by 9.4 percent from the same period last year. Classified by its source of funds, the government disbursements were as follows: **(i) the 2017 annual budget disbursement (including the 2017 supplementary budget)** was at 608.6 billion baht (or equivalent to 20.8 percent of the annual budget), increased by 15.2 percent. This included the increase in disbursement of current expenditure by 17.3 percent (the disbursement rate was at 21.1 percent) and the capital expenditure by 6.2 percent (the disbursement rate was at 19.6 percent) comparing with the same period of last year. The disbursement of supplementary budget was at 49.1 billion baht; **(ii) the carry-over budget disbursement** was at 18.4 billion baht, decreased by 39.4 percent from the same period last year; **(iii) state-owned enterprises' capital expenditure budget** was disbursed at 89.6 billion baht in this quarter (including the disbursement of capital expenditure of 5.4 billion baht of annual budget) decreased by 2.4 percent, comparing with the same period of last year; and **(iv) the off-budget loans** were disbursed at 2.3 billion baht, which included Loans for water resource management and road transport system projects of 2.1 billion baht and the Development Policy Loan (DPL) of 240 million baht.

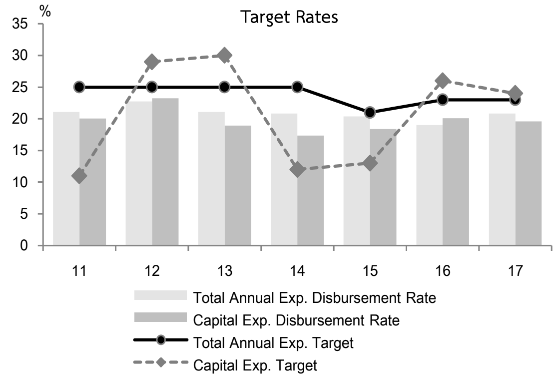
The capital expenditure increased by 6.2 percent contributed by the disbursement of supplementary budget.

Annual Budget Disbursement



Source: GFMIS

The 4th Quarter Annual Budget Disbursement and Target Rates

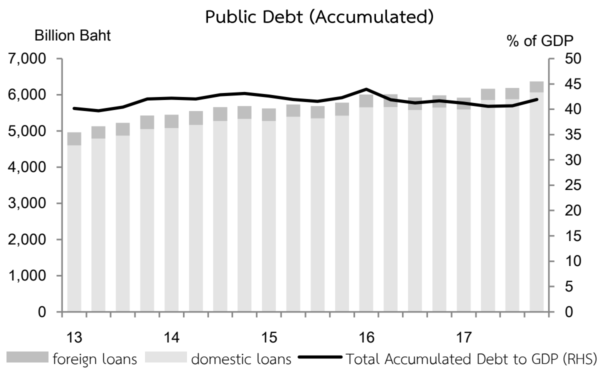


Source: GFMIS

For the whole fiscal year 2017, (i) the annual budget disbursement amounted to 2,686.6 billion baht, increased by 4.2 percent from the same period of previous year (the disbursement rate was at 91.9 percent, lower than the same period last year rate of 92.9 percent). The increase in the annual budget disbursement was contributed by the capital expenditure's disbursement which increased by 4.4 percent from the same period of last year; (ii) the carry-over budget disbursement amounted to 182.5 billion baht (equivalent to 74.6 percent of total carry-over budget); (iii) state-owned enterprises' capital expenditure budget disbursement amounted to 345.9 billion baht; and (iv) the off-budget loans disbursement amounted to 9.4 billion baht.

Public Debt at the end of September 2017 was accumulated at 6.4 trillion baht or equivalent to 41.7 percent of GDP. The public debt was comprised of domestic loans of 6.1 trillion baht (39.8 percent of GDP) and foreign loans of 301.5 billion baht (2.0 percent of GDP).

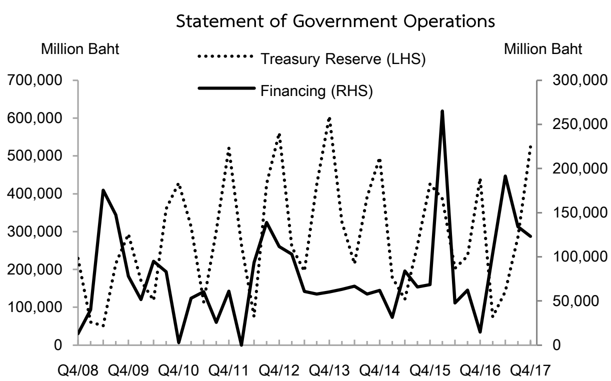
The public debt remained under the fiscal prudential framework at 41.7 percent of GDP, increased from 40.5 percent at the end of previous quarter.



Source: PDMO and NESDB

Fiscal Balance: in the last quarter of fiscal year 2017, the budgetary balance recorded a deficit of 20.4 billion baht, while the non-budgetary balance recorded a surplus of 135.6 billion baht. In the meantime, the government conducted a cash balance management through borrowing total of 123.2 billion baht. (The 2017 Fiscal year, the government has conducted a cash balance management through borrowing total of 552.9 billion baht of Loan on Deficit Financing). Therefore, the cash balance after debt financing recorded a net surplus of 238.5 billion baht, and the treasury reserve at the end of fiscal year 2017 stood at 523.8 billion baht.

At the end of fiscal year 2017, the treasury reserve stood at 523.8 billion baht.



Source: MOF

Financial Conditions:

The policy rate was kept unchanged at 1.50 percent per annum throughout the third quarter.

Policy interest rate remained unchanged, though policy direction in the advanced economies became normalized.

During the meeting on 16 August and 27 September, the Monetary Policy Committee maintained its accommodative policy stance at 1.50 percent per annum as demand-pull inflationary pressure still subdued. Meanwhile, Fed decided to leave policy rate on hold at a range of 1.00 - 1.25 percent per annum at its 20 September meeting, and announced that it would begin to reduce the size of Fed balance sheet towards 4.5 trillion dollars. The ECB, BOE and BOJ also kept their policy rates and pursued their size of quantitative measures as in previous quarter. Given inflation below their targets, several central banks in the region still held their interest rates and some of them even further lowered policy rates. In particular, Bank of Indonesia cut its policy rates twice during August to September, and then Bank of India together with the Central of Russia also edged down their individual rates in August and September.

In October 2017, the ECB indicated a decision to extend its asset purchase program until September 2018, but reducing the pace of monthly asset purchases to 30 billion Euros from January 2018. At its 31 October meeting, Fed continued to keep existing policy rate at a range of 1.00 - 1.25 percent per annum, however, it was expected another hike in December meeting.

Policy Interest Rate

(%) At the end of period	2016					2017						
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Jul	Aug	Sep	Oct
USA	0.50-0.75	0.25-0.50	0.25-0.50	0.25-0.50	0.50-0.75	0.75-1.00	1.00-1.25	1.00-1.25	1.00-1.25	1.00-1.25	1.00-1.25	1.00-1.25
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
England	0.25	0.50	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Australia	1.50	2.00	1.75	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
New Zealand	2.00	2.25	2.25	2.00	2.00	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Russia	10.00	11.00	10.50	10.00	10.00	9.75	9.00	8.50	9.00	9.00	8.50	8.25
China	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Taiwan	1.375	1.50	1.50	1.375	1.375	1.375	1.375	1.375	1.375	1.375	1.375	1.375
Korea, South	1.25	1.50	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
India	6.50	6.75	6.50	6.50	6.50	6.25	6.25	6.00	6.25	6.00	6.00	6.00
Indonesia (BI Rate)	6.50	6.75	6.50	-	-	-	-	-	-	-	-	-
Indonesia* (BI 7-Day RR Rate)	4.75	-	5.25	5.00	4.75	4.75	4.75	4.25	4.75	4.50	4.25	4.25
Philippines	3.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Thailand	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50

Source: Collected by NESDB
Remark: In August 2016, Indonesia introduced a new policy rate known as the BI 7-Day (Reverse) Repo Rate in order to replace the former reference rate – BI Rate. The new policy rate was retroactive since April 2016.

The deposit and lending rates of commercial banks and SFIs remained stable. However, real rates decreased, following a pick up in headline inflation rate.

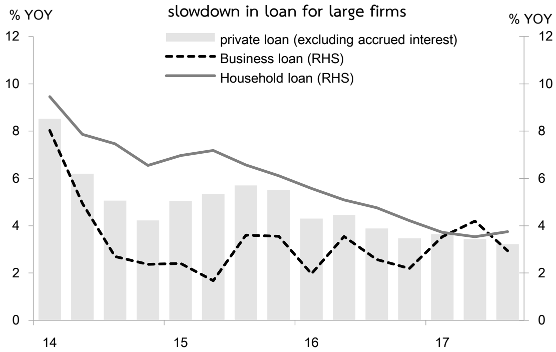
All commercial banks and Specialized Financial Institutions (SFIs) kept their both 12-month deposit rates and MLR lending rates at the same level as in the previous quarter. In the meantime, Bank of Thailand tightened rules governing credit card and personal loan, particularly limited credit line and reduced ceiling for interest charged on credit card loan. Nonetheless, real deposit and lending rates decreased due to the increase in headline inflation rate after a pick up in energy price and a slowdown declining in raw food prices.

In October 2017, the MLR and MRR lending rates of commercial banks slightly edged up, which was due to a completion of retail loan transfer to a medium-sized commercial bank after another foreign bank decided to change its business model. Meanwhile, deposit and lending rates of other commercial banks and SFIs stayed at the same level as seen in the previous month. Furthermore, the real deposit and lending rates were stable, following a steady headline inflation rate.

Private loan of Depository Corporations decelerated, due mainly to a slowdown in loan for large firms. In contrast, household loans continually expanded.

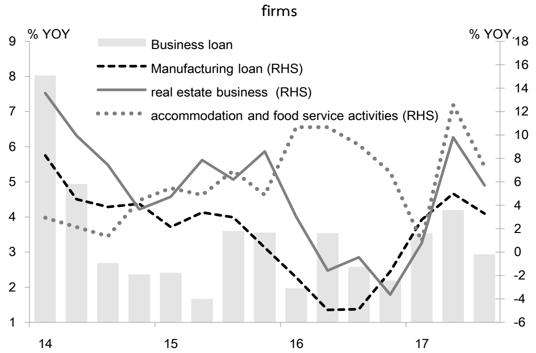
In the third quarter of 2017, Private loan of Depository Corporations grew by 3.2 percent, decelerated from a 3.4 percent growth in the previous quarter. Business loan in this quarter grew by 2.9 percent, slowed down from a 4.2-percent growth in the previous quarter, owing to the deceleration of loan for large firms from commercial banks and a decrease in loan from Specialized Financial Institutions (SFIs). In particular, the slowdown of loan from commercial banks found in those for manufacturing, real estate business and accommodation and food service activities sector. In contrast, household loans accelerated from the previous quarter following the expansion in credit card loan, hire purchase loan and housing loan. Meanwhile, Non-Performing Loan to total outstanding loan ratio rose from 2.95 percent to 2.98 in this quarter.

Private loan of Depository Corporations decelerated, mainly from a slowdown in loan for large firms



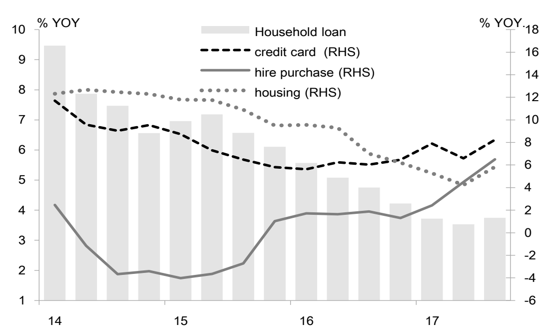
Source: Bank of Thailand

Business loan slowed down from the acceleration in loan for large firms



Source: Bank of Thailand

Household loan accelerated from the previous quarter



Source: Bank of Thailand

Thai Baht against US dollar appreciated as a result of weakening US dollar, current account surplus and inflow of foreign portfolio investment.

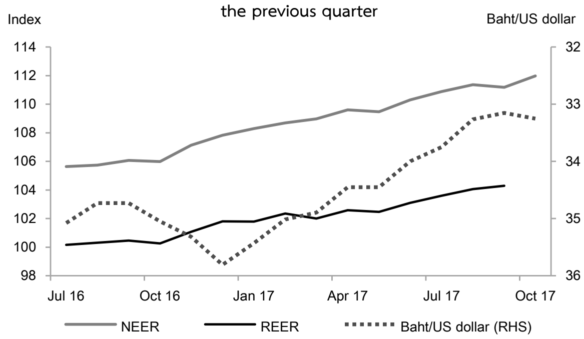
Thai Baht against US Dollar appreciated. During the third quarter of 2017, an average exchange rate was at 33.37 baht per US dollar, appreciating 2.7 percent relatively to the previous quarter. The appreciation was a result of US dollar depreciation pressured by (i) the uncertain pace of further the Federal Reserve (Fed)'s interest rate hike (ii) concerns over possible delays of the US economic stimulus package caused by a slow progress of President Trump's healthcare reform proposal. In addition, Thai baht was also strengthened by current account surplus as well as net buy of foreign portfolio investment especially in the bond market. However, in the last week of the third quarter, the baht appreciation was slightly weighted down after the US economic indicators showed a clearer sign of economic recovery. In the third quarter of 2017, an average Thai baht against trading partners (NEER)[1] appreciated by 1.2

[1] The BOT began using the new NEER and REER in March 2014. The base year would also be changed to 2012, that the indicators could capture the true structure of trade in line with changing international dynamics.

percent compared with the same period of last year. This was in line with a 1.2-percent appreciation of the real effective exchange rate (REER).

In October 2017, the average exchange rate was at 33.25 baht per US dollar, slightly depreciating from September average. This was caused by strengthening US dollar supported by (i) European Central Bank's policy decision, which kept its policy rate on hold and decided to scale down the pace of its stimulus program, effective on January – September 2018. (ii) further progress of President Trump's tax reform plans after the senate approved the 2018 budget resolution.

Thai Baht appreciated against US dollar from the previous quarter



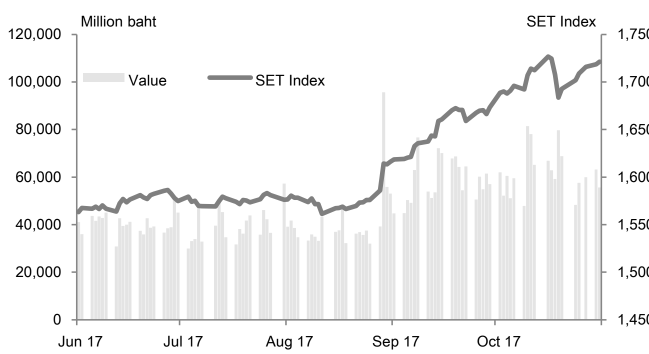
Source : CEIC, Bank of Thailand

In line with other neighboring stock markets, SET Index accelerated and reached to 1,700 points, the first time since 1994.

SET Index increased from the previous quarter. At the beginning of the quarter, SET Index remained steady, with slight fluctuation due to the announcement of the second quarter listed companies' operating performance. However, SET Index turned to increase remarkably in line with the higher daily trading values at the end of August. This rise reflected improvement of political conditions. Besides, investors' expectation on the movement of Thai Baht and flows of capital into financial markets of Asian and emerging market economies were also key drivers. Nonetheless, short-term fluctuations have been observed due to the change in global investors' expectation on monetary policy decisions in many countries. At the end of this quarter, SET index closed at 1,673.16 points, increasing by 6.3 percent from the previous quarter.

In October 2017, SET Index continued to rise, which was in line with the upward trend in other financial markets. SET Index reached to the level of 1,700 points, the first time since 1994. Similarly, the stock indices of neighboring financial markets such as JCI Index (Indonesia) and PCOMP Index (Philippines) also recorded a historical high. However, foreign investors shifted their investment strategies to net selling in the second half of the month, in order to relocate their capital towards developed markets after their monetary policy announcements in the last week of the month. Instead, local investors became main buyers in the second half of the month. SET index thus closed at 1,721.37 points at the end of October, accelerating further from the third quarter by 2.9 percent.

SET Index surged in the end of August



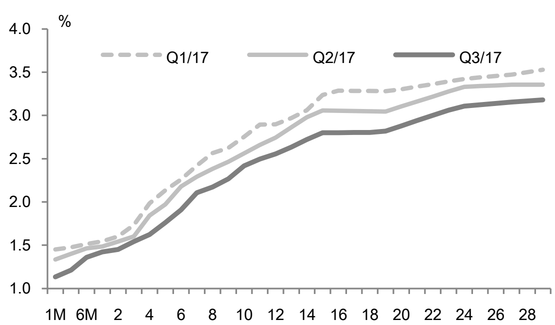
Source: CEIC

The government bond yield curve shifted downwardly in all maturities. The shift was driven by foreign investor net buy from the last week of July. The 10-year Thai government bond yield at the end of third quarter was at 2.42 percent, decreasing by 14 basis points (bps) from the last quarter. The decline of the yield was in line with an increase in the government bond price index (ThaiBMA Government Bond Index group 3: 7<TTM<=10). At the beginning of quarter, the yield moved downwardly following the decline of the 10-year U.S. treasury yield. However, the treasury rates rebounded after the European Central Bank (ECB) decided to maintain its policy rate on 7 September 2017, resulted in narrowing spread. At the end of the quarter, spread was at 9 bps, lowered from 25 bps in the last quarter.

The Government bond yield declined following buying force of global investors.

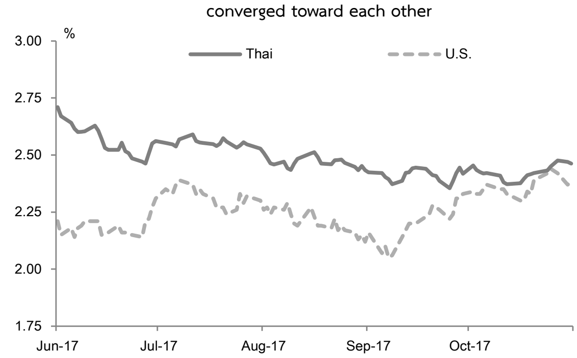
In October 2017, the government bond yield gradually increased especially for the medium- and long-term bonds with maturities between 4-14 years, which was attributable to the selling force of global investors since the second half of the month. The 10-year yield of Thai government bond increased to 2.46 percent at the end of the month, increased by 4 bps from the previous month. The spread between the Thai government bond yield and U.S. treasury yield continued to decline to 1 bps since the beginning of the month; then rebounded once the ECB decided to maintain the level of its policy rate on 26 October 2017.

Government bond yield in all maturities shifted downward



Source: ThaiBMA

The 10-year Thai and U.S. government bond yield converged toward each other



Source: ThaiBMA and CEIC

Capital and financial account recorded a net inflow of 1.0 billion US dollars in the third quarter of 2017, relative to a net outflow of 4.1 billion US dollars in the second quarter. The net inflow was caused by (i) a net inflow of foreign portfolio investment, particularly in the bond market, and (ii) a net inflow of foreign direct investment. Nonetheless, there was a continued net outflow from Thai investors in terms of both direct and portfolio investment.

Capital and financial account recorded a net inflow, which mainly driven by a net buy position in the bond market from foreign investors.

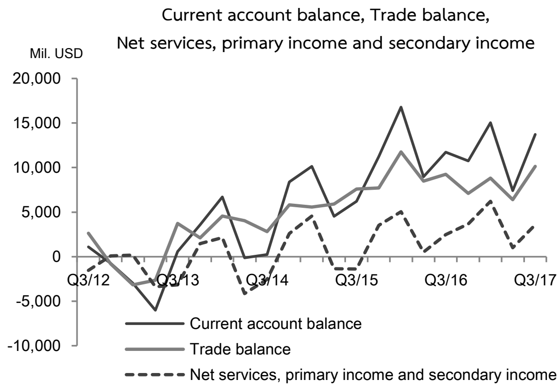
Capital Flow

(Billion USD)	2016					2017				
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Aug	Sep
Categorized by economic sectors										
Government	0.8	-0.7	1.3	1.1	-0.9	0.8	1.8	0.9	0.5	0.8
Monetary Authorities	1.1	2.6	-0.1	0.8	-2.3	0.4	-0.4	1.8	0.7	1.4
Bank	-0.7	-0.9	3.0	-0.2	-2.6	-0.1	-1.1	3.6	1.2	-0.2
Others	-22.2	-0.9	-5.5	-9.5	-6.4	-8.1	-4.4	-5.3	-1.1	-3.0
Capital and financial account	**-21.0**	**0.2**	**-1.3**	**-7.8**	**-12.1**	**-7.0**	**-4.1**	**1.0**	**1.3**	**-1.0**
Categorized by financial transactions										
- Direct Investment	-10.3	-1.2	-1.8	-7.4	0.1	-1.0	-2.5	-1.0	-1.1	-0.4
Thai investor	-13.4	-4.7	-3.2	-3.3	-2.3	-3.5	-4.3	-2.6	-1.6	-1.2
Foreign investor	3.1	3.5	1.3	-4.1	2.3	2.5	1.8	1.7	0.5	0.9
- Portfolio Investments	-2.8	1.7	0.9	2.8	-8.2	-1.4	-1.3	3.3	1.3	2.5
Thai investor	-4.3	-0.8	1.3	-2.8	-2.0	-3.7	-2.7	-2.1	-0.8	-0.2
Foreign investor	1.5	2.6	-0.4	5.5	-6.2	2.3	1.5	5.4	2.1	2.7
- Loans	1.40	-0.7	3.6	-1.3	-0.2	-0.7	1.7	0.3	1.2	0.8
- Others	-9.3	0.3	-3.9	-1.8	-3.8	-3.9	-2.0	-1.7	-0.2	-4.0
Capital and financial account	**-21.0**	**0.2**	**-1.3**	**-7.8**	**-12.1**	**-7.0**	**-4.1**	**1.0**	**1.3**	**-1.0**

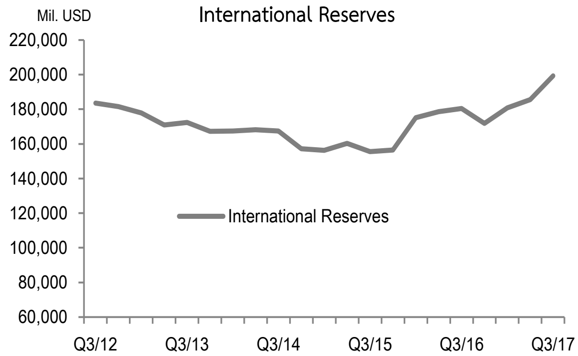
Source: BOT

Current account registered a surplus of 13.7 billion US dollars (456.6 billion baht). This was a result of a trade surplus of 10.1 billion US dollars and a surplus in services, and primary and secondary income of 3.6 billion US dollars.

Current account registered a surplus.



Source: Bank of Thailand



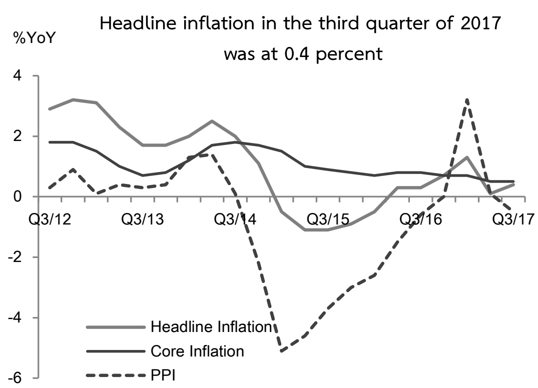
Source: Bank of Thailand

International reserve at the end of September 2017 stood at 199.3 billion US dollars (excluding net forward position of 31.2 billion US dollars), which was equal to 3.5 times of short-term foreign debt or import value of 11.6 months (the average of import value in the third quarter of 2017).

International reserve at the end of September 2017 stood at 199.3 billion US dollars.

Headline Inflation: In the third quarter of 2017, headline inflation was average at 0.4 percent. **Food -and-Beverage** price index decreased by 0.5 percent, due to a decline in price of meats, eggs and dairy products and vegetables and fruits. Meanwhile, **Non-Food and Beverage** price index increased by 1.0 percent, as the domestic retail fuel price increased, which made energy index increased by 4.9 percent. Core inflation stood at 0.5 percent.[2]

Headline inflation was at 0.4 percent, accelerated from the previous quarter. Non-Food and Beverage price index increased while Food-and-Beverage price index declined.



Source: Ministry of Commerce

Producer Price Index (PPI): In the third quarter of 2017 decreased by 0.5 percent. **The price of agricultural product** decreased by 5.8 percent as price of crops, and live-stocks decreased. **The price of mining products** increased by 4.7 percent due to lignite, petroleum & natural gas price increased. **The price of manufacturing products** increased by 0.1 percent, decelerated from 0.6 percent in the previous quarter due to rubber & plastic price decreased.[3]

Producer Price Index (PPI) decreased by 0.5 percent. The price of agricultural product decreased, while price of mining and manufacturing product increased.

[2] In October 2017, headline inflation was at 0.9 percent and core inflation was at 0.6 percent. In the first 10 months of 2017, headline inflation was at 0.6 percent and core inflation was at 0.5 percent.

[3] In October 2017, Producer price index (PPI) increased by 0.1 percent. In the first 10 months of 2017, Producer price index increased by 0.8 percent.

2. Crude Oil price in Q3 of 2017

The crude oil price in the global market increased. In the third quarter of 2017, the average crude oil price in the 4 major markets (Dubai, Oman, Brent, and WTI) stood at 50.33 USD per barrel, increased from the same period last year by 12.6 percent, and from the previous quarter by 1.4 percent.

The major factors contributed to the increase of global crude oil price included (i) the improvement of global economy that raised demand for crude oil, especially in Europe and China. Meanwhile, the US demand slightly decreased. (ii) The 9-month extension of oil production cut of OPEC and Non-OPEC (until March of 2018). (iii) Hurricanes Harvey and Irma, which disrupted US oil productions in late August and early September 2017.

The crude oil price increased due to the improvement of global economy, and OPEC and Non-OPEC output cut.

Crude oil price

Year		USD per Barrel					(%YOY)				
		OMAN	DUBAI	BRENT	WTI	Average	OMAN	DUBAI	BRENT	WTI	Average
2014	Year	96.82	96.48	99.49	92.71	96.38	-8.2	-8.5	-8.6	-5.6	-7.7
2015	Year	51.17	50.87	53.61	48.84	51.12	-47.1	-47.3	-46.1	-47.3	-47.0
2016	Q1	31.20	31.30	35.09	32.46	32.51	-40.9	-39.8	-36.2	-33.3	-37.6
	Q2	43.30	43.03	46.96	45.61	44.73	-29.4	-29.6	-26.1	-21.3	-26.7
	Q3	43.66	43.10	46.99	45.01	44.69	-12.5	-13.3	-8.4	-3.4	-9.5
	Q4	48.68	48.19	51.12	49.32	49.33	19.6	18.7	14.6	17.0	17.4
	Year	41.71	41.40	45.04	43.10	42.81	-18.5	-18.6	-16.0	-11.8	-16.3
2017	Q1	53.44	53.00	54.60	51.90	53.24	71.3	69.4	55.6	59.9	63.7
	Q2	49.80	49.55	50.92	48.31	49.65	15.0	15.1	8.4	5.9	11.0
	Q3	50.55	50.34	52.22	48.20	50.33	15.8	16.8	11.1	7.1	12.6
	Jul.	47.56	47.55	49.28	46.83	47.80	10.1	12.1	6.0	4.1	8.0
	Aug.	50.32	50.16	51.86	48.02	50.09	14.5	15.1	9.8	7.1	11.6
	Sep.	53.76	53.32	55.51	49.75	53.09	22.6	23.2	17.5	10.1	18.3
	9M	51.26	50.96	52.58	49.47	51.07	30.1	30.2	22.3	20.6	25.7
	Oct.	55.50	55.46	57.68	51.62	55.07	13.1	13.6	12.3	3.5	10.6

Source: Thai Oil Plc and EPPO.

3. The World Economy in Q3 of 2017

In the third quarter of 2017, the global economy continually improved, led by stronger economic activities in advanced countries, particularly the US, Canada, the Eurozone, and Japan. Meanwhile, the Chinese economy maintained relatively strong growth. The solid growth has accelerated global trade volume, and contributed to the recovery and board-based expansions across NIEs, ASEAN and other emerging regions.

The world economy continually improved in the third quarter, mainly supported by strong economic activities in major advanced countries led by the US, Eurozone, and Japan which in turn contributed to board-based expansions in other developing countries. In addition, some major countries started to signal monetary policy normalization namely the Fed, Bank of Canada, Bank of England, and the ECB.

Inflations have increasingly stabilized and gradually picked up in several countries including major economies, but the rates in most countries remained under the monetary policy target. Nevertheless, the US's Federal Reserve and ECB announced the balance sheet normalization plan. Bank of Canada (BoC) and the Bank of England (BoE) raised policy rates in September and November, respectively, due to a clear sign of the economic recovery, improving employment and rising inflationary pressure. By contrast, the Bank of Japan (BOJ) and other central banks in developing countries hold the accommodative monetary policy stance in order to maintain economic recovery, and to achieve the inflation target. These improvement has led the US dollar (Trade weighted) to gradually appreciate. Still, there were some remaining concerns over the global uncertainty, regarding particularly the progress on the US trade and economic policies, the results of NAFTA and BREXIT negotiation, the election results in Germany and Japan, and geopolitical tensions over the Korean peninsula and political unrest in Spain.

US economy expanded by 2.3 percent (Advance estimate), a gradual acceleration from 2.2 percent in the previous quarter, considered as the highest rate in 8 quarters. The economy managed to grow at solid pace despite the damage inflicted by two devastating hurricanes. The major driver in this quarter was the investment expansion in particular from change in inventories. However, personal consumption expenditures and exports decelerated, along with a decline in public investment. The continual economic growth has led the unemployment rate dropped to 4.3 percent which was the lowest rate in 16 years. Although the inflationary pressure is likely to increase in the near term, the inflation (PCE Price index) remained at 1.5 percent in the third quarter, lower than the Fed's target. Under the economic recovery with a gradual inflation dynamic, the FOMC decided to maintain its policy rate in the range of 1.00 – 1.25 percent in the 19th – 20th September 2017 and 31st October – 1st November 2017 meeting in line with the announcement to start implementing its balance sheet normalization program in October 2017. Additionally, the Fed will end its practice of reinvesting the principal payments of maturing into new bonds but rather allow 10 billion US dollars in holdings to roll off without reinvestment every month until it reaches 50 billion US dollars per month in October 2018.

The US economy expanded by 2.3 percent, the highest rate in 8 quarters, driven by private investment following an increase of change in inventories. Unemployment rate dropped to the lowest rate in 16 years, which will create inflationary pressure in the next period.

Eurozone economy grew by 2.5 percent, accelerating from 2.3 percent in the previous quarter, the highest rate in 26 quarters. The buoyancy of growth was supported by an improvement of household consumption expenditure in line with improving political conditions which have been strengthened consumer confidence index (CCI), reaching to the highest level in 16 years. Likewise, the pickup of manufacturing and service sectors has led to lower unemployment rate at 9.1 percent, the lowest level in 8 years. However, inflation was at 1.4 percent, closed to the previous quarter. Amid the economic recovery and remaining lower-than-target inflation rates, the ECB decided to keep its policy rate unchanged and maintain the same net asset purchases. Nevertheless, the ECB stated to start decreasing its monthly asset purchases to 30 billion euro from January to September 2018 in the 26th October 2017 meeting.

The Eurozone economy reached the highest growth rate in 26 quarters, the highest CCI in 16 years and the lowest unemployment rate in 8 years. The ECB kept its policy rate unchanged but will start to decrease the asset purchases to 30 billion euro from January to September 2018.

Japanese economy expanded by 1.7 percent, accelerated from 1.4 percent-growth in the previous quarter. The pickup was mainly supported by better domestic demand, accommodative fiscal stance, and the investment expansion prepared for the 2020 Tokyo Olympic Games. Despite the slowdown of export due to the Yen appreciation, the favorable growth has brought labor market reaching to the lowest unemployment rate in 23 years at 2.8 percent. While price pressure has gradually improved to 0.6 percent of inflation, marked as highest rate within 10 quarters, the rate remained below the monetary policy target. Hence, the Bank of Japan (BOJ) decided to keep the same level of key policy rate and asset buying at the monetary meeting on October 31st, 2017.

The Japanese economy continued to expand, mainly supported by stronger domestic demand both private and public sectors while export slowed down. Inflation gradually picked up though remaining at low level which thus made the BOJ to keep its monetary policy unchanged.

Chinese economy expanded by 6.8 percent, relatively strong expansion compared to 6.9 percent -growth in the first half of the year. Fixed asset investment and exports have decelerated in this quarter. Nevertheless, manufacturing production and domestic consumption manifested by favorably retail sales showed continual expansions and thus became key engines of the economic growth. Meanwhile, the external economic stability has continued to improve in which the foreign reserves increased for eight consecutive months, and resulting in the Yuan appreciation by 2.8 percent compared with the previous quarter.

The Chinese economy expanded by 6.8 percent, slowing down due to softened fixed asset investment and export while manufacturing production and retail sales remained key economic drivers.

NIEs economies mostly accelerated from the previous quarter. This was mainly due to the more robust export growths, along with the recovery in domestic demand which also brought about stronger manufacturing production. In the meantime, the inflation rate of most countries have increasingly stabilized and picked up gradually. The Singapore, Taiwan and South Korea economies grew by 4.6 percent, 3.1 percent and 3.6 percent, accelerating from 2.9 percent, 2.1 percent and 2.7 percent in the previous quarter, respectively. There was only Hong Kong economic growth experienced a slowdown with growth rate of 3.6 percent, lower than 3.9 percent in the previous quarter. Likewise, **ASEAN economies** also experienced economic improvement due to the acceleration of export, household consumption and public investment. The Vietnam, Indonesia, Malaysia and the Philippines economies expanded by 7.5 percent, 5.1 percent, 6.2 percent, and 6.9 percent as compared to 6.3, 5.0, 5.8 and 6.7 percent in the previous quarter respectively.

Most of NIEs economies accelerated due to the expansions of export and the recovery in domestic demand. Likewise, ASEAN-4 economies also experienced positive improvement due to stronger export, household consumption and public investment.

In the fourth quarter of this year, major economies tend to exhibit favorable growths continuing from a recovery momentum in the first three quarters as observed by better confidence, lower unemployment, rising in asset prices and the world commodity prices. Under such supportive environment together with high liquidity in major economies, it is expected that the world economy will expand by 3.6 percent, improving from 3.2 percent in 2016 and upwardly revised from 3.4 percent in the previous assumption.

GDP growth, Inflation and Export growth in several key economies

	Export (%YoY)				GDP (%YoY)				Inflation (%YoY)			
	2015	2016	2017		2015	2016	2017		2015	2016	2017	
	Year	Year	Q2	Q3	Year	Year	Q2	Q3	Year	Year	Q2	Q3
USA	-7.5	-3.6	5.7	4.9	2.9	1.5	2.2	2.3	0.1	1.3	1.9	2.0
EU	-12.1	0.1	2.7	11.8	2.0	1.8	2.3	2.5	0.0	0.2	1.5	1.4
Japan	-9.5	3.2	7.3	6.2	1.1	1.0	1.4	1.7	0.8	-0.1	0.4	0.6
China	-2.9	-7.7	8.5	6.5	6.9	6.7	6.9	6.8	1.4	2.0	1.4	1.6
Hong Kong	-1.8	-0.6	7.0	7.2	2.4	2.0	3.9	3.6	3.0	2.4	2.0	1.8
India	-17.0	-1.3	8.9	13.4	7.5	7.9	5.7	-	4.9	5.0	2.2	3.0
Indonesia	-14.6	-3.5	7.9	24.1	4.9	5.0	5.0	5.1	6.4	3.5	4.3	3.8
South Korea	-8.0	-5.9	16.7	24.0	2.8	2.8	2.7	3.6	0.7	1.0	1.9	2.3
Malaysia	-14.9	-4.6	11.4	16.0	5.0	4.2	5.8	6.2	2.1	2.1	4.0	3.8
Philippines	-5.3	-2.4	12.7	8.2	6.0	6.9	6.7	6.9	1.4	1.8	3.1	3.1
Singapore	-13.8	-5.5	5.6	9.5	2.0	2.0	2.9	4.6	-0.5	-0.5	0.8	0.4
Taiwan	-10.9	-1.8	10.2	17.5	0.8	1.5	2.1	3.1	-0.3	1.4	0.6	0.7
Thailand	-5.6	0.1	7.9	12.5	2.9	3.2	3.8	4.3	-0.9	0.2	0.1	0.4
Vietnam	7.9	9.0	22.2	22.6	6.7	6.2	6.3	7.5	0.6	2.7	3.3	3.1

Source: CEIC, Collected by NESDB

4. The World Economic Outlook for 2018

The world economy in 2018 tends to stay on the upward trend due to notable acceleration of the US economy and broad-based economic recovery in developing economies, supported by improving commodity prices and fiscal balance; in particular India, Russia, Brazil and the Middle East countries that tend to show accelerating growths. In addition, the Eurozone, Japanese and Chinese economies will continue their expansions, despite an anticipated moderate slowdown.

The continual growths of major advanced economies and synchronized recovery of the global economy will put higher pressures on primary commodity prices and inflation dynamic in major economies to increase gradually. Consequently, major economies will be likely to normalize their monetary policy stances including the US Fed that tends to continue raising policy rates along with gradually reducing its securities holdings and also the ECB that will start to implement its monthly asset purchases reduction plan. Meanwhile for other developing economies, the central banks are anticipated to adjust monetary policy direction during the latter half of the year, following increasing inflationary pressure and US interest rate. Nonetheless, the Bank of Japan appeared to remain the policy rate and keep the same level of asset buying as in the previous year.

Under the baseline scenario, the world economy and global trade volume are projected to grow by 3.6 percent and 4.0 percent, respectively. **The US economy** is projected to grow by 2.3 percent, gradually accelerating from 2.2 percent in 2017. The economic growth will be underpinned mainly by household spending supported by improving employment conditions, an increase in wages, and higher asset prices. Expansion of corporate profits and private investment will also become another key growth driver. Meanwhile, the inflationary pressure is likely to increase following the decline of the unemployment rate which marked as the lowest rate since 2000. As a result, the FOMC is likely to continually hike its policy rate in December 2017, June and December 2018, together with its balance sheet normalization program. **The Eurozone economy** is estimated to expand by 2.0 percent, gradually slowing down from 2.3 percent in 2017. The slowdown is due to the normalizing monetary policy and the uncertainty from the Brexit negotiation. However, the growth will be supported by the improvement of employment condition, easing liquidity condition, and improving economic confidence, which will support economic expansion. As inflation tends to pick up on a gradual pace, ECB thus tends to keep its policy rate unchanged for at least in the first three quarters, and simultaneously maintain the QE tapering. **The Japanese economy** is anticipated to grow at the rate of 1.2 percent in 2018, compared to 1.5 percent in 2017. The growth will continue to be driven by easing liquidity condition under improving political sentiment as well as investment in preparation for the 2020 Tokyo Olympic Games. Nonetheless, the conflict around Korean peninsula could lead to the appreciation of Yen, and thus continue to hinder exports. Meanwhile, the inflation will remain low and rise only gradually. Therefore, the BOJ is likely to hold the key policy rate and continually maintain asset purchases. **The Chinese economy** is estimated to expand by 6.6 percent, decelerating from 6.8 percent in 2017. This is owing to the deceleration of fixed asset investment, caused by the economic restructuring policy and resolving financial instability. Nevertheless, the supporting factors from fiscal stimulus packages on infrastructure investment and the improvement of manufacturing production and exports following the recovery of global economy will continue to support economic growth. **The NIEs** is anticipated to expand at a favorable pace. The Hong Kong, Taiwan and Singapore economies are estimated to grow by 2.8, 2.1, and 2.7 percent, compared to 3.7, 2.5, and 2.9 percent in 2017, respectively. Meanwhile, The South Korea economy is likely to grow by 3.0 percent, same rate in the previous year. Similarly, **the ASEAN economies** are expected to grow continuously owing to strong export sector and improving domestic demand, particularly public expenditure and investment which will lead to an improvement in manufacturing production. It is projected that the Malaysia, Indonesia, Philippines and Vietnam will grow by 5.5, 5.6, 6.9, and 6.4 percent in 2018, compared to growths of 5.9, 5.2, 6.7 and 6.2 percent in 2017, respectively. **For other developing economies,** the growth outlook has started to accelerate and is expected to be one among the key engines for global economic growth, in particular India, Brazil and Middle East economies which are forecasted to expand by 7.2, 1.5, and 3.5 in 2018, compared with the growth of 6.7, 0.7 and 2.6 in 2017 respectively.

Nevertheless, over the remainder of 2017 and 2018 there remain some limitations and risk factors that could pose some challenges to the global economy and monetary policy directions in major economies to diverge from the baseline scenario, and lead to fluctuations of the key currencies and global financial system. The factors are as follows: (i) the progress of US's tax reform and Budget Blueprint which is likely to be inert; (ii) the US's trade policy and the result of the NAFTA negotiation that could affect economic sentiments and limit global trade expansion; (iii) the negotiation on BREXIT could be prolonged and derail economic recovery of the Eurozone and the UK; and (iv) the political conditions among the EU member countries, notably Spanish regional election in the late of 2017 and the Italy's parliamentary election in May 2018, coupled with the political conflicts around the Korean peninsula and the intense opposition between Saudi Arabia, Iran and Lebanon.

Progress on the U.S. tax reform

On November 16th, 2017, the United States House of Representatives have passed tax reform bill by a vote of 227 to 205. Key objective of the reform is aiming to stimulate economic growth and increase purchasing power of households. It is estimated that this tax legislation will make the government to run into budget deficit of nearly 1.5 trillion US dollars over the next 10 years. Key details of the tax reform proposal are as follows, **(1) justify corporate tax system** by (i) reduce corporate tax rate from 35 percent to 20 percent, (ii) improve international business tax system in order to avoid transfer pricing, (iii) decrease the maximum tax rate for small businesses and non-profit organizations from 36.9 percent to 25 percent. **(2) justify personal income tax system** by (i) consolidate income tax brackets from seven to four while keeping the highest tax bracket on hold at 39.6 percent, (ii) increase the standard deduction for all taxpayers from 6,350 dollars to 12,200 dollars and from 12,700 dollars to 24,400 dollars for married couples, (iii) increase the size of the child tax credit from 1,000 dollars to 1,600 dollars, (iv) limit ceiling of home-mortgage-interest deduction. On new-home purchases, interest tax deduction up to 500,000 dollars would be deductible, (v) limit state and local property tax deduction up to 10,000 dollars.

However, there remain some possibilities that the policy implementation of President Donald Trump's tax bill could be delayed than expected due to significant differences between the Senate's draft and the House of Representative's draft. The Senate considers that the House's bill would cause a substantial budget deficit and also tends to benefit the rich rather than helping the poor. Thus, those Senators prefer to postpone the tax bill enactment for 1 year to be in 2019. This is thus against President Trump's will, who favor to have an immediate enforcement of tax reform to stimulate the economy. The possible delay could also cause US firms located abroad to reconsider and postpone their decision of relocating back to the US production base. Furthermore, if the House of Representative and the Senate are not able to reconcile their substantial differences and pass Senate's draft by the end of 2017, it could affect to the business confidence and the US economy.

The difference of tax reform advanced in the House and the Senate

	House Tax Cuts and Jobs Act	Senate Plan
Corporate taxes		
Rate	Rate cut to 20% as of 1/1/18	Rate cut to 20% as of 1/1/19
Pass-through	25% rate on some pass-through income; new rates for small businesses	New pass-through deduction
Expensing	Immediate deduction (sunset after 5 years)	Immediate deduction (sunset after 5 years)
Repatriation	One-time 7%/14% tax on overseas profits Excise tax on payments to foreign subsidiaries	One-time 5%/10% tax on overseas profits 12.5% tax on overseas intellectual property income
Business Interest	Interest deduction limited to 30% of earnings; some businesses exempt	Net interest deduction limited to 30% of adjusted gross income, some businesses exempt
Individual income taxes		
Rates	4 tax brackets (12%, 25%, 35%, 39.6%), repeal Alternative minimum tax	7 tax brackets (10%, 12%, 22.5%, 25%, 32.5%, 35%, 38.5%), repeal Alternative minimum tax
Deductions	2018 Standard deduction to $12,200/$24,400	2018 Standard deduction to $12,200/$24,400
Exemptions	$0 personal exemptions	$0 personal exemptions
Child tax credit	$1,600 Child tax credit	$1,650 Child tax credit
Estate	Estate tax exemption $11 million, phase-out starts after 2024	Estate tax exemption $11 million, no phase-out
Special Deductions	Repeal itemized deductions except property tax up to $10k, Charitable gifts, mortgage interest on new homes up to $500k and investment interest.	All state and local deductions repealed; mortgage interest, medical expense deduction maintained.
Indexing	Tax brackets indexed to chained CPI	Tax brackets indexed to chained CPI

Source: Oxford Economics

5. Thai Economic Outlook for 2017

The Thai economy in 2017 is projected to grow by 3.9 percent, improving continually from 2.9 percent and 3.2 percent of growth in 2015 and 2016, respectively. Average headline inflation is projected to be 0.7 percent, increasing from an average of 0.2 percent in 2016. Current account balance is forecasted to register a surplus of 10.4 percent to GDP, comparing with a surplus of 11.9 percent to GDP in 2016.

In the press release dated on 20th November 2017, NESDB forecasted that Thai economy will expand by 3.9 percent, increasing from a 3.7-percent midpoint in the projection range of 3.5 – 4.0 percent in a press release dated on 21st August 2017. The upward revision is based on the fact that growth contribution from export sector are higher than previously forecasted thus makes the 2017's growth projection to be higher than the 3.7-percent midpoint and move closer to the 4.0 percent upper bound in the prior projection. The public investment, however, tends to contribute less than previously estimated. The justifications for the projection revision are as follows:

1) **Public investment** is expected to grow by 1.8 percent, revised downward from the growth of 8.0 percent in the previous projection. This was owing to the actual value of public investment in the third quarter of 2017, which declined from (i) decreasing capital budget disbursement due to the end period of short-term stimulus packages such as the Water Resource and Road Network Management Project (urgent phase) and measures to boost Small-Scale Public Investment Projects Nationwide. (ii) slow growth of capital budget disbursement under FY2017 annual budget, which partly caused by redundant rainfalls and flood impact. As a result, the disbursement rate in the third quarter of 2017 was slightly lower than the same period of last year. (iii) less disbursement of state-owned enterprises' capital expenditure budget which was the result of the disbursement expedition prior to this quarter. This is confirmed by the growth of state-owned enterprises' investment in the first six months and first nine months of 2017, which were recorded at 21.3 and 12.1 percent, respectively. (iv) the mega investment projects which were partly in the initial phase and some expenditures were not included in gross fixed capital formation (GFCF) under System of National Account (SNA)[4]. Thus, as public expenditure of the third quarter of 2017 declined, together with possible delay of fiscal disbursement in the first quarter of FY2018, growth driver from public expenditure is prone to be less than the previous estimation.

2) **Export value** is projected to expand by 8.6 percent, revised upward from 5.7 percent growth in the previous estimation. The revision was a result of a 12.5-percent growth of export value in the third quarter of 2017 (the highest rate in 19 quarters), which was higher than the previous projection in both export price and quantity. This was in line with the upward revision of the world economic growth of 3.6 percent, from 3.4 percent in previous projection. Regarding the higher-than-expected growth of export price and quantity, together with the robust trend of export growth in the fourth quarter, the export value of 2017 is expected to grow by 8.6 percent, higher than the previous forecast. The upward revision of export value would offset the downward revision of public investment, and thus resulted in higher economic growth and current account compared to the previous projection in the press release dated on 21st August 2017.

[4] The definition of gross fixed capital formation in System of National Account is different from the definition of capital expenditure under Budget System.

6. Thai Economic Outlook for 2018

The Thai economy in 2018 tends to grow well with a gradual acceleration, mainly supported by stronger global economic recovery and continual expansion in exports which, in turn, will further stimulate the manufacturing sector to clearly recover and further support overall economic growth. Likewise, total investment is likely to expand at the faster pace contributed by continual improvement of private investment which will be supported by a reduction in excess capacity in several key industries, better economic confidence, as well as accelerating public investment in line with significant progress of key infrastructure investment projects and an increase of capital budget framework. Meanwhile, other major production sectors are likely to continue their favorable growth pace from the previous year. Nevertheless, the contribution from agricultural sector tends to be softened as the growth returns to its normal level, implying that an economic growth would thus requires more contributions from non-agricultural sector. Besides, the global economy and financial system might be exposed to volatility risk, which thus requires close monitoring and assessment.

Supporting factors for the economic growth:

1) **The favorable global economic recovery will sustain the robust growth of export and subsequently support the recovery of manufacturing sector which will thus be able to contribute more to the economic growth.** Although the world economic expansion has turned export to an upward trend since early of 2017, the manufacturing sector, accounted for 28 percent of GDP, recovered sluggishly in the first half of the year as the recovery was less broad-based while some producers export the inventories instead of expanding their production. The continual strong and broader growth of export in the third quarter resulted in running down of inventories, and markedly started accelerating manufacturing production. In 2018, the world economy is likely to stay on the upward trend which will support a continual robust in export of goods, tourism and other related-services, as well as accelerate manufacture productions and thus achieve higher economic growth.

2) **Public investment expansion tends to accelerate following a further progress of key infrastructure projects and the larger 2018 annual capital budget framework.** The infrastructure projects under the Transportation Action Plans have made a continual progress. However, the public investment in the third quarter manifested a decrease and lower than previously estimated. The key reasons are as follows: (i) decrease in capital budget disbursement after the completion of short-term stimulus packages such as the water resource and road network management project (urgent phase), measures to boost small-scale public investment projects nationwide, and living standard promotion measure at district level project; (ii) a slow growth of capital budget disbursement under FY2017 annual budget, which partly caused by redundant rainfalls and flooding impact. As a result, the disbursement rate in the third quarter of 2017 was slightly lower than the same period of last year; (iii) the mega investment projects which were partly in the initial phase and some expenditures were not included in gross fixed capital formation (GFCF) under System of National Account (SNA); and (iv) the possibility of a delay in fiscal disbursement in the first quarter of FY2018. Nonetheless, the public investment in 2018 tends to accelerate and significantly contribute to economic growth, mainly supported by (i) increasing capital budget framework under annual budget and state-owned enterprise's budget by 21.8 and 45.7 percent, respectively; (ii) the progress of key public investment project under the 2016-2017 Transportation Action Plan. The recent data as of 31st October of 2017 showed that there are 10 projects already under construction, worth 341,104 million baht (8 projects under 2016 Action Plan and 2 projects under 2017 Action Plan). Meanwhile, it is expected

that for the remainder of 2017 and throughout the year 2018, there will be more projects to undertake the constructions, and (iii) the growth base of government disbursement growth tends to become normalized after the completion of the short-term stimulus packages such as the Stimulus Package through Water Management and Road System Improvement, Measure to Stimulate Small Investment and Measure to Promote Living Conditions at Sub-district Level.

3) **More pronounced recovery of private investment.** Though private investment in 2017 became more stabilized and slowly recovered in the second quarter of 2017, the expansion was low under the constraints of high excess capacity in manufacturing sector in the first half of the year. It is expected that private investment in 2018 will accelerate with these following supporting factors; (i) an increase in capacity utilization rate in the manufacturing sector, which recently increased to 62.0 percent, from 59.1 percent in the previous quarter and 58.5 percent in the same period last year. Evidently, several key industries reached capacity utilization rate of 65-70 percent, namely electronic tubes and electronic components. Some industries even remained over 80 percent of capacity utilization rate, such as components and accessories for motor vehicles and engines, refined petroleum production, meat production and meat processing, and automotive production. The improving capacity utilization, coupled with the continual recovery of the global economy and robust exports would encourage private businesses to start expanding their investment in order to expand production capacity (ii) more progress in public investment projects, which then would both directly and indirectly stimulate private investment. (iii) the improvement in the confidence in economic performance with supporting factors from better political conditions in the country, the recovery of exports and overall economy, several measures and policies implemented by the government to drive domestic economy and enhance further economic growth potential.

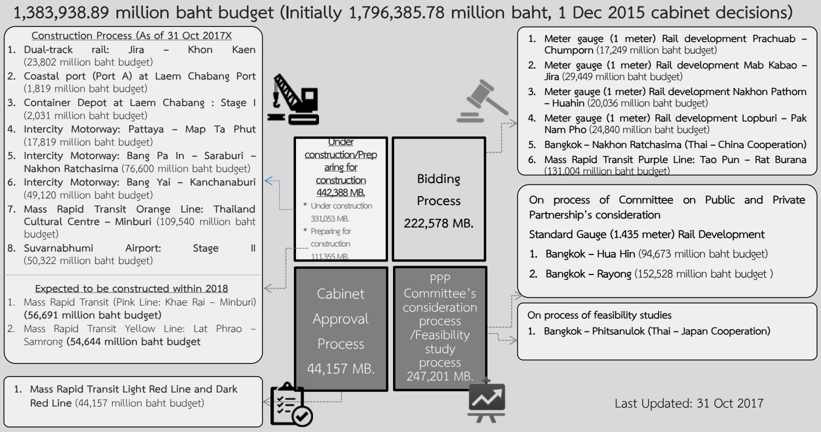
4) **Major economic sectors as key growth engines in 2017 are likely to favorably expand further** including (i) the tourism sector, which gain from the global economic recovery, not only from major advanced economies but also from other major Asian economies, which would in turn support further expansion of long distance and other regional tourists, including also those from Russia, India and Middle East economies which clearly tend to experience with stronger growth, (ii) the export sector, which the export volume is expected to continue to grow well aligning with a recovery in global demand although export value would likely slowdown from the previous year due to a slower growth in oil price compared with last year. (iii) The transport and communication sector which is expected to grow favorably, following the expansion of tourism activities, agricultural and industrial production, including exports and imports. Besides, the success of Thai government in resolving the Significant Safety Concerns (SSC) of the International Civil Aviation Organization (ICAO) would also be another supporting factor since it allows Thai airlines to launch new international routes, starting from the second quarter of 2018, and (iv) household expenditure, which will be supported by higher income base due to the continual and more broad-based economic growth as well as supportive government measures that focus on farmers and low-income groups.

Progress of Major Public Investment Projects

Public infrastructure investment projects have been progressing. They were consisted of projects under the 2016 Transport Action Plan, and those under the 2017 Transport Action Plan.

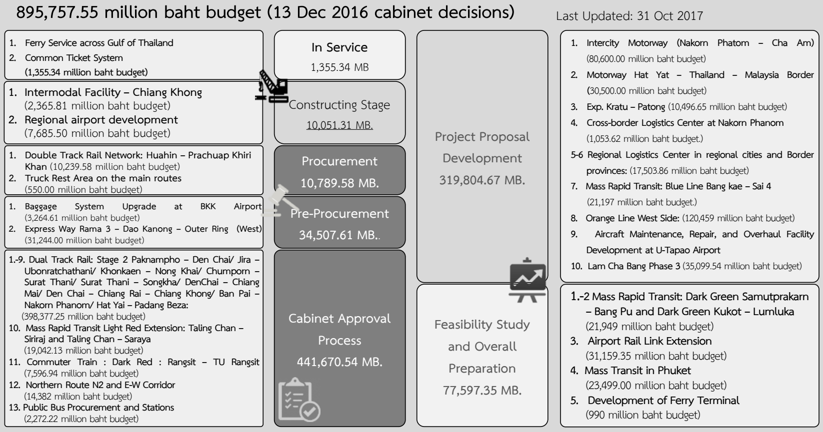
On October 31, 2017, there were a total of 10 projects already under constructions, with a total budget of 341,104 million baht; 8 projects are under the 2016 Transport Action Plan with 331,053 million baht total budget, and 2 projects are under the 2017 Transport Action Plan with 10,051 million baht total budget. In addition, before the end of the year 2017, 2 projects under the 2016 plan will proceed to the construction phase which are (1) Mass Rapid Transit Pink Line: Khae Rai – Minburi, which is worth 56,691 million baht and (2) Mass Rapid Transit Yellow Line: Lat Phrao – Samrong, which is worth 54,644 million baht. Both are under the stage of land ownership management and initial construction preparation. Therefore, it is expected that there will be a total of 12 projects under the construction phase within 2017, with a total budget of 452,439 million baht.

Progress of 20 public investment projects under Transport Action Plan Year 2016,
1,383,938.89 million baht budget (Initially 1,796,385.78 million baht, 1 Dec 2015 cabinet decisions)



As for 2018, it is expected that there will be more projects proceeding to the phase of construction, especially projects in the bidding process; 6 projects under the 2016 plan and 2 projects under the 2017 plan, with total budget of 222,578 and 10,790 million baht, respectively.

Progress of 36 public investment projects under Transport Action Plan Year 2017,
895,757.55 million baht budget (13 Dec 2016 cabinet decisions)



Source: Ministry of Transport, evaluated by NESDB

5) **The improvement in employment and household income base**, supported by (i) the expected expansion in production and employment in the agricultural sector, as a result of higher levels of water in the major dams above the average level over the past 30 years, (ii) the recovery of industrial production, especially some industries that will move towards higher investment in order to expand production capacity, and thus be able to absorb more labor force, and (iii) the continual expansion of key service sectors.

Limitation and Risk Factors:

1) **Less contribution from the expansion of agricultural production.** In the first nine months of 2017, the agricultural production remarkably expanded with the average growth of 10.3 percent, and significantly accounted for 0.8 percent of economic growth in the first nine months, compared to only 0.0 percent in the same period of last year. A high growth of the agricultural sector was partly supported by the unusually low base from the prolonged drought over 2015 and 2016, resulting in a lower agricultural production index and GDP in the agricultural sector than those figures in 2014. However, the drought had eventually subsided and thereafter brought the agricultural production index in the fourth quarter of 2016 back to same level observed in 2014. Similarly, GDP in the agricultural sector also returned back to normal in the first quarter of 2017, reaching the same level of those in 2014. The normalizing adjustment would result in an expected slower growth in agricultural production index as well as agricultural GDP in 2018. Thus, the agricultural production will become less supportive to economic growth.

2) **Risks from fluctuation in global economy and financial market**, which might be caused by the progress and direction of the US economic policies, the outturns of NAFTA and BREXIT negotiations, political conditions in Spain and Italy, and the geopolitical tensions around the Korean Peninsula and the Middle East.

3) **Gradual increases of the commodity prices, inflation and interest rates in the world markets,** following the global economic recovery trend and the beginning of the monetary policy normalization in major advanced economies. Though this upward trend is expected to be gradual and not hinder economic recovery yet, over the next period there might be some possibilities that it will affect purchasing power of households and some businesses, particularly those sensitive to change in commodity prices and interest rates.

Key assumptions for 2018 economic projection:

World Economic Projection

	Actual Data		Projection on Nov 20, 2017	
	2015	2016	2017	2018
World Economic Growth (%)	3.4	3.2	3.6	3.6
USA	2.9	1.5	2.2	2.3
EU	2.0	1.8	2.3	2.0
Japan	1.1	1.0	1.5	1.2
China	6.9	6.7	6.8	6.6
World Trade Volume (%)	2.8	2.6	4.2	4.0
Exchange Rate (Baht/US dollar)	34.29	35.29	34.00	34.0 - 35.0
Dubai Crude Oil (US Dollar/Barrel)	50.9	41.4	52.5	50.0 - 60.0
Export Price (US Dollar) (%)	-4.1	-0.4	3.0	0.5 - 1.5
Import Price (US Dollar) (%)	-10.8	-2.7	5.0	1.0 - 2.0
Income from Tourism (Trillion baht)	1.54	1.76	1.98	2.21

Source: NESDB

1) **In 2018, the world economy and the world trade volume are ere expected to grow by 3.6 and 4.0 percent respectively, following the 2017 expected growths of 3.6 and 4.2 percent, respectively.** The global economic expansion is supported by the acceleration of the US economy and major developing economies particularly Russia, India, Brazil, and Middle East countries, as well as the continual expansion of the Eurozone, Japan, and China, despite a slight slowdown. These results in a continual and similar growth rate as in last year. The expansion of the above mentioned economies is expected to put more upward pressures on the world commodity prices. Meanwhile, inflation rate of the major economies

will revert to their monetary policy target which will result in an continually upward adjustment of the US Fed rate and a normalization of its balance sheets. Similarly, other major central banks (except BOJ) are more likely to signal a change in monetary policy direction in the second half of 2018.

2) **The average value of Thai baht in 2018 is expected to be in the range of 34.0 to 35.0 baht per US dollar, slightly depreciating from 34.0 baht per US dollar in in 2017.** This is in line with the continuous Fed rate hike and reduction of the balance sheet, as well as major economies' signals of monetary policy adjustment, which are expected be more evident in the latter half of 2018. These will result in a gradual increase in world market interest rates and thus pressure on Thai baht depreciation. For the base case scenario, it is expected that the US Fed will adjust its policy rate in December 2017, before continues to hike twice in June and December of 2018, respectively. Moreover, it is possible that European Central Bank (ECB) is going to signal monetary policy change again in the fourth quarter of 2018. Nevertheless, the high surplus of the current account and the recovery of the Thai economy under improving political conditions will curb the depreciation pace of Thai baht to be in a limited range.

3) **The average Dubai crude oil price in 2018 is expected to be in the range of 50.0 – 60.0 US dollar per barrel, a gradual rise from 52.5 US dollar per barrel in 2017.** The factors that will support the rise include: (i) increasing oil demand as a result of a more pronounced recovery of the world economy, (ii) continuous production reduction of OPEC and non-OPEC countries amidst the rise in world demand for oil, will reduce excess supply and oil inventories in the global market, (iii) investors' speculation on the possibility of extending oil production cut agreement of the OPEC and non-OPEC countries, which will be terminated in March of 2018, for 3 – 9 more months, and (iv) The persistent geopolitical tensions over Korean Peninsula and the Middle East. However, there are limitations causing the oil price to rise at a slow pace including (i) a rise in oil production of non-OPEC, especially the US and Canada, and (ii) the US Dollar appreciation following the Fed's monetary policy normalization.

4) **The export and import price in US dollar term increases by 0.5 – 1.5 and by 1.0 – 2.0 percent, lower than 3.0 and 5.0 percent in 2017, respectively.** This is in line with the world oil price assumption that it will rise at a slower rate from 26.8 percent in 2017 (From 41.4 US dollars per barrel in 2016 to 52.5 US dollars per barrel in 2017) to 4.7 percent in 2018. (From 52.5 US dollars per barrel in 2017 to 50.0 – 60.0 US dollars per barrel in 2018)

5) **Revenue from foreign tourists is likely to be 2.21 trillion baht, increasing by 11.6 percent from 1.98 trillion baht in 2017.** Key supporting factors are (i) the pickup of the world economy, including advanced countries, and major economies in Asia which will support a continuous positive growth of long-distance tourists and tourists within the region particularly those from Russia, India, and the Middle East countries where the economies are clearly improving, (ii) low traveling costs, in line with the world oil price trend and intense competitions among the airline industry, (iii) ongoing government's measures to stimulate the tourism sector and the continual improvement of domestic political stability, (iv) Thailand is regarded as one of the world's important tourism destination, (v) the expansion of short-haul international operations by low cost airlines, and (vi) the capacity extension of major airports to accommodate increasing number of aircrafts and tourists.

6) **Government Budget** is expected to be disbursed as follows; (i) the FY2018's annual budget disbursement rate of 92.0 percent of overall budget, compared with the FY2017 actual disbursement rate of 91.9 percent. In FY2018, it is expected that current budget disbursement rate will be 97.0 percent while capital budget disbursement rate will be 75.0

percent, compared with 96.8 and 70.3 percent, respectively, in FY2017, (ii) the state-owned enterprise's capital budget disbursement of 80.0 percent, (iii) the carry-over budget disbursement of 75.0 percent, (iv) the off-budget loans consisted of water resources management and road transport system projects, and others, of approximately 8,530.1 million baht, reduced from 9,398.4 million baht in FY 2017, and (v) the annual budget disbursement in the first quarter of FY 2019 (October – December 2018) of 30.0 percent of overall budget.

Economic Projection for 2018:

The Thai economy in 2018 is projected to expand in the range of 3.6 – 4.6 percent, with the midpoint of 4.1 percent, increasing from 3.9 and 3.2 percent of growth in 2017 and 2016, respectively. The headline inflation is projected to be in the range of 0.9 – 1.9 percent and the current account balance is forecasted to register a surplus of 8.1 percent of GDP

Key components of the economic growth :

1) **Consumption: Private consumption expenditure** is estimated to grow by 3.1 percent, continuously increasing from a growth of 3.2 percent in 2017, due to the improvement of overall income condition in the economy. Meanwhile, **government expenditure** is anticipated to expand by 2.7 percent, accelerating from 2.0 percent-growth in 2017.

2) **Total investment** is projected to grow by 5.5 percent, an increase from 2.0 percent in 2017. **Public investment** is estimated to expand by 11.8 percent, accelerating from 1.8 percent in 2017. The revision is mainly a result of an increase in capital budget from both annual budget and state-owned enterprise's capital budget by 21.8 percent and 45.7 percent, respectively. In additions, key public infrastructure projects in particular mega projects under Transportation Action Plans in Year 2016 and 2017 is expected to make more progress and start to undertake a construction. There will also be acceleration in capital budget disbursement from ongoing projects under construction process. **Private Investment** is likely to grow by 3.7 percent, accelerating from a growth of 2.2 percent in 2017, contributing primarily by (i) increasing capacity utilization trend due to favorable export growths which will stimulate new investment for expanding production capacity, particularly in the industrial sectors with the current capacity utilization rate of higher than 75 percent, (ii) the improvement of investors' sentiment towards economic recovery and improving domestic political conditions, and (iii) a further progress of measures and key public investment projects which will enhance economic confidence and support private investment.

3) **Export value of goods in US dollar term** is projected to expand by 5.0 percent, increasing from a growth of 8.6 percent in 2017. Export volume of growth is projected to grow by 4.0 percent, following the continual recovery of the world economy and global trade volume. Meanwhile, export price is forecasted to grow by 1.0 percent, lower than 3.0 percent in 2017, following a diminishing increase in global oil price which will lead to lower growth of export price and eventually lead to a deceleration of overall export value. Together with continual expansion of export of service in line with increases in receipts and numbers of foreign tourists, the export quantity of goods and services is projected to grow by 5.3 percent.

4) **Import value of goods in US dollar term** is anticipated to grow by 7.0 percent, compared to a 13.0 percent growth in 2017. It is forecasted that the import volume will expand by 5.5 percent owing to the acceleration of export and investment, despite a slight decrease from

7.9-percent growth in the previous year due to the fact that growth began to adjust to its normal trend (import volume in the first nine months of 2017 increased by 8.5 percent, partly supported by a decrease of 4.3-percent at the same period in 2016). Likewise, import price is forecasted to grow by 1.5 percent, a moderate slowdown from 5.0 percent-growth in 2017. After adding up import of services, it is projected that the import volumes of goods and services will grow by 5.6 percent.

5) **Trade balance** is estimated to register a surplus of 29.4 billion US dollars, lower than a surplus of 31.9 billion US dollars in 2017. A smaller surplus is due to the fact that the import value is projected to increase faster than the export value. After combining with the service account surplus, the current account is projected to register a surplus of approximately 38.1 billion US dollars, an equivalent of 8.1 percent of GDP.

6) **Economic stability** will remain favorable. The average headline inflation across 2018 is expected to be in the range of 0.9 – 1.9 percent, increasing from 0.7 percent in 2017. This is supported by the improvement of domestic demand, the continual increase in oil price and primary commodity prices, a gradual pace of Thai baht depreciation and a normalization of raw food price.

7. Economic Management for the year 2018

The recovery of global economy and the impact of key fiscal measures have contributed significantly to the accelerating pace of Thai economy in 2017, as well as the improvements of key economic fundamentals and stability. In 2018, the dynamic of Thai economic growth tends to be strengthened further. The supporting factors include acceleration of public and private investment and the expansion of export, tourism and related services sector driven by the world economic recovery. The recovery of the manufacturing sector tends to be strengthened by the continued recovery of exports and further support the growth of overall economy. However, the growth contribution from the agricultural sector tends to soften as the output level becomes normalized. Therefore, Thai economy needs to be driven by non-agricultural sectors. Under the outlooks that the development of global economic recovery and financial system still prone to volatility amidst the rising trends of commodity price level and interest rates, the macroeconomic policy management should be given to the following guidelines:

1) **Promoting non-agricultural sectors to offset the declining growth contribution from the agricultural production** by: (i) fostering export sectors to its full potential as it helps contribute to the growth of manufacturing sector which minimizes idle capacities and foster manufacturing production; (ii) building up confidence and conducting measures to bolster private capital accumulation. The focuses should be on encouraging private sector to invest in the country's strategic sector, improving economic competitiveness and ensuring investors that the important policy directions are mandate to continue implementation, as legislatively stipulated in the Making of National Strategy and National Reform Plan and Process acts; (iii) supporting the expansion of tourism sector by maintaining public securities and improving facilities in tourist attraction areas, strategizing on high-income and long distance travel segments and emphasizing on income distribution from tourist sector to local communities.

2) **Expediting the public investment** for enhancing investor confidence, fostering economic expansion and, ultimately, achieving the long-term economic growth target as stipulated in the 20-year National Strategy. For achieving these targets, the emphases shall be placed on: (i) improving the efficacy of the government's and state-owned enterprises' capital budget disbursement to reach the disbursement rate of not less than 75 and 80 percent, respectively, of their owned capital budget; (ii) expediting procurement processes of the key infrastructure projects under the 2016-2017 Transportation Action Plan to continually enter construction phase; (iii) Developing targeted special economic zones including Eastern Economic Corridor (EEC) as well as conducting measures to promote investment in those strategic development areas and; (iv) Progressing key transportation and logistics infrastructure projects to bolster economic expansions and to disseminate economic activities.

3) **Supporting small farmers and low income groups and strengthening the SMEs and local economies**: (i) On agricultural production and farm incomes, the emphases shall be on increasing export of agricultural product from the level in 2017, supporting measures for agricultural crops that will be released to the markets, supporting a large-scale farming in minimizing cost and increasing output, empowering bargaining power of small farmers, and adopting proper crop plantation and production methods suitable for each particular area as well as shifting to grow higher-market-value crops; (ii) On financial and fiscal measures, the measures shall aim at resolving and mitigating the impacts of flood, ensuring sufficient funds for the existing measures that aim to support small farmers, local enterprises and

SMEs, particularly the groups that are vulnerable to the rise of commodity price level and cost of productions; (iii) On strengthening the SMEs and local enterprises, the measures should: encourage SMEs to adopt tax accounting standard and to implement high technology in production, management and marketing system, to establish the link with larger-scale business and manufacturers, to develop product corresponding to customer demand and to invest in special economic zones for tax benefits and expatriate workers, including the promotion of dual education system for resolving labor shortage and regulating expatriate workers.

4) **Arranging labor force to facilitate an expansion of economic activities** covering high- and semi-skilled labors as well as expatriate workers, the measures should aim at: (i) training fresh graduates, (ii) developing skillsets for adaptation to disruptive technology, (iii) promoting the use of platform mobile application in labor market, (iv) promoting job market platform where job seekers, academic institutes and employers are met in order to minimize transaction costs of seeking and, (v) developing specialized labor training institutes for the strategic industry.

Projection for 2017 - 2018 [1]

	Actual Data		Projection		
			2017		2018
	2015	2016	Aug 21, 2017	Nov 20, 2017	Nov 20, 2017
GDP (at current prices: Bil. Bht)	13,672.9	14,366.6	15,185.5	15,257.3	16,264.3
GDP per capita (Bht per year)	203,356.3	212,980.2	224,459.0	225,520.8	239,776.0
GDP (at current prices: Bil. USD)	399.2	407.1	440.2	448.7	471.4
GDP per capita (USD per year)	5,937.0	6,035.1	6,506.1	6,633.0	6,950.0
GDP Growth (CVM, %)	2.9	3.2	3.5 - 4.0	3.9	3.6 - 4.6
Investment (CVM, %)	4.4	2.8	3.4	2.0	5.5
Private (CVM, %)	-2.2	0.4	2.2	2.2	3.7
Public (CVM, %)	29.3	9.9	8.0	1.8	11.8
Private Consumption (CVM, %)	2.2	3.1	3.2	3.2	3.1
Public Consumption (CVM, %)	3.0	1.7	3.2	2.0	2.7
Export volume of goods & services (%)	0.7	2.1	4.9	6.1	5.3
Export value of goods (Bil. USD)	214.0	214.3	226.3	232.7	244.3
Growth rate (%)[2/]	-5.6	0.1	5.7	8.6	5.0
Growth rate (Volume, %)[2/]	-1.5	0.5	3.2	5.5	4.0
Import volume of goods & services (%)	0.0	-1.4	5.6	6.5	5.6
Import value of goods (Bil. USD)	187.2	177.7	197.4	200.8	214.9
Growth rate (%)[2/]	-10.6	-5.1	10.7	13.0	7.0
Growth rate (Volume, %)[2/]	0.3	-2.5	6.2	7.9	5.5
Trade balance (Bil. USD)	26.8	36.5	28.9	31.9	29.4
Current account balance (Bil. USD)	32.1	48.2	42.5	46.5	38.1
Current account to GDP (%)	8.1	11.9	9.7	10.4	8.1
Inflation (%)					
CPI	-0.9	0.2	0.4 - 0.9	0.7	0.9 - 1.9
GDP Deflator	0.6	1.8	1.5 - 2.5	2.3	2.0 - 3.0

Source: Office of the National Economic and Social Development Board, 20th November 2017

Note: [1/] Data was calculated based on new National Accounts Office's Series, published on www.nesdb.go.th

[2/] Export and import based on the Bank of Thailand's data.