NESDC ECONOMIC REPORT

Thai Economic Performance in Q4 and 2019 and Outlook for 2020

Macroeconomic Strategy and Planning Division

Press Release 9.30 a.m. Feb 17, 2020

Economic Projection of 2020

(%YoY)	2018	2019			Projection
	Year	Year	Q3	Q4	2020
GDP (CVM)	4.2	2.4	2.6	1.6	1.5 - 2.5
Investment[1/]	3.8	2.2	2.7	0.9	3.6
Private	4.1	2.8	2.3	2.6	3.2
Public	2.9	0.2	3.7	-5.1	4.8
Private Consumption	4.6	4.5	4.3	4.1	3.5
Government Consumption	2.6	1.4	1.7	-0.9	2.6
Export of Goods[2/]	7.5	-3.2	0.0	-4.9	1.4
Volume[2/]	3.9	-3.5	-0.4	-5.3	1.5
Import of Goods[2/]	13.7	-5.4	-6.8	-7.6	2.7
Volume[2/]	7.7	-5.6	-6.6	-8.3	2.8
Current Account to GDP (%)	5.6	6.8	6.8	7.2	5.3
Inflation	1.1	0.7	0.6	0.4	0.4 - 1.4

Note: [1/] Investment means Gross Fixed Capital Formation

[2/] Based on the Balance of Payment Recording System

❒ **The Thai economy in the forth quarter of 2019** expanded by 1.6 percent, compared with 2.6 percent in the previous quarter (%YoY). After seasonally adjusted, the economy grew by 0.2 percent from the third quarter (%QoQ sa).

❒ **On expenditure side**: the growth was supported mainly by continual expansions of private consumption and improving private investment while government spending, public investment and export of goods declined. **On production side**: the accommodation and food service activities and transportation and storage sectors accelerated. Meanwhile, the wholesale and retail trade sector continuously expanded. However, manufacturing, agricultural, construction, and electricity and gas sectors declined.

❒ **The Thai economy in 2019** expanded by 2.4 percent, compared with 4.2 percent in 2018. Export value declined by 3.2 percent and private consumption and total investment grew by 4.5 and 2.2 percent respectively. Headline inflation averaged 0.7 percent and the current account recorded a surplus of 6.8 percent of GDP.

❒ **The Thai economy in 2020** is projected to expand by 1.5 - 2.5 percent, softening from 2019 due to impacts from the corona virus (COVID-19) outbreak, the drought conditions, and the delay in FY2020 budget. Nevertheless, the economy continues to be supported by (i) a gradual global economic recovery following easing trade tensions and lower risks of a no-deal Brexit; (ii) a favorable expansions of private consumption and investment of both private and public; (iii) key government stimulus measures; and (iv) a low growth base in the last quarter of 2019. In all, it is expected that export value will expand by 1.4 percent while private consumption and total investment will increase by 3.5 and 3.6 percent respectively. Headline inflation will lie in the range of 0.4 - 1.4 percent and the current account will register a surplus of 5.3 percent of GDP.

❒ **Economic management for the remainder of 2020** should put emphasis on following issues: **(1) Coordinating the monetary and fiscal policies** to support the economy in the first half and to propel the recovery in the second half of the year; **(2) Supporting the recovery of the tourism sector** to be able to expand in the latter half in order to achieve 37.0 million of foreign tourists and 1.73 trillion baht of tourism revenue from foreign tourists by focusing on (i) exempting cancellation fee for foreign tourists that are unable to travel during the COVID-19 outbreak; (ii) encouraging Thais to make more domestic travel; (iii) campaigning tourism activities to stimulate the tourism in the second half; and (iv) considering additional holidays in the first half of the year without creating economic impacts; and (vi) implementing tourism supportive measures. **(3) Fostering export growth** to reach the target of at least 2.0 percent (excluding gold) mainly by: (i) propelling export strategies in 2020; (ii) fostering export of products which will benefit from trade diversion and those related products to the COVID-19 epidemic; (iii) assisting producers and exporters in the Chinese supply chain; and (iv) expediting process to finalize key trade negotiations. **(4) Maintaining growth momentum from government expenditure and public investment** by speeding up the disbursement of FY2020's annual budget, carry-over budget, and the state-owned enterprises (SOEs) budget to reach no less than 91.2, 70.0, and 75.0 percent respectively. **(5) Building up investors' confidence and supporting private investment growth** by: (i) monitoring and implementing investment stimulus measures; (ii) speeding up the implementation of key public infrastructure projects; (iii) pushing up key trade negotiations; and (iv) solving business constraints proposed by foreign investors. **(6) Strengthening low income groups as well as those impacted by droughts, reduced tourists, and economic slowdown** by providing particular care on (i) agricultures who work in the service sector during off-crop/cultivated season; (ii) employees in tourism and related sector; (iii) the SMEs; (iv) speeding up the disbursement of compensation for droughts impacts; and (v) the comprehensive water resource management.

1. The Thai Economy in Q4/2019

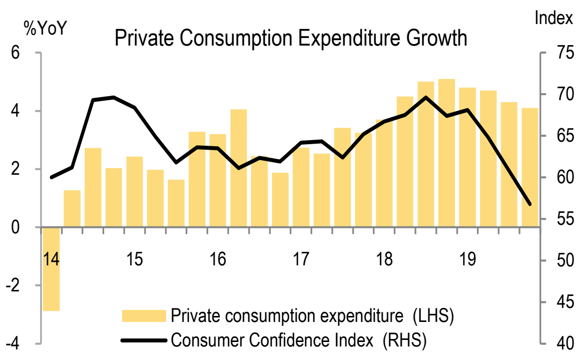
Expenditure Side:

In the fourth quarter of 2019, Private consumption expenditure continually expanded. Private investment and public investment accelerated. Meanwhile export of goods decreased.

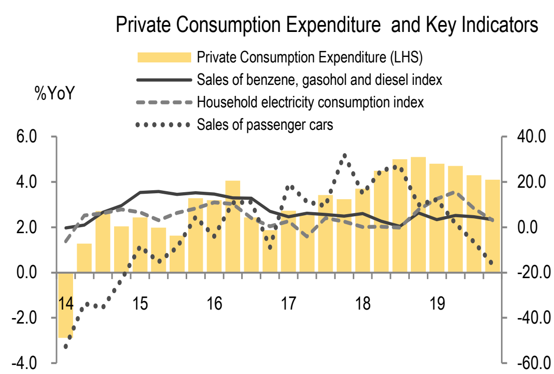
Private consumption expenditure continued to expand at a satisfactory rate supported by low interest rate and inflation, favorable employment conditions and government stimulus measures. In the fourth quarter of 2019, private consumption expenditure expanded by 4.1 percent, continuing from a 4.3-percent growth in the previous quarter. This was in line with the expansion of durable goods and semi-durable goods index according the VAT of hotel and restaurant index (at 2010 price), household electricity consumption index, sales of benzene as well as gasohol and diesel index grew by 6.3, 3.4 and 3.1 percent, respectively. However, the commercial and passenger car sales declined by 17.2 and 16.4 percent. Besides, the expansion of private consumption expenditure in this quarter was supported by (1) low interest rate and inflation, (2) government stimulus measures, (3) favorable employment conditions, and (4) an accelerated increase in Thais overseas spending. The Consumer Confidence Index, pertaining to the overall economic situation stood at 56.8.

In 2019, private consumption expenditure expanded by 4.5 compared with 4.6 percent in 2018.

Private consumption expenditure favorably expanded, continuing from the previous quarter supported by low interest rate and inflation, and government measures.



Source: NESDC, University of the Thai Chamber of Commerce

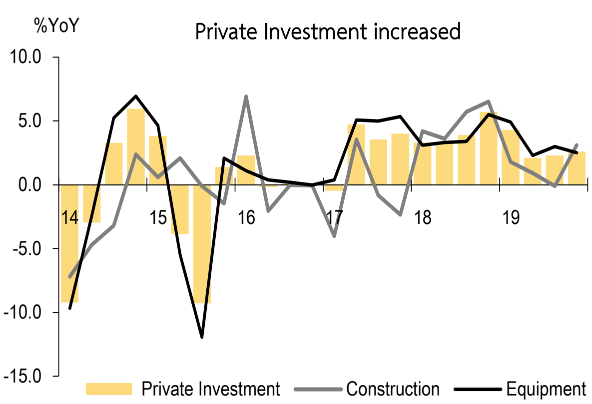


Source: NESDC, BOT, Department of Energy Business

Private investment gradually accelerated, supported by the acceleration of investment in machinery and equipment, and the investment in construction. In the fourth quarter of 2019, private investment increased by 2.6 percent, compared with a 2.3-percent growth in the previous quarter. **The investment in construction** grew by 3.1 percent, accelerated from 0.1-percent decrease in the previous quarter in accordance with an accelerated growth in non-residential construction and continuous growing in residential construction, particularly hotel construction and construction in an industrial estate. **The investment in machinery and equipment** grew by 2.5 percent compared with a 3.0-percent growth in the previous quarter as a result of an expansion in the transportation equipment and machines such as airplanes, ships, and locomotives. **The Business Sentiment Index (BSI)** stood at 46.9.

In 2019, private investment expanded by 2.8 percent, declining from 4.1 percent in 2018, while an investment in machinery and equipment expanded by 3.2 percent, and an investment in construction increased by 1.4 percent.

Private investment increased by 2.6 percent, accelerated from the previous quarter, the investment in construction accelerated from the previous quarter in accordance with an accelerate growth in non-residential construction as well as the expansion of investment in machinery and equipment.

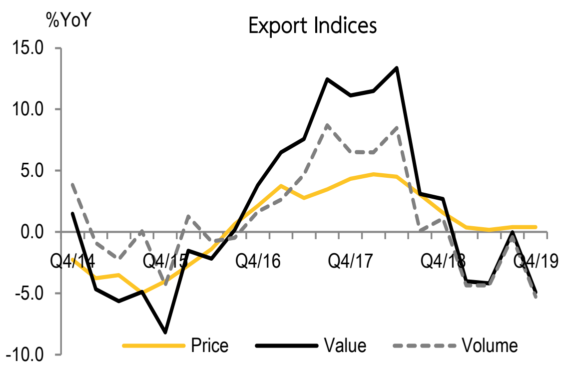


Source: NESDC

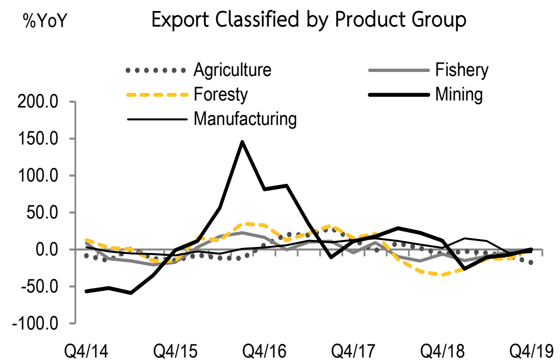
Exports in US dollar terms decreased following the economic slowdown in key trading partners, the impacts from trade war, oil refinery shut down, as well as the downturn in global electronics cycle. Export value in the fourth quarter of 2019 was recorded at 59,169 million US dollars; fell by 4.9 percent compared with a 0.0-percent growth in the previous quarter. The export volume index dropped by 5.3 percent, supported by the decrease in export volume of agricultural commodities, fishery products, and manufacturing products by 22.3, 1.7, and 3.2 percent, respectively. These contractions were attributed to weaker global demand as a result of slower economic growth in major trading economies, and impacts from the US - China trade war. Export price index slightly increased by 0.4 percent, equal to a 0.4-percent growth in the previous quarter, following an increase in export price of agricultural commodities and fishery products by 5.8 and 2.2 percent, respectively. Meanwhile, export price of manufacturing products fell by 0.3 percent, consistent with the decline in price of oil related products, such as refined fuel, and plastic granules. Excluding unwrought gold, export value fell by 4.7 percent, compared with a 4.8-percent decline in the previous quarter. **In Thai Baht terms,** export value decreased by 12.3 percent, continued from a 6.9-percent decline in the previous quarter.

Export value decreased as a result of the economic slowdown in key trading partners, high uncertainty of the trade protection measures, baht appreciation, as well as the limitation in supply of some products.

In 2019, Exports in US dollar terms recorded at 243.0 billion US dollars, declined by 3.2 percent from 2018.



Source: Bank of Thailand



Source: Bank of Thailand

Exports value of agricultural commodities declined by 17.8 percent, compared with a 8.9-percent drop in the previous quarter. This was due to the economic slowdown in key trading partners amid a high level of importers' inventories, lack of agricultural products in global market as a result of drought, as well as the deteriorated export price competitiveness of Thailand as well as the trading partners' reduction in the import quantity of main agricultural products, especially rice, rubber and tapioca. However, export prices of agricultural products increased by 5.8 percent. **Exports value of manufacturing products** fell by 3.5 percent, compared with a 4.9-percent decrease in the previous quarter, as a result of the economic slowdown in key trading partner countries, the impacts from the trade war, as well as the temporary factor of oil refinery shutdown. **Exports value of fishery products** increased by 0.5 percent as a result of the reduction in export volume, while export price increased. **Exports value of other products** decreased by 11.5 percent as a result of the decrease in exports of non-monetary gold by 16.4 percent.

Export value of manufacturing products, and other exports declined by 3.5 and 11.5 percent, meanwhile export value of fishery products increased by 0.5 percent.

In 2019, Export in US dollar terms fell by 3.2 percent. In Baht terms, export value decreased by 7.0 percent.

Export items with increased value included sugar (51.1 percent), computer parts & accessories (5.2 percent), motorcycle (44.1 percent), and other electrical apparatus (7.9 percent). On the other hand, **export items with decreased value** included rice (-33.3 percent), tapioca (-37.7 percent), rubber (-15.2 percent), petroleum products (-30.7 percent), petro-chemical products (-9.3 percent), chemicals (-25.9 percent), pick up and trucks (-22.6 percent), machinery & equipment (-8.2 percent), passenger cars (-6.3 percent), vehicle parts & accessories (-3.1 percent), cuttlefish, squid, octopus (-5.9 percent), and non-monetary gold (-16.4 percent).

Export Value of Major Product in US Dollar Term

%YoY	2018					2019					Share
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Q4/19 (%)
Agriculture	**0.4**	**-1.4**	**8.4**	**1.7**	**-6.3**	**-8.4**	**-2.1**	**-4.9**	**-8.9**	**-17.8**	6.2
Rice	9.4	21.9	16.8	8.8	-4.4	-25.9	-10.6	-23.9	-35.1	-33.3	1.7
Rubber	-23.6	-34.9	-13.6	-17.0	-25.5	-10.0	-8.9	-11.8	-3.9	-15.2	1.5
Tapioca	7.0	28.2	4.9	2.9	-7.5	-21.7	-14.2	-8.5	-27.3	-37.7	0.6
Manufacturing	**8.6**	**15.1**	**11.4**	**6.7**	**2.1**	**-3.9**	**-1.7**	**-5.4**	**-4.9**	**-3.5**	90.0
Sugar	11.1	-1.9	9.5	15.1	27.9	1.1	-15.1	-19.6	5.1	51.1	1.5
Crustaceans canned, prepared, or preserved	-14.2	-6.0	-14.1	-20.1	-14.1	-9.2	-3.9	-11.6	-10.2	-10.4	0.4
Rubber products	4.1	-2.8	19.4	2.6	-1.3	-8.6	4.8	-23.1	-14.2	-0.5	2.5
Apparels and Textile Materials	6.5	8.8	8.5	6.5	2.4	-2.7	-0.8	-4.2	-2.2	-3.5	2.9
Electronics	5.0	13.6	11.2	3.6	-6.3	-6.5	-11.4	-9.4	-6.0	0.8	15.6
- Computer parts & accessories	5.9	16.1	16.8	7.4	-12.7	-9.4	-18.9	-12.1	-10.6	5.2	6.2
- Integrated circuits & parts	0.8	7.3	6.4	-3.9	-5.5	-8.8	-11.3	-14.3	-8.4	-1.0	3.3
- Printed circuits	3.4	1.0	2.5	8.2	1.2	-13.2	-8.4	-13.0	-15.4	-15.3	0.5
- Telecommunication equipment	6.3	37.9	2.5	-0.1	-4.7	-6.2	-7.7	-3.5	-2.2	-10.9	2.4
Electrical appliances	1.6	9.6	3.6	-3.5	-3.8	1.3	-4.5	2.2	2.8	5.9	5.4
Metal & steel	13.2	18.9	20.4	7.5	7.2	-6.8	-5.0	-8.6	-4.5	-9.1	4.5
Automotive	7.9	15.9	14.6	6.1	-3.1	-3.3	-2.8	-3.5	-0.5	-6.3	14.8
- Passenger car	2.6	18.7	12.4	1.6	-17.3	-8.0	-8.2	-12.9	-4.4	-6.3	4.0
- Pick up and trucks	8.3	2.1	24.8	11.7	-1.2	-4.0	11.1	-4.3	0.5	-22.6	2.6
- Vehicle parts & accessories	10.3	15.5	13.4	7.7	5.6	-0.7	-0.9	1.0	0.3	-3.1	6.2
Machinery & equipment	6.7	13.0	7.8	3.7	3.0	-6.3	-3.3	-6.4	-7.2	-8.2	8.2
Chemicals	23.3	28.4	28.6	12.2	25.5	-17.7	-7.2	-18.0	-18.8	-25.9	3.0
Petro-chemical products	16.0	17.9	22.7	15.9	8.0	-8.7	-6.2	-10.2	-9.2	-9.3	5.3
Petroleum products	30.0	41.1	30.9	32.4	19.9	-21.8	-9.3	-14.4	-29.3	-30.7	3.2
Fishery	**-6.5**	**9.2**	**-9.7**	**-15.4**	**-6.3**	**-6.5**	**-15.0**	**-9.2**	**-2.9**	**0.5**	**0.9**
Crustaceans	-8.7	13.5	-12.9	-20.3	-6.4	-6.3	-14.3	-7.4	1.1	-5.9	0.5
Other Exports	**-21.2**	**-32.7**	**36.0**	**-63.4**	**80.1**	**80.3**	**6.7**	**66.2**	**317.3**	**-11.5**	1.8
Non-monetary gold (excl. articles of goldsmiths)	-22.8	-33.8	37.3	-65.9	90.1	84.9	7.6	68.2	348.2	-16.4	1.6
Total Exports (Customs basis)	**6.9**	**12.2**	**11.2**	**3.0**	**2.0**	**-2.7**	**-1.9**	**-3.8**	**-0.5**	**-4.5**	**100.0**
Exports, f.o.b. (BOP basis)	**7.5**	**11.5**	**13.4**	**3.1**	**2.7**	**-3.2**	**-3.8**	**-4.2**	**0.0**	**-4.9**	**99.3**
Export Value (exclude gold)	**8.2**	**12.9**	**12.9**	**6.0**	**1.8**	**-4.8**	**-4.0**	**-5.8**	**-4.8**	**-4.7**	**97.7**

Source: Bank of Thailand

Export markets: exports to the US, China, and the Middle East (15) expanded, while exports to Japan, EU (15), ASEAN (9) and Australia declined. Exports to the US continued to expand by 5.4 percent, supported partly by the trade diversion from trade protection measures. Exports to China continually increased by 1.6 percent, following the increasing in exports of fresh, frozen & dried fruits, and motor cars, parts & accessories. Similarly, exports to the Middle East (15) increased by 5.4 percent. However, Exports to Japan declined by 5.0 percent following a decrease in exports of motor cars, parts & accessories. In addition, exports to EU (15) dropped by 6.4 percent, due to the contraction in exports of computer parts & accessories and motor cars, parts & accessories. Meanwhile, the exports of air conditioning machine & parts continued to expand. Exports to ASEAN (9) decreased by 8.2 percent as a result of the contraction in exports to ASEAN (5) and CLMV by 9.8 and 6.2 percent, respectively. Similarly, the exports to Australia declined by 14.8 percent, mainly due to a decrease in exports of motor cars, parts & accessories, and seafood; canned, prepared, or preserved.

Exports to the US, China, and Middle East (15) expanded by 5.4, 1.6, and 5.4, respectively that supported by divert trade direction, while exports to Japan, EU (15), ASEAN (9), and Australia dropped by 5.0, 6.4, 8.2, and 14.8 percent, respectively.

Export Value to Key Markets in US Dollar Term

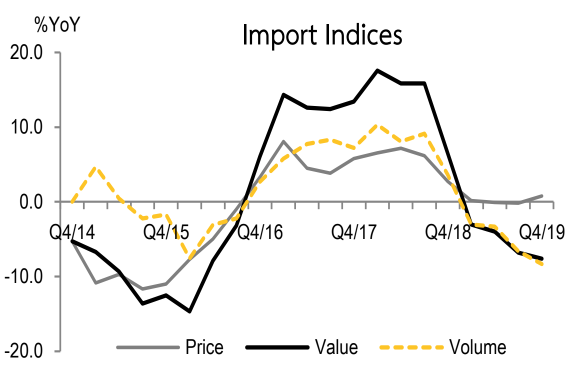
%YOY	2018					2019					Share
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Q4/19 (%)
Total Exports (Mil US$) (Customs basis)	252,957	63,287	63,368	63,930	62,372	246,245	62,106	60,968	63,601	59,569	100.0
(%YoY)	6.9	12.2	11.2	3.0	2.0	-2.7	-1.9	-3.8	-0.5	-4.5	
United States	5.5	9.1	6.8	0.1	6.8	11.8	32.0	3.3	7.7	5.4	13.0
Japan	13.0	24.9	11.3	8.6	8.2	-1.5	-1.4	-2.3	2.9	-5.0	10.2
EU (15)	5.1	11.0	11.2	2.5	-3.7	-6.6	-7.1	-7.3	-5.6	-6.4	8.5
China	2.7	4.1	16.0	-2.3	-4.8	-3.8	-10.3	-9.0	2.8	1.6	13.1
ASEAN (9)	14.9	15.1	13.6	21.8	9.6	-8.2	-4.4	-5.9	-13.9	-8.2	26.8
- ASEAN (5)*	13.6	16.1	9.4	20.2	9.3	-9.6	-7.7	-8.7	-12.1	-9.8	14.6
- CLMV**	16.7	13.8	19.9	24.1	9.9	-6.3	0.1	-2.0	-16.2	-6.2	12.2
Middle East (15)	-0.1	11.8	-5.6	1.2	-6.6	0.1	-0.3	-5.6	0.9	5.4	3.6
Australia	2.6	14.5	10.3	-5.7	-6.5	-5.1	-10.2	-9.5	14.0	-14.8	3.6
Hong Kong	1.8	1.4	9.5	2.8	-6.3	-6.5	-13.6	-5.1	-5.4	-1.1	4.6
India	17.8	32.8	27.7	14.3	-0.4	-3.9	1.3	4.3	-8.1	-14.3	2.5
South Korea	6.0	6.7	12.3	3.0	1.6	-4.3	-5.9	-0.3	-10.3	-0.9	1.9
Taiwan	-0.9	11.5	1.6	-10.1	-5.3	0.9	-14.4	-5.3	10.0	15.4	1.8

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

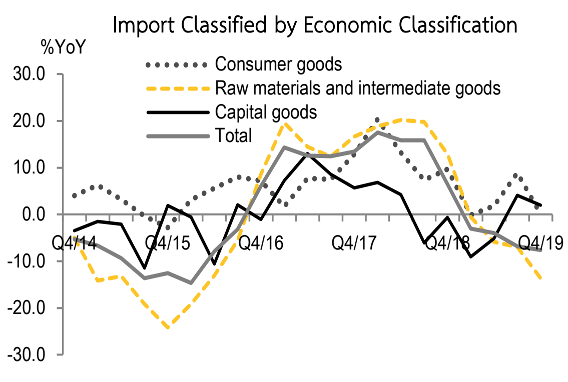
Import value in US dollar terms declined by 7.6 percent, in response to a decline in export quantity, as well as the downturn in domestic demand.

Import value in US dollar terms continued to decline from the previous quarter, consistent with the decline in export quantity. In the fourth quarter of 2019, the value of import was recorded at 53,221 million US dollars, declined by 7.6 percent, compared with a 6.8-percent decline in the previous quarter. Import volume decreased by 8.3 percent due to a decrease in import quantity of consumer goods, raw materials & intermediate goods, and capital goods, which fell by 1.4, 12.1, and 0.3 percent, respectively, associated with the contraction of export quantity. Meanwhile, the price of imports increased by 0.8 percent. Import value excluding unwrought gold declined by 8.3 percent. **In Thai Baht terms,** the import value dropped by 14.8 percent.

In 2019, import value in US dollar terms declined from the previous quarter. The value of import was recorded at 216.4 billion US dollars; fell by 5.4 percent compared with a 13.7-percent growth in 2018. Import quantity of consumer goods grew by 2.6 percent, while import value of raw and materials and intermediate goods, capital goods, and other goods decreased by 6.8, 2.1, and 5.6 percent, respectively.



Source: Bank of Thailand



Source: Bank of Thailand

Import quantity of consumer goods, raw materials & intermediate goods, and capital goods decreased.

Overall, there was a decline in import value of raw materials and intermediate goods, while consumer goods, capital goods and other import goods increased. **Import value of raw materials and intermediate goods** declined by 13.6 percent, associated with the decline in exports and manufacturing production. **Import value of capital goods** increased by 2.0 percent, as a result of the increase in imports of aircrafts, ships, floating structures & locomotive, while export of machinery, equipment & supplies declined. **Import value of consumer goods** expanded by 0.1 percent, mainly from an increase in food, beverage & daily products, household electrical appliances, and jewellery. **Import value of other goods** rose by 3.8 percent as a result of a 12.5 percent increase in the import of non-monetary gold.

Import items with increased value included computer (8.0 percent), power-generating machinery and parts (38.0 percent), medicinal and surgical equipment and supplies (10.1 percent), food, beverage & dairy products (1.1 percent), household electrical appliances (10.3 percent), and jewellery (27.8 percent). On the other hand, **import items with decreased value** included crude oil (-44.4 percent), chemicals (-13.5 percent), integrated circuits & parts (-6.2 percent), and materials of base metal (-9.3 percent).

Import Value of Major Product in US Dollar Term

%YoY	2018					2019					Share Q4/19 (%)
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	
Consumer goods	12.5	20.4	13.3	7.4	9.7	2.6	-0.1	1.9	8.9	0.1	11.6
Raw materials and intermediate goods	17.9	18.8	20.2	19.8	12.9	-6.8	-0.6	-5.9	-7.0	-13.6	52.1
Capital goods	1.0	6.9	4.2	-6.1	-0.6	-2.1	-9.0	-5.1	4.1	2.0	25.6
Other Imports	9.0	25.9	4.3	35.2	-21.5	-5.6	10.2	2.0	-29.3	3.8	10.7
Total Imports (Customs basis)	12.0	16.6	13.9	13.6	4.8	-4.7	-1.4	-4.2	-6.1	-6.8	100.0
Imports, f.o.b. (BOP basis)	13.7	17.6	15.8	15.9	6.5	-5.4	-3.0	-4.0	-6.8	-7.6	91.9

Source: Bank of Thailand

Term of trade decreased compared with the same quarter last year, as the export and import price increased by 0.4 and 0.8 percent, respectively. Thus, the term of trade slightly decreased from 108.4 in the same quarter last year to 108.0 in the fourth quarter of 2019.

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

Trade balance recorded a surplus of 5.9 billion US dollars (equivalent to 180.1 billion Baht), compared with a surplus of 8.0 billion US dollars (equivalent to 244.5 billion Baht) in the previous quarter, and a surplus of 4.6 billion US dollars (equivalent to 151.6 billion Baht) in the same quarter of last year.

Trade surplus was lower than that of the previous quarter but lower than the same period last year.

In 2019, trade balance stood at 26.6 billion US dollars (equivalent to 824.1 billion Baht), higher than a surplus of 22.4 billion US dollars (equivalent to 720.4 billion Baht) in 2018.

Production Side:

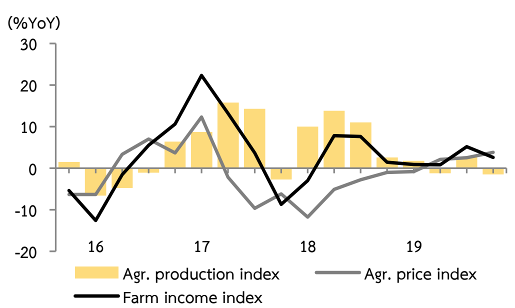
Accommodation and food service activities, transportation and storage sectors accelerated. Wholesale and retail trade slowed down. Manufacturing sectors agricultural sectors, construction, electricity, gas, steam and air conditioning supply sectors dropped.

Agriculture sector continually slowed down due to the drought and prolonged period of delayed rain. Production in agricultural sector decreased by 1.6 percent compared with 2.7-percent growth in the previous quarter. This was in line with a contraction of **Agricultural Production Index** of 1.5 percent. Major agricultural products with production contraction included (i) **paddy** (-3.2 percent), due to a prolonged period of delayed rain and drought during the growing season where the water was at a lower level than the same period last year, (ii) **sugarcane** (-21.2 percent), owing to the weather variation, no rainfalls and the drought, (iii) **oil palm** (-15.2 percent), due to the fall in price at the beginning of the year that caused farmers motivation to increase production, (iv) **swine** (-1.9 percent), due to the reduction of small-scale farmers production as a result of African Swine Fever concern, and (v) **maize** (-4.9 percent), caused by drought in some area, prolonged periods of delayed rain and pest. On the other hand, major agricultural products with production expansion included **fruits** (8.4 percent), **white shrimp** (13.7 percent), **rubber** (2.4 percent), **cassava** (10.9 percent), **fishery production** (13.7 percent), and **livestock production** (0.7 percent). **Agricultural Price Index** increased by 3.8 percent compared to an increase of 2.5 percent in the previous quarter. Such increase in API index was mainly contributed by the increase in price index of several important agricultural products such as **fruits** (10.3 percent), **paddy** (6.7 percent), **oil palm** (39.8 percent), and **poultry** (11.7 percent). In contrast, major agricultural price index with the contraction included **cassava** (-23.6 percent), **rubber** (-2.3 percent), **maize** (-5.8 percent), and **white shrimp** (-0.1 percent). The rise of agricultural price index thus led to overall increase in **Farm Income Index** by 2.6 percent.

Agricultural sector dropped a result of the reduction of some agricultural products those are affected by drought and prolonged periods of delayed rain. The rise of agricultural price index thus led to overall Farm Income Index increased.

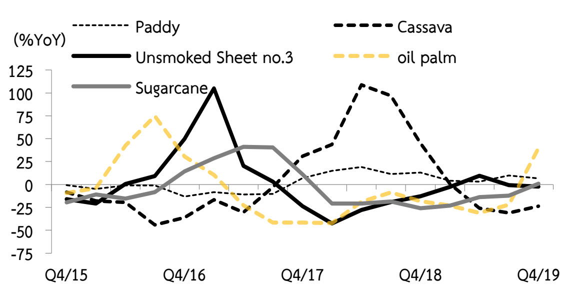
In total, 2019 production in agricultural sector expanded at a slower pace by 0.1 percent compared to a 5.5-percent growth in 2018. Agricultural Production Index grew by 0.2 percent, while Agricultural Price Index increased by 1.9 percent and Farm Income Index rose by 2.3 percent.

Farm Income Index increased by 2.6 percent due to the increase of agricultural price index



Source: Office of Agricultural Economics

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



Source: Office of Agricultural Economics

Manufacturing sector production decreased continually from the previous quarter, causing by the decrease in exports and temporary affecting factors in some important productions. Production in manufacturing sector dropped by 2.3 percent, following the 0.8-percent decline in the previous quarter. Such decrease in production found in accordance with the 6.9-percent drop in Manufacturing Production Index.

Manufacturing Production Index of the industries with 30 - 60 percent export share to total production dropped by 16.0 percent, due mainly to the decline in major semi-export-oriented industries, including production of other vehicles (-21.4 percent), sugar (-22.1 percent), Tyre (-12.5 percent). Meanwhile, production of bicycle rose by 2.3 percent.

Manufacturing Production Index of the domestic-oriented industries (with export share of less than 30 percent to total production) declined by 4.5 percent. The contraction was caused by the decrease in the production of major industries, such as refined petroleum products (-15.2 percent), steel and steel products (-10.2 percent), palm oil (-23.6 percent), plastic packaging (-3.6 percent).

Manufacturing Production Index of export-oriented industries (with export share of more than 60 percent to total production) dropped by 1.6 percent. A fall of export-oriented industry was from the decline in rubber products (-8.1 percent), processing and preserving of fruit and vegetables (-14.0 percent), electronic components (-3.9 percent), clothing and textile (-12.4 percent) and domestic appliances (-7.6 percent).

The average capacity utilization rate stood at 63.4 percent, declined from 65.0 percent in the previous quarter and from 69.3 percent in the same quarter last year.

Manufacturing Production Index with negative growth principally included vehicles (-21.4 percent), petroleum products (-15.2 percent), sugar (-22.1 percent), steel and steel products (-10.2 percent), rubber products (-8.1 percent), palm oil (-23.6 percent), processing and preserving of fruits and vegetable (-14.0 percent), electronic components (-3.9 percent), clothing and textile (-12.4 percent) and Tyre (-12.5 percent), etc.

Manufacturing Production Index with positive growth mainly covered other general-purpose machinery (17.0 percent), computers and assembly (7.3 percent), rectifying and blending of spirits expanded by (31.7 percent), processing and preserving of fish (8.3 percent), malt liquors and malt (6.5 percent), porcelain and ceramic products (19.2 percent), poultry meat products (5.5 percent), basic chemicals (7.4 percent), wire, cable and wire products (7.0 percent) and cement (4.3 percent), etc.

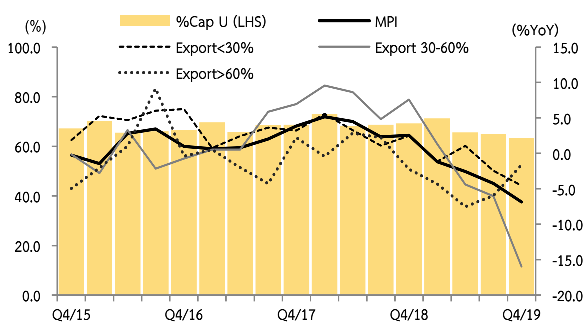
In 2019, **Manufacturing sector** dropped by 0.7 percent from 3.2 percent in the previous year, along with a 3.7-percent contraction in Manufacturing Production Index (MPI) and the **average capacity utilization rate** stood at 66.3 percent compared with 69.8 percent in 2018.

Manufacturing sector kept declining by 2.3 percent.

Manufacturing Production Index of the industries with 30 - 60 percent export share to total production dropped by 16.0 percent, Manufacturing Production Index of the domestic-oriented industries (with export share of less than 30 percent to total production) declined by 4.5 percent and Manufacturing Production Index of export-oriented industries (with export share of more than 60 percent to total production) declined by 1.6 percent.

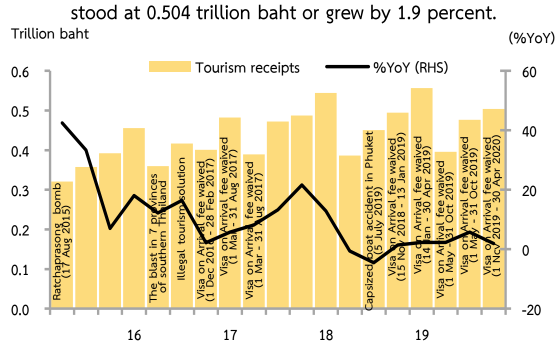
In the forth quarter of 2019, the average capacity utilization rate stood at 63.4 percent.

Manufacturing Production Index decreased by 6.9 percent and the capacity utilization rate averaged at 63.4 percent.



Source : Office of Industrial Economics

Income from foreign tourists for Q4/2019 stood at 0.504 trillion baht or grew by 1.9 percent.



Source: Ministry of Tourism and Sports

Accommodation and food service activities sector expanded favorably from the previous quarter, owing to the growth in number and revenue from foreign tourists, as well as the increase in the average occupancy rate. Accommodation and food service activities sector expanded by 6.8 percent, rose continually form 6.7 percent in the previous quarter. **The total number of foreign tourists recorded at 10.33 million persons, increased by 6.4 percent** expanded further form 7.2 percent in the previous quarter. The increase in number of foreign tourists was mainly supported by an extension of visa-on-arrival fee waiver for citizens of 21 nations until 30 April 2020, combined with the recovery of Chinese tourists market in the second half of the year, and the implementation of stimulus measures to promote tourism sector. The expansion in the number of tourists was mainly from China (14.6 percent), India (22.8 percent), Russia (8.5 percent), Taiwan (19.0 percent), and Laos (7.1 percent), respectively. Together with, the increase in spending of Thai tourists, supported by the government stimulus measures to promote domestic consumption, resulting in **the total amount of tourism revenue of 0.79 trillion Thai Baht, rose by 0.9 percent**. This was attributed to (i) **foreign tourism receipts 0.50 trillion Thai Baht, rose by 1.9 percent**, mainly contributed to tourism receipts from China, India, Japan, Russia and Taiwan, (ii) **Thai tourism receipts of 0.29 trillion Baht slightly declined by 0.8 percent. The average occupancy rate** was at 71.24 percent, increased from 64.08 percent in the previous quarter.

Accommodation and food service activities sector grew by 6.8 percent owing to an expansion in the number and revenue generated from foreign tourists.

Average Occupancy Rate was at 71.24 percent, increased form 64.08 percent in the previous quarter.

For the whole year of 2019, accommodation and food service activities sector expanded by 5.5 percent compared with 7.6-percent growth in 2018. Total amount of tourism revenue was 3.02 trillion Thai Baht, expanded by 2.4 percent from the 4.5-percent decline in 2018. The number of foreign tourists was at 39.8 million persons in 2019 (increased by 4.2 percent). Receipts from foreign tourists were at 1.93 trillion Thai Baht (increased by 3.1 percent). Receipts from Thai tourists were at 1.08 trillion Thai Baht (increased by 1.2 percent). The average occupancy rate was at 71.38 percent.

Wholesale and retail trade; repair of motor vehicles and motorcycles sector continued to expand favorably by 5.2 percent, compared with a 5.3-percent growth in the previous quarter. This was in line with an acceleration of the **Retail Sales Index (except motor vehicles and motorcycles)** which expanded by 1.3 percent, and the **expansion in Wholesale Sales Index (except motor vehicles and motorcycles)** of 4.3 percent, due to a 9.9-percent growth in wholesales of household goods and a 13.7-percent growth in wholesales of general goods. Meanwhile, a contraction in **Wholesale, Retail Sales, and Repair of Motor Vehicles and Motorcycles Index of 13.0 percent**, which caused by a 15.9-percent decline in motor vehicles sales and 9.4-percent decline in automotive parts sales.

Wholesale and retail trade continued expanded.

For the whole year of 2019, wholesale and retail trade; repair of motor vehicles and motorcycles sector grew by 5.7 percent, slowed down compared to an expansion of 6.6 percent in 2018.

Transportation and storage sector expanded with an accelerated rate from the previous quarter, following the expansion of air transport services shipping support services and water transport services. Production in the transport and storage sector had expanded by 3.9 percent, which was higher than a 3.1-percent growth of the previous quarter. Transport service grew by 4.1 percent, comparing with 3.0 percent growth in the previous quarter, mainly due to the increasing of transport service attributed to (i) a 2.8-percent growth in land transport and transport, (ii) 5.1-percent growth in air transport services, and (iii) 4.2-percent growth in water transport services. In addition, shipping support services expanded by 5.8 percent, improved from a 4.9-percent growth in the previous quarter in accordance with the increase in earnings performance of shipping support service providers. Meanwhile, postal services dropped by 0.8 percent .

Transportation and storage sector accelerated.

In 2019, transportation and storage sector expanded by 3.4 percent in total, slower than a 4.4-percent growth in last year. In addition transport service, shipping support services and postal services expanded by 2.8, 5.9, and 3.6 percent, respectively.

Electricity, gas, steam, and air conditioning supply sector decreased due to the decline in electricity generation activities and a slowdown of separation plant activities. Electricity, gas, steam and air conditioning supply sector decreased by 0.4 percent compared with an expansion of 3.2-percent in the previous quarter, In details, (i) electric power generation decreased by 0.9 percent, compared with an expansion of 2.8-percent in the previous quarter, due to a decrease in total demand for electricity of 0.4 percent. The demand for electricity in industrial and manufacturing sector dropped by 3.9 percent while the demand for electricity in household fell by 3.3 percent, compared with an expansion of 6.8 percent in the previous quarter. (ii) Gas separation plant expanded by 3.1 percent, compared with a 7.5-percent rise in the previous quarter.

Electricity, gas, steam, and air conditioning supply sector decreased, due to the decline in electricity generation activities and a slowdown of separation plant activities.

In 2019, electricity, gas, steam and air conditioning supply sector increased by 4.9 percent, accelerating from a rise of 2.2 percent in 2018. Production of electric power generation and gas separation plant expanded by 5.1 and 3.3 percent, respectively.

Production in construction sector decreased due to the delay of budget process and the decrease in the public construction, while the private construction increased. Construction sector fell by 1.9 percent, compared with an expansion of 2.7 percent in the previous quarter, owing to the decrease in **public construction** by 6.1 percent, compared with a 5.1-percent expansion in the previous quarter. In details, government construction sharply decreased by 17.4 percent compared with a rose of 5.3 percent in the previous quarter whereas state-owned enterprises construction expanded by 15.2 percent. **Private construction** rose by 3.1 percent compared with a drop by 0.1 percent in the previous quarter, due to an expansion of non-residential construction such as commercial buildings and factory building especially in the Eastern Economic Corridor (EEC) special zone, as well as the construction of mega-hotel in Bangkok and vicinity area. However, other constructions decreased compared to the figure of the previous quarter. **Construction Materials Price Index declined** by 2.8 percent, which decreased for two consecutive quarters owing to a decrease in steel and steel products (-15.2 percent), and cements (-0.2 percent), whereas prices of concrete products increased by 1.2 percent

Construction sector decreased due to the delay of the Budget process which decreased the public construction by 17.4 percent. However, state-owned enterprises construction and private construction increased.

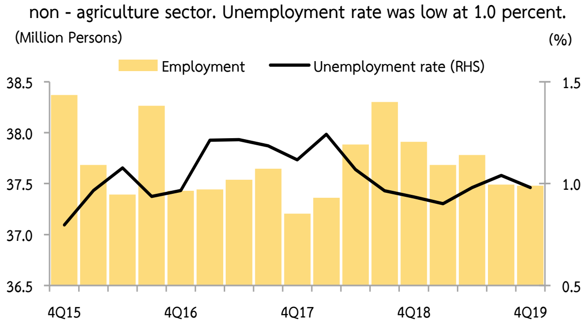
In 2019, construction sector expanded by 2.0 percent in total, slightly lower than a rise of 2.4 percent in 2018. Such expansion was mainly due to an increase in public construction which expanded by 2.4 percent (government construction rose by 0.7 percent, and state-owned enterprises construction expanded by 5.6 percent), Meanwhile, private construction rose by 1.4 percent.

Employment: dropped as a result of a decline in employment of both agricultural and non-agricultural sector, while unemployment rate remained low. Employment in the fourth quarter of 2019 declined by 1.1 percent compared with a drop of 2.1 percent in the previous quarter. In details, agricultural employment dropped by 1.6 percent, which was a continuous decline for four consecutive quarters. Non-agricultural employment declined by 0.9 percent, due to the drop in employment in manufacturing sector and accommodation and food service activities sector. However, and construction sector and wholesale, retail sales, and repair of motor vehicles and motorcycles sector rebound in Q4/2019.

Employment decreased for four consecutive quarters due to a decline in agricultural and non-agricultural employment. The unemployment rate stood at 1.0 percent.

In 2019, the average unemployment was 3.7 thousand persons. The unemployment rate stood at 1.0 percent.

Employment decreased by 1.1 percent, following a decrease of employment in both of agriculture sector and non - agriculture sector. Unemployment rate was low at 1.0 percent.



Source: National Statistics Office

Employed Persons by Industry

%YOY	Share Q4/19	2018 Year	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Year	2019 Q1	2019 Q2	2019 Q3	2019 Q4
Employed	100.00	1.1	-0.2	0.9	1.7	1.9	-0.5	0.9	-0.3	-2.1	-1.1
- Agricultural	32.09	3.3	6.0	3.0	1.9	2.4	-3.3	-4.2	-4.0	-1.8	-1.6
- Non-Agricultural	67.91	0.1	-2.8	-0.0	1.6	1.7	0.8	3.2	1.5	-2.3	-0.9
Manufacturing	16.15	2.5	-0.0	2.6	2.8	4.6	-1.6	1.0	-0.5	-5.2	-3.9
Construction	5.51	-2.2	-11.8	-2.7	2.6	5.0	4.9	10.5	6.2	-2.2	0.2
Wholesale and retail trade; repair of motor vehicles and motorcycles	16.87	-0.7	-2.8	-2.2	0.9	1.5	-0.7	2.4	-0.4	-4.1	0.1
Accommodation and food service activities	7.56	1.8	-1.3	5.7	3.0	-0.0	1.3	-0.2	1.1	3.1	-0.7
Total labor force (Million persons)		38.4	38.1	38.5	38.7	38.4	38.2	38.3	38.4	38.0	38.0
employed (Million persons)		37.9	37.4	37.9	38.3	37.9	37.7	37.7	37.8	37.49	37.48
Unemployment (Hundred thousand persons)		4.1	4.7	4.1	3.7	3.6	3.7	3.5	3.8	3.9	3.7
Unemployment Rate (%)		1.1	1.2	1.1	1.0	0.9	1.0	0.9	1.0	1.0	1.0

Source : National Statistics Office (NSO)

Fiscal Conditions:

On the revenue side, in the first quarter of the fiscal year 2020 (October - December 2019), the net government revenue collection stood at 605.8 billion baht, increased by 1.5 percent compared to the same quarter last year. The key contributing components included: (i) the increase in revenue from petroleum income tax, due to the amendment in the tax payment system where petroleum companies are required to pay taxes within 10 days after shipping the product out of the factory rather than making a tax payment on the 15th of the following month. This amendment enabled the tax collection period of October 2019 to expand by 21 days, resulting in greater revenue from petroleum income tax (one-time revenue). (ii) The increase in revenue from the excise tax on beer, due to the boosts in production by entrepreneurs to match consumers' demand during the New Year celebration. (iii) The carry-over revenue remittance of state-owned enterprises (SOEs) such as the Electricity Generating Authority of Thailand (EGAT), the Provincial Electricity Authority (PEA), and the Government Savings Bank (GSB). (iv) The increase in the collection of personal income tax, due to the expansion of Withholding Income Tax on Salary (P.N.D.1), and Withholding Income Tax on Interest (P.N.D.2).

The net government revenue collection increased by 1.5 percent compared with the same quarter of Fiscal Year 2019.

Government Revenue

Fiscal Year (Billion Baht)	2018 Year	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Year	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1
Net Government Revenue	2,536.9	547.6	532.5	754.1	702.8	2,566.1	596.6	564.2	776.1	629.2	605.8
YOY (%)	7.7	-0.1	6.5	9.3	13.8	1.1	9.0	5.9	2.9	-10.5	1.5

Source: Ministry of Finance

On the expenditure side, the total budget disbursement in the first quarter of fiscal year 2020 was at 873.6 billion baht[1], decreased by 15.4 percent compared with the same quarter of fiscal year 2019 in which current and capital expenditure disbursements decreased by 13.8 percent and 22.5 percent, respectively .

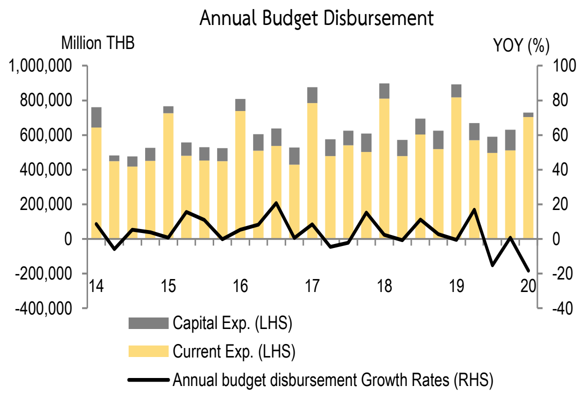
Classified by sources of funds, the government disbursements were as follows: (i) **the 2020 annual budget disbursement** stood at 729.5 billion baht[2], declined from the same quarter last year by 18.3 percent. The disbursement rate was at 22.8 percent, lower than the rate of 29.8 percent in the same quarter of last year.

In details, the current expenditure disbursement amounted to 703.5 billion baht, decreased by 14.0 percent compared with the same quarter of the previous year. The disbursement rate was at 27.7 percent, lower than the rate of 33.4 percent in the same quarter last year. The capital expenditure disbursement marked at 26.0 billion baht, dropped by 65.4 percent compared with the same quarter of last year. The rate of disbursement was at 4.0 percent, lower than the rate of 13.7 percent of the same quarter last year. The decline in current and capital expenditure disbursement was partly caused the delay of the Fiscal Year 2020 Budget Bill.

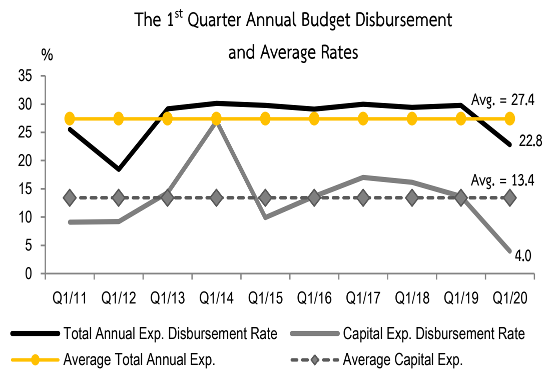
The delay of the Fiscal Year 2020 Budget Bill significantly caused a decline in the disbursement of both current and capital expenditure.

The rate of annual budget disbursement was at 22.8 percent owing to rates of the current and capital expenditure disbursement which were at 27.7 percent and 4.0 percent, respectively.

[1] The total government budget disbursement includes the disbursement of the grand total of annual budget, the carry-over budget, the off-budget loans, and the State-owned enterprises' capital expenditure budget (exclude PTT Public Limited Company).
[2] The disbursement in the first quarter of fiscal year 2020 (October - December 2019) was an advance disbursement due to the delay of the 2020 Budget Bill.



Source: GFMIS



Source: GFMIS

(ii) **The carry-over budget disbursement** stood at 80.7 billion baht, increased by 14.0 percent compared with the first quarter of fiscal year 2019. The disbursement rate was at 30.6 percent, greater than the rate of 19.1 percent of the same quarter last year. (iii) **Capital expenditure disbursement of state-owned enterprises** (excluding PTT) was at 64.2 billion baht[3], rose from the same period last year by 8.0 percent in accordance with the amendments in the investment plan of the Metropolitan Electricity Authority (MEA), PEA, Mass Rapid Transit Authority of Thailand (MRTA), and the Airports of Thailand PLC. (iv) **The off-budget loans** were disbursed at 519.2 million baht, greater than in the same quarter of last year where the disbursement of the off-budget loans was at 279.7 million baht. Such 519.2 million baht disbursement was disbursed on the Development Policy Loan (DPL).

The disbursements of the carry-over budget, the state-owned enterprises' capital expenditure budget and the off-budget loans expanded.

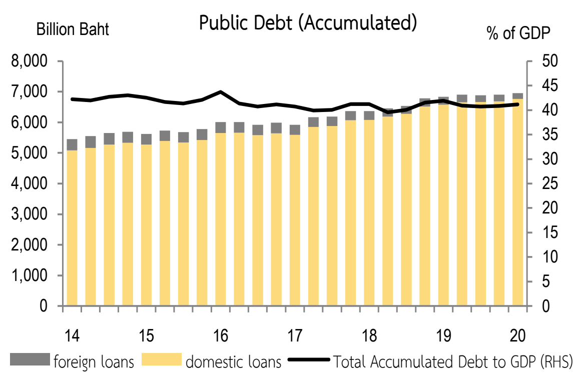
Public Debt: at the end of December 2019, public debt was accumulated at 6.9 trillion baht, equivalent to 41.2 percent of GDP. The public debt was comprised domestic loans of 6.7 trillion baht (40.1 percent of GDP) and foreign loans of 188.5 billion baht (1.1 percent of GDP).

The distribution of public debt was detailed as follows: 5,741.5 billion baht in Government Debt, 869.8 billion baht in SOEs (non-financial-institute) debt, 333.9 billion baht in SOEs (financial institute) debt, and 8,701.1 million baht in debt of other government agencies, which were accounted to 82.6 percent, 12.5 percent, 4.8 percent, and 0.1 percent of public debt, respectively.

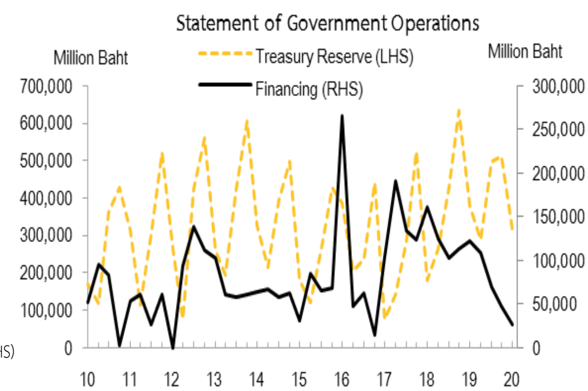
At the end of December 2019, the public debt was at 41.2 percent of GDP, remained under the fiscal prudential framework.

Fiscal Balance: in the first quarter of fiscal year 2020, the budgetary balance and non-budgetary balance recorded deficits of 163.9 billion baht and 59.0 billion baht, respectively. In the meantime, the government conducted a cash balance management through borrowing of 26.3 billion baht. Therefore, the cash balance after debt financing recorded a net deficit of 196.6 billion baht. At the end of the first quarter of fiscal year 2020, the treasury reserve stood at 316.4 billion baht.

At the end of December 2019, the treasury reserve stood at 316.4 billion baht.



Source: PDMO and NESDC



Source: MOF

3 The number was included the 2,029.8 million baht of the capital spending allocated from the annual budget .

Financial Conditions:

The policy rate decreased by 25 basis points to 1.25 percent per annum in the fourth quarter of 2019. In the meeting on 6th November 2019, the Monetary Policy Committee (MPC) decided to lower the policy rate by 25 basis points from 1.50 percent per annum to 1.25 percent per annum with the decision based on the assessment that the Thai economy would expand at a lower rate than previously assessed and further below its potential. Likewise, Federal Reserve (Fed) decided to lower its policy rate by 25 basis points to a range of 1.50-1.75 percent per annum. Similarly, many central banks continued to ease their monetary policies and cut their policy interest rates from previous quarter such as the central banks of India, Australia, South-Korea and Indonesia decided to lower their policy rates by 25 basis points. In particular, the central bank of Russia cut its policy rate twice by 50 basis points in October and by 25 basis points in December. As a result, its policy rate was decreased from 7.00 percent per annum to 6.25 percent per annum.

The policy interest rate decreased to 1.25 percent per annum in the fourth quarter of 2019, in line with direction of many countries such as the USA, India, South Korea, Russia, Indonesia and Australia.

In 2019, the Monetary Policy Committee (MPC) decided to lower the policy rate in August and November. As a result, the policy rate was decreased from 1.75 percent per annum at the end of 2018 to 1.25 percent per annum at the end of 2019.

In January 2020, the central bank of Malaysia decided to decrease its policy rate by 25 basis points to 2.75 percent per annum.

In February 2020, the Monetary Policy Committee (MPC) decided to decrease the policy rate by 25 basis points to 1.00 percent per annum. The policy rate reduction decision was based on the assessment that the Thai economy would expand at a much lower rate in 2020 than the previous forecast and much further below its potential due to COVID-19 outbreak, the delayed enactment of the Annual Budget Expenditure Act, and the drought. Meanwhile, headline inflation was projected to be below the lower bound of the inflation target throughout the forecast horizon, and financial stability became more vulnerable due to the prospect of economic slowdown. Likewise the central bank of Philippines and Russia decided to lower their policy rates by 25 basis points.

Policy Interest Rate

(%) At the end of period	2018					2019							2020	
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Oct.	Nov.	Dec.	Jan.	Feb.*
USA	2.25-2.50	1.50-1.75	1.75-2.00	2.00-2.25	2.25-2.50	2.25-2.50	2.25-2.50	1.75-2.00	1.50-1.75	1.50-1.75	1.50-1.75	1.50-1.75	1.50-1.75	1.50-1.75
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	0.00	0.00
England	0.75	0.50	0.50	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
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	-0.10	-0.10
Canada	1.75	1.25	1.25	1.50	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Australia	1.50	1.50	1.50	1.50	1.50	1.50	1.25	1.00	0.75	0.75	0.75	0.75	0.75	0.75
New Zealand	1.75	1.75	1.75	1.75	1.75	1.75	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Russia	7.75	7.25	7.25	7.50	7.75	7.75	7.50	7.00	6.25	6.50	6.50	6.25	6.25	6.00
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	4.35	4.35
Korea, South	1.75	1.50	1.50	1.50	1.75	1.75	1.75	1.50	1.25	1.25	1.25	1.25	1.25	1.25
India	6.50	6.00	6.25	6.50	6.50	6.25	5.75	5.40	5.15	5.15	5.15	5.15	5.15	5.15
Indonesia	6.00	4.25	5.25	5.75	6.00	6.00	6.00	5.25	5.00	5.00	5.00	5.00	5.00	5.00
Philippines	4.75	3.00	3.50	4.50	4.75	4.75	4.50	4.00	4.00	4.00	4.00	4.00	4.00	3.75
Malaysia	3.25	3.25	3.25	3.25	3.25	3.25	3.00	3.00	3.00	3.00	3.00	3.00	2.75	2.75
Thailand	1.75	1.50	1.50	1.50	1.75	1.75	1.75	1.50	1.25	1.50	1.25	1.25	1.25	1.00

Source: Collected by NESDC *Information as of 14th Feb 2020

Large, medium-sized commercial banks and specialized financial institutions (SFIs) cut their deposit and loan interest rates from the previous quarter. In the fourth quarter of the year 2019, the average 12-month fixed deposit rates of large commercial banks declined by 0.06 percent, a continuous reduction from the previous quarter to 1.39 percent per year as a result of 3 of 5 large commercial banks lowering deposit rates to the level of 1.38 percent per year and 1.33 percent per year in November and December, respectively, while the average Minimum Loan Rate (MLR) decreased by 2.5 percent from the previous quarter level of 6.15 percent per year, following the reduction of loan interest rates to 6.08 percent per year in November. This MLR reduction was the first reduction in 14 quarters after the last reduction in April 2016. For medium-sized commercial banks, deposit rates and MLR were reduced to an

Financial institutions both deposit and loan interest rates decreased from the previous quarter. However, real interest rates increased. According to the reduced inflation.

average of 1.30 and 6.65 percent respectively. Furthermore, specialised financial institutions (SFIs) reduced deposit rates and average MLR rates to 1.58 and 6.46 percent, respectively. The real average deposit and loan rate increased according to the slowing inflation rate.

In 2019, average deposit interest rates and average lending rates of large commercial banks decreased to 1.41 and 6.23 percent, respectively, as well as specialized financial institutions that lowered average deposit and loan rates to the level of 1.59 and 6.55 respectively.

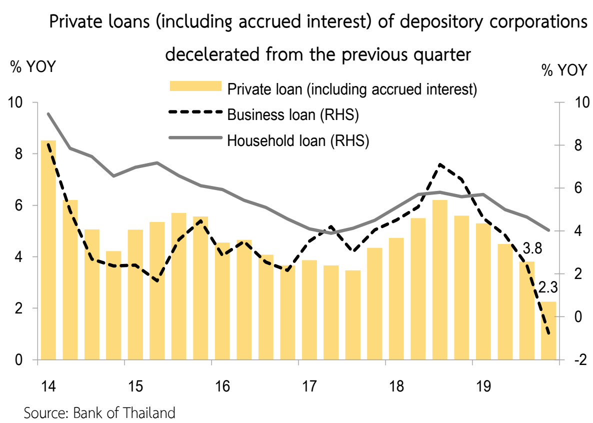
In January 2020, large commercial banks and some SFIs reduced deposit rates but retained at the interest rate of the loan while real interest rates decreased from rising inflation. In January, inflation stood at 1.05 percent, the highest rate in 8 months.

In February 2020, two large commercial banks and one SFI cut loan rates, while four large commercial banks and two SFIs reduced deposit rates in accordance with the policy rate cut by the Monetary Policy Committee. Meanwhile, the deposit rate for medium-sized commercial banks was unchanged, the Minimum Retail Rate (MRR) for some commercial banks decreased.

Private loans of depository institutions slowed down in response to the slowdown of business loans in the manufacturing, wholesale and retail sales, and accommodations and food service activities, as well as household loans which slowed down due to the slowdown in loan demand for housing while credit card loans maintained expanding.

Private loans of depository institutions slowed down both in business loans and household loans. At the end of the fourth quarter of 2019, private loans outstanding by depository institutions grew by 2.3 percent, decelerated from an expansion of 3.8 percent in the previous quarter, following a decrease in credits for manufacturing, wholesale and retail sale, and accommodation and food service activities. Household loans slowed down from the growth of 4.6 percent in the previous quarter to 4.0 percent, especially housing loans which continued slowing down by 3.4 percent from a 4.6-percent growth in the previous quarter. Nevertheless, other personal consumer loans slowed down slightly as credit card loans continued to expand favourably following sales promotions and new service provider products while the overall credit quality performed better than the previous quarter. The ratio of non-performing loans to total loans decreased to 2.99 percent from 3.03 percent in the previous quarter which was mainly due to small and medium business loans and personal consumption loans.

In 2019, private credit outstanding of depository institutions at the end of the year grew by 2.3 percent, decelerated from a 5.9-percent growth at the end of 2018 as a result of a slowdown from household loans. Meanwhile, corporate loans decreased by 0.8 percent.



Thai Baht against US dollar appreciated from the previous quarter mainly in line with a surplus of current account, a net capital inflow from foreign investors and a decreased of Fed interest rate.

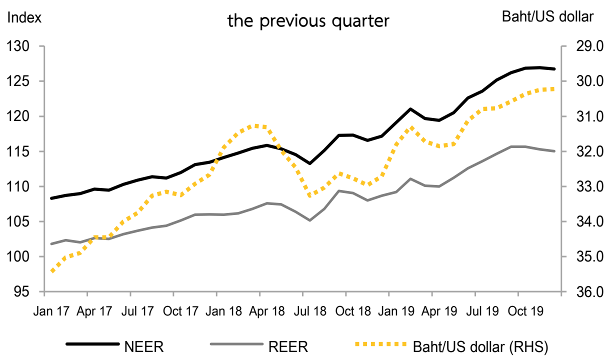
Thai Baht against US Dollar appreciated. In the fourth quarter of 2019, an average exchange rate was at 30.28 Baht per US dollar, appreciating by 1.4 percent from the previous quarter, in line with the other regional countries such as Taiwanese Dollar, South Korean Won, Philippine Peso and Singapore Dollar. Meanwhile, Japanese Yen, Vietnam Dong and Indian Rupee depreciated from the previous quarter. This appreciation was caused by a net foreign inflow in terms of both direct and portfolio investment even though the Monetary Policy Committee (MPC) decided to lower the policy rate and relaxed foreign exchange regulations to encourage capital outflows in November 2019. This was also caused US dollar to be depreciated as Fed decided to lower its policy rate in October. Thai Bath against trading partners (NEER)[4] appreciated in average by 1.6 percent from the previous quarter (an average of 126.95).

[4] 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.

In 2019, Thai Baht fluctuated within a range of 30.15-32.37 Baht per US dollar (an average of 31.04 Baht per US dollar), appreciating by 3.96 percent from the 2018 average rate. The appreciation was mainly caused by (i) a surplus of current account, (ii) the result of global trade volume affected by trade tensions, and (iii) the relaxation of monetary policy of major economies for example USA and ECB.

In January 2020, the monthly average of Thai Baht was at 30.44 Baht per US dollar, depreciated by 0.7 percent relative to the average rate in the previous month. Thai Baht depreciated in line with the others regional countries due to the prospect of economic slowdown which affected by the COVID-19 outbreak and formal signing between the United States and China in the first phase of trade agreement.

Thai Baht appreciated against US dollar from the previous quarter



Source : CEIC, Bank of Thailand

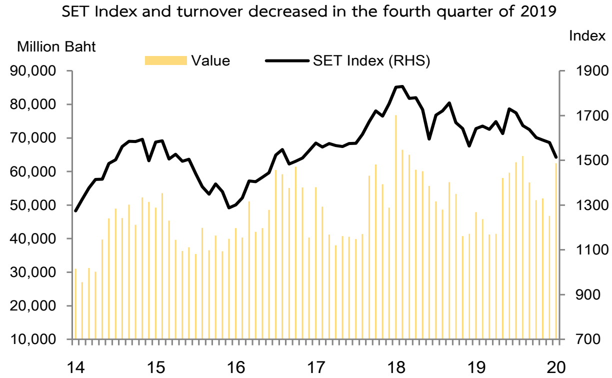
SET Index decreased from the previous quarter caused by a net sell of foreign investors.

SET index decreased from the previous quarter. At the end of the fourth quarter of 2019, SET index decreased by 3.5 percent to 1,580 points from the previous quarter. The downward movement of SET index was mainly driven by the net sell position of foreign investors. However, overall throughout the quarter, SET index fell from the previous quarter, supported by (i) the slowdown in export, (ii) the lost of GSP tariff privileges with the US, (iii) the unexpected financial reports of the companies in energy industry, resulting from the subdued oil price, (iv) the uncertainty over the US-China trade tension, and (v) political situation in Hong Kong .

Overall in 2019, SET index increased from 1,564 points at the end of 2018 to 1,580 points at the end of 2019, equivalent to a 1.0-percent rise from 2018. This was resulted from the trade tension, political situation, and monetary policy of major countries.

In January 2020, SET index decreased by 4.2 percent to 1,514 points from the end of December, which was pressured by a net sell of foreign investors and local institutions. Meanwhile, retail investors posted a net buy. A decline in SET index from the previous month was resulted by (i) the US - Iran conflict and (ii) the outbreak of COVID-19.

SET Index and turnover decreased in the fourth quarter of 2019



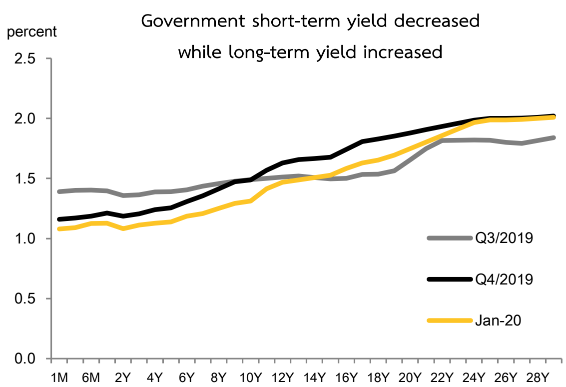
Source: SET

The short-term government bond yield shifted downward while the long-term government bond yield shifted upward. In the fourth quarter, investors concerned about the risk affecting short-run of Thai economic growth. Monetary Policy Committee (MPC) cut the policy rate in August and November. However, the improvement of the US, and Asian economies, and the lower tension of US-China trade conflict, after reaching the US-China phase I trade deal in September the global economy, were the signals of recovery in global economy. As a result, the investors adjusted their portfolios and gradually sold their holding bonds. Foreign investors registered a net sell in short-term bonds and a net buy in long-term bonds. At the end of the fourth quarter, foreign investors registered a net sell of 8.3 billion Baht, comparing with a net sell of 79.9 billion Baht in the previous quarter.

The short-term government bond yield shifted downward while the long-term government bond yield shifted upward.

Overall in 2019, a daily average outright trading volume was at 87.8 billion Baht, higher than an average of 78.8 billion Baht in 2018. A decline in policy rate from 1.75 percent to 1.25 percent and uncertainty in global economy caused the government bond yield to decrease in all maturities while government bond price index increased by 11.7 percent. Consequently, foreign investors registered a net sell, equalling to 79.3 billion Baht.

In January 2020, foreign investors registered a net buy of 10.8 billion Baht in bond market, by selling short-term bond and buying long-term bond.



Source: ThaiBMA

Capital and financial account recorded a net outflow of 1.7 billion US dollars in the first two months of the fourth quarter of 2019. The net outflow was mainly due to a continual outflow from Thai investors in terms of both direct and portfolio investment. However, there was a continual foreign inflow especially in terms of direct investment.

Capital and financial account recorded a net outflow which were caused by outflow of Thai investors in forms of both direct and portfolio investments.

In the first eleven months of 2019, capital and financial account registered a net outflow of 10.4 billion US dollars which was mainly due to the overseas investment of Thai investors informs of direct investment and bond market. On the other hand, there was a continual net inflow from foreign investors in terms of direct investment.

Capital Flow

(Billion USD)	2018					2019						
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4(2M)	Oct.	Nov.
- Direct Investment	-8.0	-1.1	-3.8	-2.6	-0.5	-4.7	-3.8	-1.8	0.5	0.3	0.2	0.0
Thai investor	-21.2	-5.2	-5.9	-5.8	-4.5	-14.1	-4.4	-3.8	-4.0	-1.9	-0.9	-1.0
Foreign investor	13.2	4.0	2.0	3.2	4.0	9.3	0.7	2.1	4.5	2.1	1.1	1.0
- Portfolio Investments	-5.9	-3.0	-4.1	1.4	-0.2	-7.5	-2.6	2.0	-6.1	-0.8	-0.4	-0.5
Thai investor	-2.0	-2.1	1.5	-1.2	-0.2	6.6	-1.3	-0.6	-2.5	-2.3	-2.1	-0.1
Foreign investor	-3.9	-0.9	-5.6	2.6	-0.2	-1.0	-1.3	2.6	-3.7	1.4	1.7	-0.3
Others	-1.0	0.7	-0.1	0.1	-1.8	1.9	1.2	-2.8	4.6	-1.2	-1.2	0.1
Capital and Financial Account	-14.9	-3.3	-8.1	-1.1	-2.5	-10.4	-5.1	-2.5	-1.1	-1.7	-1.4	-0.4

Source: Bank of Thailand

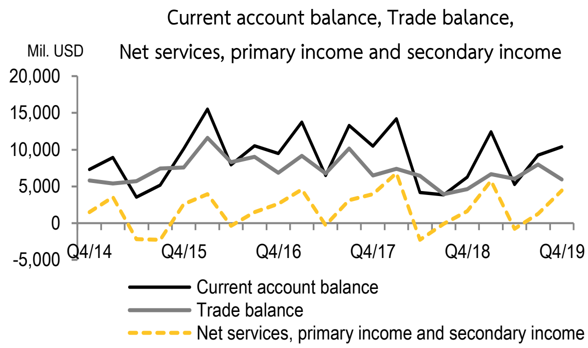
Current account registered a surplus of 10.4 billion US dollars (equivalent to 314.5 billion Baht). This was a result of a trade surplus of 5.9 billion US dollars and a surplus in services, and primary and secondary income of 4.4 billion US dollars.

In 2019, current account registered a surplus of 37.3 billion US dollars (equivalent to 1,154.4 billion Baht), compared with a surplus of 28.5 billion US dollars (equivalent to 913.3 billion Baht) in 2018.

International reserve at the end of December 2019 stood at 224.3 billion US dollars (excluding net forward position of 34.7 billion US dollars), which was equivalent to 3.8 times of short-term foreign debt, or to an import value of 12.6 months (given the average of import value in the fourth quarter of 2019)

Current account registered a more surplus than the same period last year.

International reserve at the end of December 2019 stood at 224.3 billion US dollars.

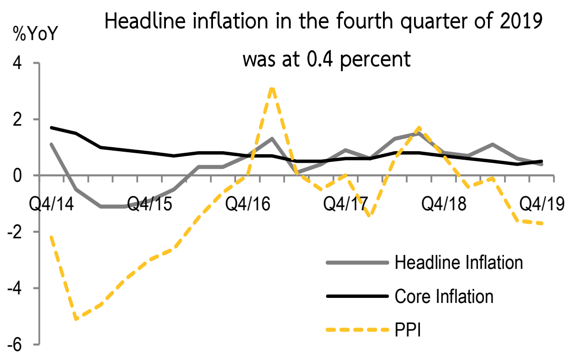


Source: Bank of Thailand

Headline inflation: In the fourth quarter of 2019, headline inflation was at 0.4 percent on average, decelerated from 0.6 percent in the previous quarter. Food-and-beverage price index increased by 1.8 percent, continued from 2.9 percent in the previous quarter, due to an increase in prices of fresh vegetables, fresh fruit and meat. Non-food and beverage price index dropped by 0.4 percent compared with a 0.7–percent decrease in the previous quarter, as the domestic retail fuel price decreased. Core inflation was average at 0.5 percent, compared with 0.4 percent in the previous quarter.[5]

In 2019, headline inflation was at 0.7 percent on average and core inflation was average at 0.5 percent.

Headline inflation was at 0.4 percent, decelerated from 0.6 percent in the previous quarter due to the decline of Food and Beverage price index.



Source: Ministry of Commerce

Producer Price Index (PPI): In the fourth quarter of 2019, Producer Price Index decreased by 1.7, due to the deceleration in price of manufacturing products and mining products. The price of mining products dropped by 5.7 percent, compared with a 4.8-percent decrease in the previous quarter due to decelerating price of lignite, petroleum, and natural gas. In addition, the price of manufacturing products fell by 2.3 percent from a 2.6-percent decrease in the previous quarter as price of petroleum and chemical products decelerated. Meanwhile, the price of agriculture products rose by 4.8 percent continued from 7.2 percent in the previous quarter as price of crops and live animal and products increased.[6]

In 2019, producer price index decreased by 1.0 percent compared with 0.4-percentage growth in 2018.

Producer Price Index (PPI) decreased by 1.7 percent, due to the decrease in price of mining products and price of manufactured products.

[5] In January 2020, headline inflation was 1.1 percent, and Core inflation was 0.5 percent.

[6] In January 2020, Producer Price Index (PPI) increased by 0.8 percent.

2. Crude Oil price in Q4 of 2019

The crude oil price in the global market declined due to an increase in OECD inventory, and the world economic slowdown.

The crude oil prices in the global market fell from the same period last year but increased from the previous quarter. In the fourth quarter of 2019, the average crude oil price in the four major markets (Dubai, Oman, Brent, and WTI) stood at 60.90 USD per barrel, decreased from the same period last year by 8.1 percent from 66.30 USD per barrel, but increased from the previous quarter by 1.1 percent from 60.22 USD per barrel. Key reasons for the decline in the global crude oil price included (i) an increase in OECD (US, Canada, and others) inventory to 2,914 million barrels (higher than 2,860 million barrels in the same period last year), (ii) world economic slowdown, causing from that the global demand increased slowly, and (iii) investor concern over key risks including uncertainties between the US - China trade negotiations that could affect the expansion of the world economy.

In 2019, the average crude oil price in the four major markets stood at 61.94 USD per barrel, or a decrease of 10.3 percent, lower than 69.08 USD per barrel in 2018.

Crude oil price

Year		USD per Barrel					(%YoY)				
		OMAN	DUBAI	BRENT	WTI	Average	OMAN	DUBAI	BRENT	WTI	Average
2017	Year	50.90	54.78	52.99	53.18	52.97	18.1	21.6	27.8	27.4	23.7
2018	Q1	62.94	67.26	63.79	64.12	64.52	21.5	23.4	20.6	20.2	21.5
	Q2	68.07	75.22	72.23	72.28	71.95	41.8	48.7	46.7	46.1	45.9
	Q3	69.52	75.88	74.03	74.32	73.47	44.0	44.9	46.7	46.6	45.6
	Q4	59.57	68.96	68.13	68.56	66.30	7.4	11.9	15.0	15.7	12.6
	Year	65.05	71.84	69.54	69.82	69.08	27.8	31.1	31.2	31.3	30.4
2019	Q1	54.88	63.79	63.20	63.34	61.30	-12.8	-5.2	-0.9	-1.2	-5.0
	Q2	59.62	68.17	67.15	67.37	65.58	-12.4	-9.4	-7.0	-6.8	-8.9
	Q3	56.38	61.96	61.04	61.48	60.22	-18.9	-18.4	-17.6	-17.3	-18.0
	Q4	56.73	62.29	62.05	62.42	60.90	-4.8	-9.7	-8.9	-9.0	-8.1
	Year	56.85	63.99	63.31	63.59	61.94	-12.6	-10.9	-9.0	-8.9	-10.3
	Oct.	53.96	59.59	59.58	59.95	58.27	-23.8	-26.1	-24.8	-25.0	-25.0
	Nov.	57.07	62.72	62.12	62.63	61.21	0.9	-4.9	-5.4	-5.0	-3.7
	Dec.	59.75	65.12	65.01	65.20	63.77	22.1	12.8	14.3	14.0	15.6
2020	Jan.	57.70	63.74	64.47	64.58	62.62	11.7	5.8	9.4	9.1	8.9

Source: Thaioil Plc and EPPO.

3. The World Economy in Q4 of 2019

The world economy in the fourth quarter of 2019 revealed signs of recovery, as shown in many countries, especially in the US and other Asian countries where economic growth rates were higher than those in the previous quarter. The economic recovery was partly supported by better adjustments of global supply chain and international trade to the trade protectionism measures as well as a lesser trade tension between the US and China after the high-level meeting turned positive during September, 19th - 20th, 2019. As a result of significant progress made during the high-level meeting, the US decided to postpone additional tariffs on Chinese imports worth 250 billion US dollars, which was supposed to be implemented on October 15th, 2019, and tariffs on Chinese imports worth 160 billion US dollars, which, otherwise, would be implemented on December 15th, 2019. At the same time, the Chinese government announced the plan to import agricultural products from the US worth approximately 40 - 50 billion US dollars per year. Nevertheless, the global economic recovery was still fragile as other major economies, such as European Union and Japan, still experienced declining manufacturing production growths as well as some other countries also experienced low growth in domestic demand.

With concerns over tenuous global economic prospect and lower-than-target-inflation, central banks in many advanced countries continued to implement expansionary monetary policy. For instance, the Federal Reserve (FED) lowered its policy rate in October 2019 which made totaled 3 times of rate cuts in 2019 by 0.75 percentage points to 1.25 - 1.50 percent. The European Central Bank (ECB) also expanded its asset purchase program and lowered its deposit facility rate. Similarly, central banks in other major countries also lowered their policy rates, such as Australia, India, South Korea, Indonesia, Hong Kong, Mexico, Russia and Brazil.

The US economy accelerated, *owing to the acceleration in public investment and net exports, as well as the continuous expansion of private consumption. This was also in line with a strong employment conditions and a low level of inflation.*

The US economy expanded by 2.3 percent, accelerating from 2.1 percent in the prior quarter. This was due to acceleration in public investment of 6.5 percent, the highest expansion in history since 2003, and an increase of net exports, causing by a reduction in imports, for the first time in 10 years, especially a decline in import from China of 23.8 percent. Besides, private consumption continued to grow at a satisfactory pace, which was in line with strong employment conditions, where unemployment rate was at 3.5 percent, the lowest rate in 50 years. Nevertheless, the core PCE inflation was 1.6 percent, remaining about the same as the previous quarter. As the economy continued to recover and labor market remained strong, the Federal Open Market Committee (FOMC), thus, decided to keep the target range for the federal fund rate at 1.50 - 1.75 percent in the meeting on December 10th - 11th, 2019, after cutting the rate 3 times this year. Thus, for the year 2019, the US economy grew by 2.3 percent, which was the lowest growth rate in 3 years and decelerated from 2.9 percent in the previous year, owing mainly to deterioration in private consumption and exports.

European economy decelerated from the previous quarter and registered a lowest growth in 24 quarters, *owing to a reduction in manufacturing sector and a deceleration in private consumption together with a decline of consumer confidence.*

Eurozone economy in the fourth quarter of 2019 grew by 0.9 percent, comparing with 1.2 percent in the preceding quarter, the lowest rate in 24 quarters. This slowdown was mainly attributable to a decline in manufacturing sector due to the trade protectionism measures and the new Euro emission standard. Accordingly, the manufacturing Purchasing Manager Index (PMI) in the fourth quarter was at an average of 46.4, same as in the third quarter, which was below 50 for fourth consecutive quarters. Likewise, the capacity utilization rate was at 81.0 percent which was the lowest rate in 20 quarters. Also, the household consumption decelerated, reflected by a low growth in retail sale index in the fourth quarter of 1.8 percent, slowdown from 2.6 percent in the previous quarter. This was also in line with the decrease in consumer confidence index owing to an uncertainty of Brexit particularly when the no deal Brexit condition arose. Nonetheless, the unemployment rate remained low at 7.4 percent. Similarly, the inflation rate was at 1.0 percent, closed to 0.9 percent in the previous quarter. Consequently, the ECB's Monetary Policy Committee meeting on December 12th, 2019, decided to keep its level of easing monetary policy including the low policy interest rate, the extension of buying assets under the Asset Purchase Programme, a series of quarterly targeted long-term refinance operation (TLTROs III), and a two-tier system where part of banks' holding of excess liquidity will be exempted from the negative deposit facility rate. Subsequently, the Eurozone economy in 2019 grew by 1.2 percent - the lowest in 3 years, decelerating from 1.9 percent in 2018 mainly due to the slowdown in export and manufacturing sectors.

Japanese economy tends to decelerate in the fourth quarter, *owing to deterioration in private consumption and exports. In addition, as inflation was lower than the target level, the BOJ decided to maintain its policy rate.*

The Japanese economy is expected to decelerate from the previous quarter, owing mainly to reductions in private consumption and in export values. In addition, the retail sale index declined by 3.8 percent, which was the first time in 13 quarters, owing partly to the acceleration in private consumption prior to the consumption tax hike in the previous quarter, and was also consistent with a low level of consumer confident index. Moreover, export values declined by 4.4 percent, for the fourth consecutive quarters, which was corresponding to a decline of the manufacturing production index to 49.5, lower than 50.0 for the fourth consecutive quarters. Besides, inflation rate was at 0.5 percent and was lower than the 2.0-pecent target. Thus, in the meeting on December 26th, 2019, the Bank of Japan (BOJ) decided to keep its policy rate at -0.1 percent and maintained its current level of expansionary monetary policy. For the year 2019, the Japanese economy grew by 1.0 percent, accelerating from 0.3 percent in 2018, supported especially by a recovery in exports.

The Chinese economy expanded at the same rate in preceding quarter, and remained at lowest rate in almost 28 years. *Due to the continued domestic demand growth. While, the net exports declined following imports turned to positive rate. Inflation rate hiked as higher pork price, owing to the outbreak of swine flu.*

The Chinese economy grew by 6.0 percent, equivalent to the preceding quarter, which remained the slowest pace in 111 quarters. This was due to the continued domestic demand growth in both private investment and fixed asset investment. Meanwhile, the net exports declined for the first time in 5 quarters, owing to the growth in import values turned to positive rate, and increased faster than the export values. Meanwhile, imports and exports with US decreased by 1.5 and 18.0 percent, respectively. The inflation rate stood at 4.3 percent, accelerating from 2.9 percent in the previous quarter, and was the highest rate in 32 quarters. This was caused by higher food prices, especially a dramatic increase in pork price, owing to the outbreak of swine flu, and increased tariffs in many products from the US. China's foreign reserve at the end of December 2019 increased to 3.108 trillion USD, highest level in 6 months. Meanwhile, corporate debt remained high, at 154.5 percent of GDP. Under the conditions of economic slowdown and increasing pressure to economic stability, the People's Bank of China (PBOC) decided to cut the one-year Loan Prime Rate (LPR) on November 20th, 2019 from 4.20 percent to 4.15 percent. For the year 2019, the Chinese economy expanded by 6.1 percent, slowing from 6.7 percent in 2018, and was the lowest growth rate in 29 years. This was due to the slowdown in service, industrial and agricultural sectors.

The NIEs economies *mostly started to improve following the exports and private investment, except the Hong Kong economy, which declined for the second quarter due to the impact of domestic unrest.* ***As for the most economies in ASEAN,*** *the export value started to improve in line with the growth of Chinese's import.*

Most of **the NIEs economies** started to improve from the previous quarter following the recoveries of exports and private investment. This was attributable to the lesser trade tension from trade protectionism measures between the US - China and the supporting factor from the Chinese economic stimulus policies in the previous period. The South Korean economy grew by 2.2 percent, accelerating from 2.0 percent, in line with acceleration in the service sector and an expansion in the construction sector. On the other hand, the industrial and agricultural sectors slowed down. The Taiwanese economy grew by 3.3 percent, accelerating from 3.0 percent, following the acceleration in private consumption and total investment. The Singapore economy grew by 0.8 percent, closed to a 0.7-percent expansion in the previous quarter, driven by the acceleration in the service sector. The manufacturing sector continued to decline for the fourth consecutive quarter, which was consistent with the slowdown in the construction sector with the lowest rate in 4 quarters. Meanwhile, the Hong Kong economy declined by 2.9 percent, which was the declined for the second consecutive quarters, following the decreases in private consumption, total investment and exports, due to the prolonged domestic protests. Besides, inflation rates, in most of the countries, accelerated from the previous quarter due to higher food prices, especially pork price owing to the outbreak of swine flu. On the other hand, Hong Kong's inflation slowed down from the previous quarter due to the decrease in prices of accommodation and utilities. For the year 2019, the economies of South Korea, Taiwan, and Singapore grew by 2.0, 2.7 and 0.7 percent, compared with 2.7, 2.7 and 3.2 percent in 2018, respectively. However, the Hong Kong economy declined by 1.2 percent, compared with a 3.1 percent growth in 2018, which was the lowest rate in 10 years.

The ASEAN economies mostly experienced recoveries in their export values, corresponding with the expansion of Chinese's imports in this quarter. The Indonesian economy expanded by 5.0 percent, a similar rate to the previous quarter, supported by improved net exports of goods and services, while domestic demand continued to slow down. The Philippines economy grew by 6.4 percent, accelerating from 6.0 percent in the previous quarter, following the acceleration in government spending, total investment and exports of goods and services. Meanwhile, the Malaysian economy grew by 3.6 percent, decelerating from 4.4 percent in the previous quarter, following the continued decline in total investment and the reduction, for the first time in 5 quarters, of net exports of goods and services. Finally, the Vietnamese economy grew by 7.0 percent, decelerating from 7.5 percent in the previous quarter, following the slowdown of industrial, construction and agricultural sectors, while the service sector accelerated. Meanwhile, inflation rates decreased in most countries, mainly due to higher food prices, except for Vietnam where inflation was higher. For the year 2019, the economies of Indonesia, Malaysia, Philippine and Vietnam grew by 5.0, 4.3, 5.9 and 7.0 percent, decelerating from 5.2, 4.7, 6.2 and 7.1 percent in 2018 respectively.

GDP and Export growths in several key economies

(%YoY)	GDP						Export Value							
	2017	2018	2019			Lowest in	2017	2018	2019					
	Year	Year	Q3	Q4	Year	(Year)	Year	Year	Q3	Q4	Oct	Nov	Dec	Year
USA	2.4	2.9	2.1	2.3	2.3	3	6.6	7.8	-1.7	-1.4	-3.3	-2.0	1.3	-1.3
Euro Area	2.5	1.9	1.2	0.9	1.2	6	9.4	8.7	-1.4	-1.0	0.5	-5.4	-2.4	-2.6
UK	1.9	1.3	1.2	1.1	1.4	-	10.9	4.4	5.3	7.4	1.8	3.7	16.7	5.0
Japan	2.2	0.3	1.7	-	-	-	8.3	5.7	-1.3	-4.4	-5.4	-4.1	-3.7	-4.4
Australia	2.5	2.7	1.7	-	-	-	16.6	14.4	15.2	6.1	3.1	6.1	9.0	13.7
China	6.9	6.7	6.0	6.0	6.1	29	7.9	9.9	-0.3	1.9	-0.8	-1.3	7.9	0.5
India	6.9	7.4	4.5	-	-	-	13.1	8.5	-3.8	-0.9	-0.6	-0.5	-1.6	0.2
Russia	1.8	2.5	1.7	2.0	1.3	3	25.2	25.7	-7.1	-10.0	-10.9	-12.8	-6.2	-6.0
Brazil	1.3	1.3	1.2	-	-	-	17.5	9.9	-5.0	-10.2	-10.6	-15.3	-4.4	-5.8
South Korea	3.2	2.7	2.0	2.2	2.0	10	15.8	5.4	-12.3	-11.8	-15.0	-14.5	-5.3	-10.4
Taiwan	3.3	2.7	3.0	3.3	2.7	3	13.0	5.9	-0.8	1.8	-1.5	3.2	4.0	-1.4
Hong Kong	3.9	3.1	-2.8	-2.9	-1.2	10	7.6	6.8	-6.3	-2.6	-9.2	-1.4	3.5	-4.1
Singapore	3.7	3.2	0.7	0.8	0.7	10	10.4	10.3	-7.8	-3.5	-8.8	-5.1	4.7	-5.2
Indonesia	5.1	5.2	5.0	5.0	5.0	3	16.3	6.6	-6.9	-3.8	-6.1	-6.1	1.3	-6.9
Malaysia	5.7	4.7	4.4	3.6	4.3	10	14.7	14.2	-3.5	-3.2	-7.4	-4.8	3.3	-4.3
Philippines	6.7	6.2	6.0	6.4	5.9	10	19.7	0.9	1.0	6.1	0.3	-0.4	21.4	1.5
Vietnam	6.9	7.1	7.5	7.0	7.0	2	21.8	13.3	10.7	8.5	7.3	4.7	14.0	8.4

Source: CEIC , Collected by NESDC

4. The World Economic Outlook for 2020

The world economy and merchandise trade in 2020 tend to gradually improve as observed from the sign of recovery in production and exports of major economies in the last quarter of 2019. This upward tendency was partly supported by (i) the reduced tensions over the US and China trade conflict, (ii) the fewer risk of no-deal Brexit, (iii) the conclusion of United States-Mexico-Canada Agreement (USMCA) which was revised and signed on December 10th, 2019, (iv) the adjustment of global supply chain and trade direction in response to preceding trade protectionism measures, and (v) the continual implementation of expansionary monetary and fiscal policies. Consequently, in 2020, the major economies namely the US, Eurozone, China, and Japan tend to grow satisfactorily which will thus support other economies including Indian economy, Emerging economies, Newly Industrialized Economies, and ASEAN countries to accelerate in 2020.

Nevertheless, the recovery of the global economy and trade over the remainder of 2020 has faced with additional limitations and risk factors including: (i) the outbreak of COVID-19 which has significantly affected both the Chinese and other economies through several channels namely declining tourists, transportation and supply chain disruption, slowdown of export, and decline in the global commodity prices. Despite the fact that the impacts of COVID-19 outbreak are still uncertain, under the baseline scenario it is expected that the epidemic will reach its peak in March and will finally end in early May. Therefore, the impacts on international transportation and supply chain will be limited only in the first quarter of 2020 while the effects on merchandized trade and tourism will subside in the second quarter before fading out in the third quarter. Consequently, the world economy and trade volume in 2020 are anticipated to grow by 3.2 percent and 2.4 percent, comparing with 3.1 percent and 1.5 percent in 2019 respectively.

Under the environment of the global economic recovery yet remains rising numbers of uncertainty, major central banks thus continue to keep the monetary policy accommodative aiming to support economic recovery and to facilitate price level to achieve the monetary target. Under the baseline, the US Federal Reserve is likely to maintain its accommodative monetary policy stance at the current level, although there is possibility of additionally easing monetary policy in the second half of 2020 if it is unlikely that the inflation could not return to the target. Also, the European Central Bank and the Bank of Japan are expected to maintain the loose monetary policy. Meanwhile, the People's Bank of China (PBOC) tends to further ease its monetary policy in order to help cushion impacts from the COVID-19 epidemic.

The US economy is expected to grow at a satisfactory pace of 2.1 percent, decelerating from 2.3 percent in the prior year. Nevertheless, the economy would still grow at a higher pace than the potential level, despite decelerating from the previous year following the US's business cycle and impacts from previously imposed trade protectionism measures that affected manufacturing sector, exports and investment, together with the diminishing effects from 2018 - 2019 tax cut under the Tax Cuts and Jobs Act of 2017. In addition, there are still high uncertain in the direction of US trade policy, especially trade measures toward both European Union and China. Eventually, the US economic economy in 2020 would be supported by an increase in private consumption and residential investment. This is in line with a low level of unemployment rate and the prolonged expansionary monetary policy**.** Moreover, a reduced tension over the trade protection measures would also support the expansion of productions and exports of agricultural products and investments. Also, import of intermediate and capital goods for manufacturing production is likely to recover to its normal pace in the second half of the year. Consequently, it is anticipated that the FOMC will continue its expansionary stance. Besides, there is some possibility for the additional monetary expansion in the second half of the year, if inflation rates do not convert to the target level.

The Eurozone economy in 2020 is expected to expand by 1.3 percent, gradually improving from a 1.2-percent growth in the preceding year supported by the recovery of export and manufacturing sector especially the automobile industry that was affected by the new emission standard over the past few years. In addition, the private demand both household and business tends to expand continually owing to the prolonged accommodative monetary policy, and fading risk of no-deal Brexit. Nevertheless, there remains uncertainty to Eurozone economy in 2020 including (i) the US import tariff on European automobile and parts, and manufacturing products under the section 232 of the Trade Expansion Act of 1962, (ii) trade negotiation between EU and UK that might discourage the regional trade and investment sentiment, and (iii) other domestic issues particularly the political conflict in Catalonia region in Spain, and the economic and fiscal stability in Greece.

The Japanese economy is expected to increase by 0.6 percent in 2020, decelerating from an expected 1.0 percent in the preceding year. This follows the softer pace of domestic expansion, after previously acceleration prior the consumption tax hike in October 2019. In addition, manufacturing sector is expected to grow at a marginal pace in line with the export sector where there are still some limitations from the trade tension and protection measures as well as an appreciation in Yen currency. Nonetheless, Japanese economic expansion would still be supported by (i) a stronger pace of investments, due to the business sector's adjustment to trade protection measures, (ii) the EU-Japan Economic Partnership Agreement (EPA), which is already effective on February 1st, 2019, (iii) trade dispute between Japan and South Korea tends to be more resolve, (iv) the ongoing trade agreement with the US, which is expected to reach the agreement this year, (v) the 2020 Olympic and Paralympic Games, both held in Japan, which are expected to boost domestic consumption and the tourism sector, and (vi) the economic stimulus package worth 26 trillion Yen (23.8 billion US dollars).

The Chinese economy is estimated to grow by 5.7 percent, decelerating from 6.1 percent in 2019, in line with the slowdown of both private and state-owned enterprises' investments due to the economic restructuring plan as well as the US trade protectionism measures. In addition, the outbreak of COVID-19 has affected production, exports as well as domestic spending especially in the first half of this year. Meanwhile, the current outbreak is still highly uncertain and becomes a significant risk to both the Chinese and the global economies. However, the recent situation showed that the number of new infected people tends to decline, and epidemiology experts have predicted that the epidemic will reach its peak around March - April 2020 and the crisis would eventually end by the second quarter of 2020. In fact some businesses could able to resume operation by February 2020. Hence, the impact of this epidemic on the Chinese economy tends to relieve in the second quarter and the economy is anticipated to firmly recover in the second half of 2020. To cope with the economic slowdown, the People's Bank of China (PBOC) tends to further ease the monetary policy stance through several mechanisms especially the policy interest rate, the required reserve ratio (RRR) of commercial, the bond repurchase operations, the lending of the specialized financial institutions to small and medium enterprises.[7] Moreover, the Chinese government is likely to introduce additional stimulus measures such as lower some fees for businesses that have been affected by the outbreak, and increasing the debt ceiling for the local governments.

The Newly Industrialized Economies (NIEs) and the ASEAN Economies in 2020 are likely to improve gradually following the recovery in exports and production owing to the lower pressure from the US – China trade dispute and prolonged accommodative monetary policy. However, the key downside risk to regional economic recovery is the outbreak of COVID-19 that has affected through several channels particularly the slowdown of Chinese economy, declining in tourists, and the supply chain and international trade disruption. In the base case, the epidemic is expected to eventually end in the middle of the second quarter. Essentially, the outbreak would impact different economies in different ways depending on their exposure to China for example share of export to China, share of foreign direct investment from China, and share of Chinese tourists. Consequently, South Korea and Singapore economies in 2020 are likely to expand by 2.2 percent and 1.0 percent respectively, accelerating from 2.0 and 0.7 percent in 2019. Meanwhile, Hong Kong economy is anticipated to expand by 1.2 percent, improving from the 1.2-percent contraction in 2019, and Taiwanese economy is estimated to expand by 2.2 percent, slowing down from 2.7 percent in 2019. For ASEAN countries, Indonesia, Malaysia and the Philippines economies are likely to grow by 5.0 percent, 4.5 percent and 6.0 percent respectively, accelerating from 5.0 percent, 4.3 percent, 5.9 percent in the preceding year. Besides, Vietnamese economy in 2020 is estimated to grow by 6.7 percent, decelerating from 7.0 percent in 2019.

Notwithstanding, there remain downside risks that could make the global economy to expand lower than expected and financial conditions to become more volatile. Key risks needed to be consistently monitored include: (i) the COVID-19 outbreak situations that could be longer and more severe than previously expected in the baseline scenario. More impacts could also spread over to other countries which will make the global economy and the trade volume to expand at lower rate than expected. Based on recent data on February 13th, 2020, it revealed that the number of confirmed infections recorded at 46,997 people which continually declined from its peak on February 5th. However, the number of death on February 13th, recorded at 1,368 people and thus the death rate increased to 2.91 percent, the highest in 20 days. Accordingly, these figures indicate the high uncertainty of this epidemic; (ii) the uncertainties from trade protectionism measures that could be more pronounced, especially those between the US and the EU, where there are several dispute issues such as digital tax and the Euro depreciation as well as uncertainties between the US-China trade dispute which could be erupted again after the trade deal phase 1 has been signed since some key topics have not reached the conclusion yet particularly issues on the Chinese industrial subsidy, and the access of foreign company to the Chinese market. (iii) The existing economic stability problem in China which could be worsened with the Chinese economic slowdown due to the outbreak of COVID-19. Moreover, there are other risks in countries that have weak economic fundamental particularly Greece, and Argentina and the high non-performing loans of non-bank institutions in India.

Degree of exposure to China

Share of China to Total (%)	Export of goods	Foreign Direct Investment	Number of Tourists
South Korea	25.1	10.2	31.7
Taiwan	28.7	-	24.4
Hong Kong	55.4	31.9	78.3
Singapore	13.2	2.4	18.5
Indonesia	16.6	16.5	13.5
Malaysia	14.2	2.8	11.4
Philippines	13.7	-	17.6
Vietnam	15.7	10.7	32.0
Thailand	11.8	13.5	27.6

Source: CEIC, Calculated by NESDC
Note: Export data in 2019; Foreign direct investment and number of tourists data in 2018

7 On January 6th, 2020, the PBOC lowered the RRR of commercial banks by 0.5 percent to 10.0 percent, and then on February 3rd, 2020, employing bond repurchase transactions (Reverse Repo Operations) by reducing both the 7-day and 14-day reverse repo rates by 0.1 percent to 2.40 percent and 2.55 percent, respectively, and injecting liquidity through bond repurchasing operation amount of 1.7 trillion yuan during 3rd - 4th February 2020.

5. Thai Economic Outlook for 2020

The Thai economy has experienced increasing numbers of challenges for the rest of 2020 including (i) the drought condition that may put additional impacts on the agricultural sector, (ii) the slow and fragile global growth that can limit expansions of manufacturing production and export sectors, (iii) the COVID-19 outbreak that affects the tourism and other related service sectors, and (iv) the delay in the budgeting process for FY2020 which tends to lower the contribution from public expenditure and also limit the fiscal impacts in the first half of the year. Nevertheless, in the base case scenario, it is expected that limitations from the delayed budgetary process will end in the first quarter while the COVID-19 outbreak will subside within the second half. The economy will thus recover to a normal trend in the second half of the year. Under such conditions, it is expected that the economic growth would return to its normal pace in the second half of the year 2020, supported by (i) the recovery in global economy, which, in turn, causes the export and manufacturing sectors to resume their expansions at a low pace, (ii) the satisfactory expansion in domestic demand, (iii) supports from government measures, and (iv) the unusual low growth base during the last quarter of 2019.

Supporting factors for the economic growth:

1) **A gradual recovery of the global economy, amid lower pressure from trade tension between the US and China and a lower possibility of No-deal Brexit outturn.** Despite the fact that the COVID-19 outbreak would affect Chinese economy as well as other major economies by reducing tourist numbers and disrupting international trade and global supply chain, in the baseline scenario, it is expected that the COVID-19 outbreak will subsequently end and will lead the Chinese government to lift the travel ban for Chinese tourists by early May 2020. It is thus expected that the effects from the COVID-19 outbreak on the Thai tourism industry as well as on the Thai economy would subside in the second quarter. In the meantime, the disruptions in international supply chain and exports, caused by halting businesses and government agencies operations, tend to be eased in the first quarter as government agencies plan to resume their operations in February 2020. Under such conditions, exports would be able to recover and start to show a gradual expansion in the second half of the year 2020.

2) **A favorable expansion of domestic demand. Private consumption** continues to be supported by continued low level of inflation and interest rates, government's measures for supporting income and expenditure, and increasing in agricultural product's prices which will partially offset negative impacts from the drought. **Private investment** tends to increase further supported by (i) the production relocation of foreign investors to avoid trade war impacts, as well as progresses in public investment projects, including both special economic areas and key transportation projects. These factors are in line with high growth of the construction of industrial plants in the latter half of 2019, (ii) the relaxation of the Loan-to-Value (LTV) regulations governing mortgage loans, and (iii) the government's investment promotion measures particularly the Thailand Plus Package aiming to expedite investment relocation from foreign firms. **Public investment** is expected to accelerate, owing to the speeding up of the disbursement of major infrastructure projects, which are supposed to be completed and operated in 2020 – 2021. In addition, there would be a supporting force from a higher FY2020 government's capital budget framework, which could be offset the impacts from low government budget disbursement, resulting from a delay in FY2020 budgeting process during the first half of the year.

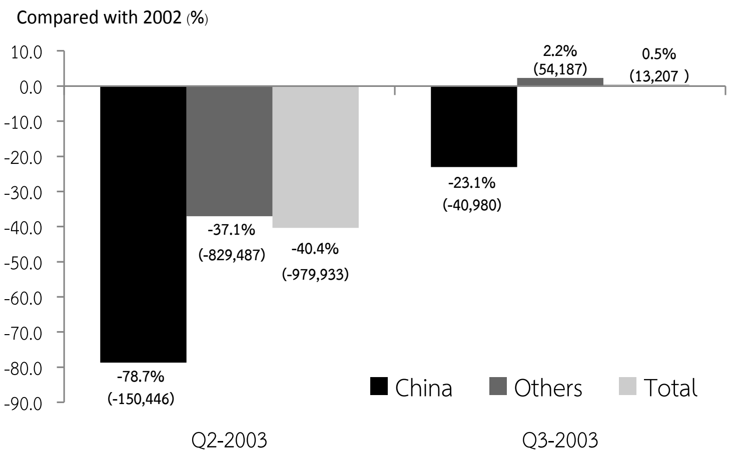
3) **Continued government measures implementation** includes: **(i) policies for supporting low income people, farmers, small and medium enterprises (SMEs), and local economies**, such as providing social welfare smart card, postponing loan repayment and lowering loan interest rate, implementing credit protection scheme, as well as providing debt memorandum, debt restructuring and providing revolving funds; **(ii) monetary and fiscal policies for supporting tourism sector** (approved by the cabinet on February 4th, 2020), namely extending the date for handing in personal income tax return form, allowing the tax deduction on domestic seminar or training courses, allowing tax deduction on renovation costs particularly for hotel business sector, and providing soft loan with comparatively lenient terms and for those in tourism businesses and other related services; **(iii) monetary and fiscal policies for supporting domestic private investment** (approved by the cabinet on January 28th, 2020), namely allowing businesses to fill 2.5 times of the actual investment costs for tax return, exempting import duties for 146 machine categories, and providing soft loan for investment, as to increase production productivity and efficiency; and **(iv) measures for supporting domestic investment and production base relocation of foreign investors (Thailand Plus Package)**, such as lowering cooperate income tax by 50 percent for 5 years specifically for the projects with actual investment value of at least 1 billion bath by 2021.

4) **The lower growth base in the last quarter of 2019**, owing to (i) a temporary closedowns of refinery production plants, which, subsequently, reduced the petroleum production in the last quarter of 2019 by 15.2 percent; (ii) transition to a new model change in the automobile industry, which caused the car production to decline by 21.4 percent; (iii) a reduction of 22.1 percent in sugar refinery; and (iv) a decrease in disbursement rate of capital budget by 65.4 percent, due to the delay in the FY2020 budgeting process. Under such conditions, it is expected that the economic growth in the last quarter of 2020 will be higher than normal trend if compared to the same quarter of last year.

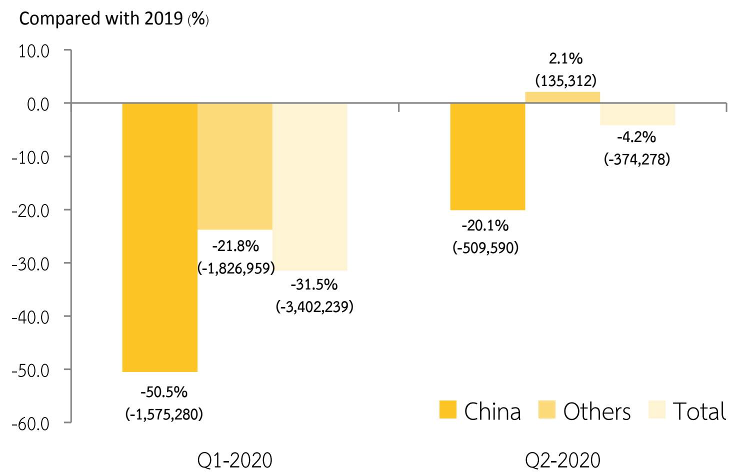
Limitation and Risk Factors:

1) **The outbreak of COVID-19** which will affect the Thai economy by reducing tourist numbers and disrupting global supply chain and transportation as a result from suspending operations of Chinese government agencies and other businesses. In addition, the Thai economy will also be affected by the Chinese and global economic slowdown, which will restrain export expansion. The impacts of COVID-19 outbreak are still uncertain, depending on the length and severity of the epidemic as well as the degree at which Chinese government would take in order to encounter the outbreak. However, in the baseline scenario, which is replicated from the pattern during the SARs outbreak in 2003, it is expected that the number of confirmed COVID-19 will reach the highest level in March 2020 and will subside so that the Chinese government would lift the international travelling ban in May 2020. As a result, the number of foreign tourists and tourism receipts in 2020 are expected to decline by 7.1 and 8.0 percent respectively, compared with last year. The number of tourists are expected to be 37.0 million persons and total tourism receipts of 1.73 trillion Baht in 2020, down from previously projected by 11.5 and 11.5 percent respectively. Nevertheless, the impacts from the global supply chain disruption and transportation suspension, caused by suspending operations of Chinese government agencies and businesses, are expected to be limited. This is consistent with the recent announcement that government agencies and most of businesses would resume their operation during February 17th - 24th, 2020. It is also expected that the outbreak will affect the Chinese economy to experience slow growth by 0.2 percentage points.

Impacts of SARs to tourist number

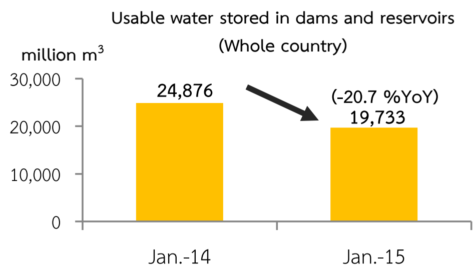


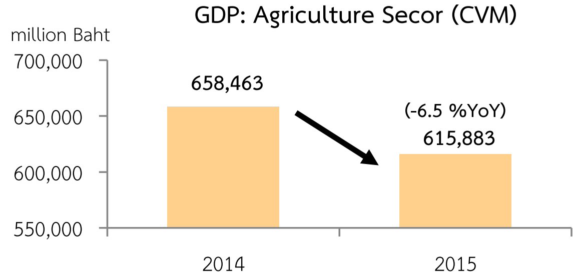
Impacts of COVID-19 to tourist number (Base case)



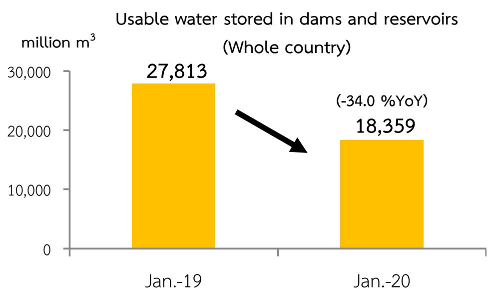
2) **The drought condition has become more pronounced and will increasingly hinder the expansion of agricultural sector.** The actual figures of all usable water stored in dams and reservoirs, as at January 31st, 2020, were 18,359 million cubic (25.9 percent of all available storage), which was the lowest level in 4 years and was lower than the level of 27,813 million cubic in 2019 (39.3 percent of all available storage). The water level this year was at similar levels as those in 2015 (28.0 percent of all available storage) and 2016 (21.0 percent all available storage), the most severe drought periods which caused the agricultural sector in 2015 and 2016 to decline by 6.5 percent and 1.2 percent, respectively. Under such conditions, it is expected that agriculture sector in 2020 tends to decrease, if rainfall over the rest of the year is lower than those in the same period last year and could also affect other production sectors in the case that the drought becomes more severe than expected.

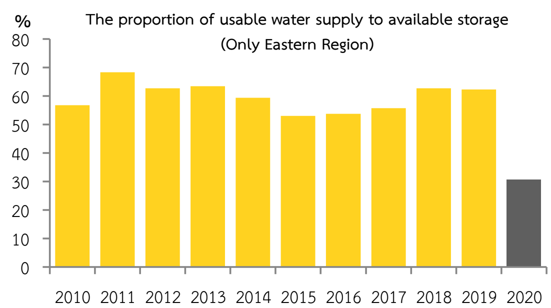
The Drought Situation in 2015





The Drought Situation in 2020





Note: at the end of January for each year

Source: National Hydroinformatics and Climate Data Center and NESDC

3) **The delay in FY2020 budgeting process**. In the baseline scenario, it is assumed that the disbursement of the FY2020 budget will be made in the early of April 2020, later than what previously expected in February 2020. Under this condition, it is expected that the disbursement in the second quarter and the rest of the year to be lower than previously expected, especially the disbursement for the capital budget, which is expected to be lower than the previous projection by around 32,791 million Baht.

4) **Risks from uncertainties in the global economy and financial situations**, although, in the baseline scenario, the global economy is expected to expand at a similar pace as previously projected, there remains some key risk factors that could make the global economy to expand lower than expected and financial conditions to become more volatile, including: (i) the COVID-19 outbreak situations that could be longer and more severe than previously expected in the baseline scenario; (ii) the uncertainties from trade protectionism measures that could be more pronounced, especially those between the US and the EU, where there are several issues such as digital tax, Euro depreciation, increasing US trade deficit, EU aircraft subsidies, use of the banned cluster bombs by the US as well as uncertainties between the US and China trade agreement; (iii) the uncertain political situations in several countries such as Catalonia's declaration of independence in Spain, anti-government protests in Hong Kong, as well as geopolitical conflict in the Middle East region, especially between the US and Iran; (iv) changes in investors' expectation and monetary policy stance in major countries; (v) possible risks of sharp slowdown and instability of the Chinese economy, which could be worsened by the COVID-19 outbreak; and (vi) economic instability in emerging and developing countries, such as fiscal condition and economic instability in Greece, risk from debt default in Argentina, and high non-performing debt in the banking and non-banking sectors in India.

In 2019 - 2020, the government approved various stimulus packages in order to maintain the driving force of economic growth. The targets of these packages were to support farmers and low-income families, to strengthen entrepreneurs, SMEs and local economy, as well as to alleviate the tourism sectors and other groups those suffered from the COVID-19 outbreak. The major policies are as follows:

Policy	Budget (million Baht)	Date
1. Policies to support Low-income families		
1.1 Electricity charge subsidy	1,740	1 Oct. 19 - 30 Sep. 20
1.2 Water charge subsidy	30	1 Oct. 19 - 30 Sep. 20
1.3 VAT refund for the Welfare Smartcard holders	99.3	1 Oct. 19 - 30 Sep. 20
2. Policies to strengthen domestic businesses		
2.1 Loan Guarantee Scheme for new businesses and innovation entrepreneurs	8,000	Until 25 Feb. 2020
2.2 Monetary and fiscal measures to promote domestic investment in 2020		
Corporate income tax deduction of 2.5 times on machinery expenditure	-	1 Jan. - 31 Dec. 20
Exemption of import duty on machinery	-	Until 31 Dec. 20
Soft loans for investment and production efficiency improvement	5,000	-
2.3 Thailand Plus Package		
50% corporate income tax deduction for 5 years for the project with actual investment value of at least 1 billion baht by 2021	-	within 2021
2.4 Debt restructuring for SMEs entrepreneurs	-	1 Jan. 20 - 31 Dec. 21
2.5 SMEs Transformation Loan Scheme	15,000	-
2.6 EXIM soft loans for projects in ECC area	20,000	-
2.7 SMART SMEs Credit and Soft Loan	20,000	-
2.8 Krungthai SMEs Credit Scheme	60,000	31 Dec. 20
2.9 SMEs Credit Guarantee Scheme by the Thai Credit Guarantee Corporation	60,000	-
2.10 GSB SMEs Extra Liquidity	50,000	31 Dec. 20
3. Policies to support farmers		
3.1 Farmer Income Guarantee Scheme:		
Rice farmers in 2019/20	21,495.74	15 Oct. 19 - 28 Feb. 20
Rubber farmers, phase 1	24,278.62	1 Oct. 19 - 31 Mar. 20
Tapioca farmers in 2019/20	9,442	1 Oct. 19 - 31 Dec. 20
Maize farmers in 2019/20	923.3	1 Dec. 19 - 31 Dec. 20
Oil palm farmers in 2019/20	13,378.9	1 Sep. 19 - 30 Sep. 20
3.2 Farmer Credit Schemes		
Loan scheme for farmers who agree to delay their paddy sales for crop year 2019/20	12,870.72	1 Nov. 19 - 31 Dec. 20
Credits for rice collection of farmer institutes, crop year 2019/20	15,000	1 Nov. 19 - 31 Dec. 20
Credits for rubber processing of farmer institutes	5,000	1 Sep. 14 - 31 Aug. 24
Credits for rubber products entrepreneurs, phase 2	15,000	2020 - 2026
Revolving credit for dry rubber entrepreneurs	20,000	1 Jan. 20 - 31 Dec. 21
Credits to be used as revolving funds for rubber collection	10,000	1 Apr. 20 - 31 Mar. 24
Credits for sugarcane production efficiency improvement, 2019 - 2021	6,000	1 Oct. 18 - 30 Sep. 21
Credits for tapioca collection and value-adding of farmer institutes	1,500	1 Dec. 18 - 31 Jul. 20
Credits for maize collection and value-adding of farmer institutes, 2019/20	1,500	1 Dec. 18 - 30 Jun. 20
4. Policies to promote tourism industry		
4.1 Extension of personal income tax filing deadline	-	Until 31 Jun. 20
4.2 Tax measures to promote domestic seminar organizing	-	1 Jan. 20 – 31 Dec. 20
4.3 Tax measures to promote hotel business improvement	-	1 Jan. 20 - 31 Dec. 20
4.4 Reduction of the excise tax on jet fuel	-	Until 30 Sep. 20
4.5 Extension of debt repayment and fees	-	T&C applied
4.6 Low-interest loan and lenient conditions measures	123,000	T&C applied

Key assumptions for 2020 economic projection:

Key Assumptions

	Actual Data			Projection for 2020	
	2017	2018	2019	Nov 18, 2019	Feb 17, 2020
World Economic Growth (%)[1]	4.2	3.8	3.1	3.3	3.2
USA	2.4	2.9	2.3	2.1	2.1
Euro Area	2.5	1.9	1.2	1.3	1.3
Japan	2.2	0.3	1.0	0.6	0.6
China	6.9	6.7	6.1	5.9	5.7
World Trade Volume (%)	5.1	4.0	1.5	2.8	2.4
Exchange Rate (Baht/US dollar)	33.9	32.3	31.0	30.5 - 31.5	30.7 – 31.7
Dubai Crude Oil (US Dollar/Barrel)	53.0	69.5	63.3	57.0 - 67.0	57.0 - 67.0
Export Price (US Dollar) (%)	3.6	3.4	0.3	(-0.6) – 0.4	(-0.6) – 0.4
Import Price (US Dollar) (%)	5.5	5.6	0.2	(-0.6) – 0.4	(-0.6) – 0.4
Income from Tourism (Trillion baht)	1.78	1.82	1.88	2.20	1.73

Note: [1] World economic growth is calculated by trade weight of key trading partners in 2016-2018 (15 economies)
Source: NESDC

1) **The world economy and trade volume in 2020 are expected to grow by 3.2 percent and 2.4 percent respectively,** revised down from 3.3 percent and 2.8 percent in the previous projection due to the outbreak of COVID-19 which significantly affects the Chinese economy and other Asian economies particularly countries that highly depend on China aspectual in trade, investment, and tourism. Nonetheless, in our baseline assumption, it is assumed that the epidemic will be limited and will end in May. Therefore, the global economy and trade volume tend to gradually expand in 2020. The key supporting factors of this improvement are (i) the lessened pressure from US - China trade dispute; (ii) the conclusion of the USMCA; (iii) the progress of Brexit which diminishes the risk of No-deal Brexit; (iv) the clearer adjustment of supply chain and trade direction in response to the trade protection measures; and (v) the continually accommodative monetary policy. Consequently, these key factors will support the global trade and investment to recover and will drive the emerging economies, newly industrialized economies, and Asian developing countries to grow satisfactorily.

2) **The Thai Baht in 2020 is expected to be in the range of 30.7 - 31.7 baht per US dollar,** depreciating from 31.0 baht per US dollar in 2019, and comparing with 30.5 - 31.5 baht per US dollar in the previous projection. This revision is in line with (i) the monetary policy direction of major central banks particularly the US Federal Reserves which are likely to maintain their expansionary monetary policies at the same level after continual easing their policies in 2019; (ii) the smaller surplus of current account as a result of the lower revenue from foreign tourists affected by the COVID-19 outbreak. In the baseline assumption, the revenue from foreign tourists in 2020 is expected to decrease by 150 billion Baht from the previous year; and (iii) the upward trend of long-term government bond yield of the US and of other advanced countries in the second half of the year.

3) **The average Dubai crude oil in 2020 is expected to be in the range of 57.0 - 67.0 US dollars per barrel with the mid-point forecast at 62.0 US dollars per barrel,** close to the average price of 2019 at 63.3 US dollars per barrel and remaining the same level as the previous projection. There are several downward pressures on oil price namely (i) the slowdown of major economies particularly the US, Japan, and China, including the COVID-19 outbreak which will weaken the crude oil demand; (ii) the US's oil production that is likely to increase to 13.2 million barrels per day from 12.2 million barrels per day in 2019, due to the enhancing efficiency of pipeline transportation and oil drilling facility; and (iii) a new limit of sulfur in fuel set by the International Maritime Organization (IMO 2020), aiming to reduce environmental impacts of maritime transport, will also decrease demand of Dubai crude oil which produces high sulfur. Nevertheless, there remains the upside factors for oil price including (i) the possibility that both OPEC and other oil producer countries particularly Russia during the OPEC+ meeting on 5th - 6th March 2020 will decide to postpone the end of production reduction period from March 2020 to be until June 2020, as well as possibility of additional cut of their production from 1.7 million barrels per day to be 2.3 million barrels per day; and (ii) geo-political conflicts in Middle East region especially a conflict between US and Iran which later on lead to the additional US sanction on Iran and that possible affect oil production and export of Iran. Moreover, there remain concerns over the domestic unrest particularly in Iraq and Libya.

4) **The export and import prices in US dollar term in 2020 are expected to marginally decrease by (-0.6) - 0.4 percent and (-0.6) - 0.4 percent respectively, remaining unchanged from the previous projection, and compared with 0.3 percent and 0.2 percent in 2019.** This is in line with the unchanged assumption in Dubai crude oil price and the lower prices of raw material and industrial goods amid the COVID-19 outbreak which has exerted a downward pressure on prices of commodity products.

5) **Revenue from foreign tourists in 2020 is expected to be 1.73 trillion Baht**, decreasing by 8.0 percent from 1.88 trillion baht in 2019. The projection is under the assumption that the effect of COVID-19 outbreak will reach its peak in March and would eventually end in early of May. Consequently, a number of foreign tourists in 2020 is projected to be at 37.0 million people, deceasing by 7.1 percent from 39.8 million people in 2019, and revising down from 41.8 million people in the previous projection. Nevertheless, there remains an uncertainty about the outbreak of COVID-19 on tourism sector depending on the contagion periods and the intensity. If the situation in China is prolonged and more intensify, the impact of the outbreak could be more disastrous than expected. Moreover, if the epidemic spreads to other countries, this contagion effect will notably harm to the economies. The prevention and disease control policy of Chinese and other governments will be crucial factors. Therefore, this outbreak situation has to be closely monitored and evaluated.

6) **The budget disbursement assumptions** are as follows: (i) the FY2020 annual budget disbursement rate of 91.2 percent of the overall budget, downwardly revised from 92.0 percent in the previous projection due to the delay of budgetary process. In this projection, the FY2020 government annual budget is expected to be able to start disbursement in early April 2020, compared to the assumption of the previous projection that expected in February 2020. Moreover, the budget disbursement in the first quarter of FY2020 was also lower than expectation. Specifically, the FY2020 disbursement rates for the current and capital budgets are expected at 98.0 percent and 65.0 percent respectively, comparing with 98.0 percent and 70.0 percent of the previous assumptions; (ii) carry-over budget disbursement of 70.0 percent, revised downwardly from 73.0 percent in the previous forecast; and (iii) state-owned enterprises' capital budget disbursement of 75.0 percent, revised downwardly from 80.0 percent in the previous projection.

Economic Projection for 2020 :

The Thai economy in 2020 is projected to expand in the range of 1.5 - 2.5 percent (with the midpoint of 2.0 percent), compared with 2.4 percent in 2019. Headline inflation is estimated to lie within the range of 0.4 -1.4 percent and the current account is anticipated to record a surplus of 5.3 percent of GDP.

In the press release dated on February 17th, 2020, the NESDC forecasted that the Thai economy is expected to grow in the range of 1.5 - 2.5 percent (with the midpoint of 2.0 percent), revised downwardly from 2.7 - 3.7 percent (with the midpoint of 3.2 percent) in the previous projection, released on November 18th, 2019, together with the revision in key growth components to be consistent with changing conditions and revised assumptions as follows;

1) The Thai economy in 2020 is likely to be confronted with additional limitations and risk factors including: (i) the drought condition that is likely to significantly impact agricultural production; (ii) the outbreak of COVID-19 in China and other countries particularly in the region which has affected the tourism and related sector; and (iii) the delay of budgeting process. These factors will directly affect the economic growth and will alter the assumptions of projection as follows:

   (1) The drought condition: based on data on January 31st, 2020 of the usable storage level of all dams across the country stood at 18,359 million cubic meters (25.9 percent of total reservoirs capacity), lower than at 27,813 million cubic meters (39.3 percent of total reservoirs capacity) in 2019, the lowest level in 4 years. This condition is comparable with the severe drought in 2015-2016 which had the usable storage level at the same period of 2015 at 19,733 million cubic meters (23.2 percent of total reservoirs capacity), down from 24,876 million cubic meters (35.4 percent of total reservoirs capacity) in 2014. The reduction of usable water was a major factor to the 6.5-percent contraction in agricultural sector in 2015. Although the effect of water deficiency on the agricultural sector and overall economy remains highly uncertain depending on the amount of rainfall level in the remaining of the year, the recent forecast by the Thai Meteorological Department suggests that the precipitation rate in 2020 will be lower than the average level, and hence the drought condition in 2020 is more likely to be more pronounced and more severe than expected. This drought possibility was not vividly noticeable during the previous projection on November 18th, 2019. Hence, this downward revision is already taking this risk into the account.

   (2) The outbreak of COVID-19 which tends to put a significant impact on Thailand's tourism sector. A number of foreign tourists already decreased by 33.3 percent since the Chinese government implemented the travel ban for Chinese tour group to travel abroad (January 24th - February 13th, 2020). Chinese tourists, in particular, declined by 76.2 percent from the same period last year. Nevertheless, there remains high uncertainties on the impacts both the direct impact to tourist reduction together with the impact to the transportation and supply chain disruptions due to the temporary suspension of manufacturing plants and other businesses in China and the indirect impact through the slowdown of the Chinese and the global economy. The magnitude of impact will depend mainly on contagion duration, intensification of the outbreak, as well as government measures to tackle with the COVID-19 epidemic. Nonetheless, in the baseline assumption, the estimation of the impact of COVID-19 outbreak on tourism sector was based on the replication of lengths, pattern, and affect from the SARs outbreak during 2003. Accordingly, the number of COVID-19 infections in China is expected to reach its peak in March and the Chinese government will lift the travel ban for Chinese tourist to travel abroad in early May (4 months after the World Health Organization (WHO) declared the global health emergency on the COVID-19 outbreak on January 30th, 2020). Under this baseline assumption, the number of foreign tourists in the first quarter is expected to decrease by 31.5 percent[8] including Chinese and other nationalities decreased by 50.5 percent and 23.8 percent respectively while it is expected that the impact will subside in the second quarter with a contraction of 4.2 percent in which that the Chinese tourists will decline by 20.1 percent, on the other hand, tourists from other nationalities will increase by 2.1. Henceforth, the revenue from foreign tourists in 2020 is likely to be lower than 2019 by 150 billion baht, and lower than the previous assumption by 230 billion Baht. Meanwhile, the impact from the supply chain disruption and suspended transportation in China tend to be limited as most operation resumption took place within February 17th, 2020.

(3) **The delay of FY2020 budgeting process**: In the base case, the FY2020 annual government budget is expected to be disbursed within early April, delaying from February as expected in the previous assumption. Moreover, the disbursement rate of capital budget in the first quarter of FY2020 was lower than expected. Consequently, the disbursement rates of the government capital budget and state-owned enterprises' capital budget were revised down to 65.0 percent and 75.0 percent respectively.

Key components of the economic growth :

1) **Consumption: (1) Private Consumption Expenditure in 2020 is expected to grow by 3.5 percent,** decelerating from 4.5 percent in 2019 and revised down from 3.7 percent in the previous projection. The revision was in line with the slower-than-expected economic trend and overall income-base growth especially revenue from tourists that has been affected by the outbreak of COVID-19, as well as the income of agricultural sector due to the severe drought condition. Moreover, it is likely that Thai people tend to travel and spend less abroad particularly the first half of 2020. Nonetheless, the private consumption tends to grow at a satisfactory pace and remains a key economic driver supported by low interest and inflation rates, a gradual recovery of export sector, as well as the government policies to support low-income people and farmers. **(2) Government Consumption Expenditure is estimated to expand by 2.6 percent** same as the previous projection, accelerating from 1.4 percent in 2019 in line with an increase in the FY2020 current budget framework**.**

2) **Total Investment is projected to grow by 3.6 percent,** accelerating from 2.2 percent in 2019. **(1) Public investment** is likely to expand by 4.8 percent, speeding up from 0.2 percent in the previous year. However, it is revised down from 6.5 percent in the previous forecast due to the adjusted assumption on capital budget disbursement under the FY2020 government annual budget which is expected to be at 65.0 percent of the total capital budget, reducing from 70.0 percent in the previous projection following the delay in the FY2020 government annual budget. Besides, the disbursement rate of state own enterprises' capital budget is also revised down to 75.0 percent of the total budget from 80.0 percent in the previous projection. Nevertheless, the overall government investment in 2020 remains stronger than it was in 2019 due to (i) the increasing in the total government capital budget framework by 19.0 percent from the last year, (ii) the low-base effect in the forth quarter of 2019, and (iii) the accelerating of budget disbursement in key infrastructure projects that is expected to start operations in 2020-2021. **(2) Private investment** is expected to grow by 3.2 percent, gradually improving from a 2.8-percent expansion in 2019. However, it is revised down from 4.2 percent in the previous projection, in line with the lower export growth projection which would thus lead to decline in investment to expand the production capacity. Nonetheless, private investment in the remaining of this year will be supported by (i) the progress of public investment projects including both special economic areas and key transportation projects, as well as the production relocation of foreign investors as observed from high growth of the construction of industrial plants in the second half of 2019. (ii) the relaxation of Loan-to-Value (LTV) regulations governing mortgage loans, and (iii) additional government measures on investment promotion particularly the Thailand Plus Package aiming to expedite investment relocation from foreign firms as well as monetary and fiscal incentive measures to support domestic investment, recently approved by the cabinet on January 28th, 2020.

3) **Export value of good in US dollar terms in 2020 is anticipated to grow by 1.4 percent,** improving from a 3.2-percent contraction in 2019. However, it is lower than 2.3 percent in the previous projection due to (i) the downward revision of export volume from a 2.4-percent growth in the previous forecast to 1.5 percent in this projection, in line with the downward revision of global economic and trade volume growths in 2020 from 3.3 percent and 2.8 percent in the previous forecast to 3.2 percent and 2.4 percent in this projection respectively. (ii) The lower export of services in tandem with the downward revision of the numbers of foreign tourist from 41.8 to 37.0 million people. Henceforth, the revenue from foreign tourists in 2020 is likely to be lower than 2019 by 150 billion Baht. This estimation is based on the assumption that the COVID-19 outbreak will reach its peak in March and will eventually end in early May when it is expected that the Chinese government will lift the travel ban for Chinese tourists to travel aboard. Consequently, the export quantity of goods and services is projected to grow by 0.9 percent, comparing with 3.5 percent in the previous projection.

[8] This projected reduction is lower than the actual contraction avid the SARs epidemic in the second quarter of 2003 because the recent outbreak began in the late January of 2020 so its effect is not fully span the first quarter of 2020 but the SARs epidemic had affected the whole second quarter of 2003.

4) **Import value of goods in US dollar term in 2020** is expected to expand by 2.7 percent, compared with a 5.4-percent reduction in 2019. This is a downward revision from a 3.5-percent growth in the previous projection as a result of the precedent downward revision in import quantity of goods from a 3.6-percent growth in the previous forecast to a 2.8-percent growth, in corresponding with downward adjustment projections of exports and investments, both private and public. Together with downward revision in export of services as Thais tend to travel abroad less, therefore, the import of goods and services is expected to increase by 3.1 percent, compared with 3.9 percent in the previous projection.

5) **Trade balance** is estimated to register a surplus of 24.2 billion US dollars, lower than a surplus of 26.6 billion US dollars in 2019 but a slightly higher than a surplus of 23.5 billion US dollars from the previous projection because the downward adjustment in imports value growth was slightly larger in comparison with the revision of exports value growth. Moreover, service account surplus tends to decline as a result of lower revenues from foreign tourists. Therefore, **the current account in 2020 is expected to register a surplus of 29.5 billion US dollars or 5.3 percent of GDP,** compared with a surplus of 6.8 percent of GDP in 2019, and a surplus of 5.6 percent of GDP in the previous projection.

6) **Economic stability will remain sound**: the headline inflation rate in 2020 is expected to be in the range of 0.4 - 1.4 percent, gradually increasing from 0.7 percent in 2019, however, it is lower than a range of 0.5 - 1.5 percent growth in the previous estimation.

6. Economic Management for the year 2020

The Thai economy over the remainder of 2020 remains under many constraints including (i) the drought condition that may put additional impacts the agricultural sector, (ii) the slow and fragile global growth that can limit expansions of manufacturing production and export sectors, (iii) the COVID-19 outbreak that affect the tourism and related services, and (iv) the delay in the budgeting process for FY2020 which tends to lower the contribution from public expenditure and also limit the fiscal impacts in the first half of the year. Nevertheless, in the base case scenario, it is expected that limitation factors from the delayed budget and the COVID-19 outbreak will subside within the first half and the economy will thus recover to a normal trend in the second half of the year. Under such conditions, the economic management for the remainder of 2020 should put emphasis on coordinating and driving economic policies in every aspect in order to cushion the economy in the first half coupled with to mitigate impacts from the economic slowdown on SMEs and low income group of people particularly those in agricultural and tourism sectors. In addition, there should prepare policies to further drive the economy to expand at its full potential after all limitations from the delayed annual budget and the outbreak of COVID-19 diminish. Key economic management issues that are required to be focused on are as follows:

1) **Coordinating the monetary and fiscal policies** to support the economy in the first half and to propel the recovery in the second half of the year. In addition, it is important to push inflation to achieve the monetary policy target.

2) **Supporting the recovery of the tourism sector in order to achieve 37.0 million people of foreign tourists and 1.73 trillion baht tourism of revenue** from foreign tourists by focusing on (i) exempting cancellation fee for tourists that are unable to travel during the COVID-19 outbreak; (ii) encouraging Thais to make more domestic travel; (iii) holding up tourism activities to stimulate the tourism in the second half after the outbreak subside; (iv) promoting Thailand's readiness in terms of prevention, control, and solution measures for tackling with the COVID-19 outbreak in order to restore foreign tourists' confidence to travel to Thailand as well as Thais to travel in the domestic market; (v) collaborating with private sector to consider announcing additional holidays or postponing holidays in the first half of the year without creating economic impacts in order to lessen impacts from reduced numbers of foreign tourists; and (vi) implementing tourism supportive measures approved by the cabinet on February 4th, 2020, especially loan provision measures and tax exemption for private sector's spending on training course or seminars.

3) **Fostering export growth to reach the target of at least 2.0 percent (excluding gold)** mainly by (i) propelling export strategies in 2020 to achieve export target; (ii) fostering export of goods which have benefited from trade diversion; (iii) seeking export opportunities from the COVID-19 epidemic in China particularly medical tools and equipment, food products, and also products that can be substituted Chinese exports; (iv) assisting producers and exporters in the Chinese supply chain; and (v) expediting process to finalize the negotiations under key trade agreements namely the Regional Comprehensive Economic Partnership (RCEP) and Thai-EU, together with focusing on the trade agreement between Thai-UK.

4) **Maintaining growth momentum from government expenditure and public investment** by (i) speeding up the disbursement of FY 2020's annual budget to reach no less than 91.2 percent (98.0 percent for the current budget and 65.0 percent of the capital budget), (ii) the disbursement of carry-over budget of 70.0 percent, and (iii) the disbursement of the state-owned enterprises (SOEs) budget of 75.0 percent. During the period of pending annual budget bill, it is important to speed up the carry-over budget and the SOEs budget as well as to identify target and monitor government disbursement to improve efficiency in budget disbursement after the bill is enacted as well as to prepare additional fiscal stimulus measures if the COVID-19 outbreak prolongs and put significant impacts on the global economy.

5) **Building up investors' confidence and supporting private investment growth** by (i) monitoring and implementing investment stimulus measures approved by the cabinet especially the Thailand Plus Package, and monetary and fiscal measures to support domestic investment; (ii) speeding up the implementation of key public infrastructure projects including projects under construction, projects approved by the cabinet and projects under the cabinet's consideration; (iii) pushing up key trade negotiations; and (iv) solving business constraints proposed by foreign investors including shortage of high skilled labors, work permit and visa-related issues, custom procedures, and the Baht currency issue.

6) **Strengthening low income groups as well as those impacted by droughts, reduced tourists, and economic slowdown** particularly by monitoring and driving ongoing measures to efficiently access to key target groups and to maintain sufficient amount of funds to support if the situation is worsened and by providing particular care on specific groups including (i) agricultures who work in the service sector during off-crop/cultivated season; (ii) employees in tourism and related sectors that are under risks of being laid off; (iii) the SMEs; (iv) speeding up the disbursement of compensation for droughts impacts; and (v) the comprehensive water resource management and production management in order to minimize impacts on agricultural sector, together with preventive measures for manufacturing and service sectors not to be affected especially in key production areas namely the Eastern region.

Projection for 2020 [1/]

	Actual Data			Projection for 2020	
	2017	2018	2019	Nov 18, 2019	Feb 17, 2020
GDP (at current prices: Bil. Bht)	15,486.6	16,365.6	16,879.0	17,593.2	17,368.5
GDP per capita (Bht per year)	225,095.2	236,815.0	243,511.4	253,106.7	249,874.1
GDP (at current prices: Bil. USD)	456.3	506.5	543.7	567.5	556.7
GDP per capita (USD per year)	6,632.2	7,329.2	7,843.9	8,164.4	8,009.0
GDP Growth (CVM, %)	4.1	4.2	2.4	2.7 - 3.7	1.5 - 2.5
Investment (CVM, %)[2/]	1.8	3.8	2.2	4.8	3.6
Private (CVM, %)	2.9	4.1	2.8	4.2	3.2
Public (CVM, %)	-1.4	2.9	0.2	6.5	4.8
Private Consumption (CVM, %)	3.1	4.6	4.5	3.7	3.5
Government Consumption (CVM, %)	0.1	2.6	1.4	2.6	2.6
Export volume of goods & services (%)	5.2	3.3	-2.6	3.5	0.9
Export value of goods (Bil. USD)	233.7	251.1	243.0	251.7	246.4
Growth rate (%)[3/]	9.5	7.5	-3.2	2.3	1.4
Growth rate (Volume, %)[3/]	5.6	3.9	-3.5	2.4	1.5
Import volume of goods & services (%)	6.2	8.3	-4.4	3.9	3.1
Import value of goods (Bil. USD)	201.1	228.7	216.4	228.2	222.2
Growth rate (%)[3/]	13.2	13.7	-5.4	3.5	2.7
Growth rate (Volume, %)[3/]	7.3	7.7	-5.6	3.6	2.8
Trade balance (Bil. USD)	32.6	22.4	26.6	23.5	24.2
Current account balance (Bil. USD)	44.0	28.5	37.3	31.8	29.5
Current account to GDP (%)	9.6	5.6	6.8	5.6	5.3
Inflation (%)					
CPI	0.7	1.1	0.7	0.5 - 1.5	0.4 - 1.4
GDP Deflator	2.0	1.5	0.7	0.5 - 1.5	0.4 - 1.4

Source: Office of the National Economic and Social Development Council, 17th February 2020

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

[2/] Investment means Gross Fixed Capital Formation

[3/] Export and import is based on the Bank of Thailand's data, which is in compliance with the Balance of Payment recording system.