NESDC ECONOMIC REPORT

Thai Economic Performance in Q4 and 2020 and Outlook for 2021

Macroeconomic Strategy and Planning Division

Press Release 9.30 a.m. Feb 15, 2021

Economic Projection of 2021

(%YoY)	2019	2020			Projection
	Year	Year	Q3	Q4	2021
GDP (CVM)	2.3	-6.1	-6.4	-4.2	2.5 - 3.5
Investment[1/]	2.0	-4.8	-2.6	-2.5	5.7
Private	2.7	-8.4	-10.6	-3.3	3.8
Public	0.1	5.7	17.6	0.6	10.7
Private Consumption	4.0	-1.0	-0.6	0.9	2.0
Government Consumption	1.7	0.8	2.5	1.9	5.1
Export of Goods[2/]	-3.3	-6.6	-8.2	-1.5	5.8
Volume[2/]	-3.7	-5.9	-7.6	-1.6	3.8
Import of Goods[2/]	-5.6	-13.5	-19.4	-5.9	6.5
Volume[2/]	-5.7	-11.8	-18.1	-5.5	4.0
Current Account to GDP (%)	7.0	3.3	5.3	-0.8	2.3
Inflation	0.7	-0.8	-0.7	-0.4	1.0 - 2.0

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

[2/] Based on the Bank of Thailand's data

- **The Thai Economy in the fourth quarter of 2020** declined by 4.2 percent (%YoY), recovering from a contraction of 6.4 percent in the previous quarter. After seasonally adjusted, the economy increased by 1.3 percent from the third quarter (%QoQ sa).
- **On expenditure side:** private consumption expenditure showed an expansion, while private investment and exports declined at slower paces. Government expenditure and public investment increased. However, exports of services continued to decline. **On the production side:** the agricultural sector returned to expand, while the manufacturing sector, the accommodation and food services activities, the transportation and storage, and the wholesale and retail trade sectors declined at slower rates.
- **The Thai economy in 2020** declined by 6.1 percent, compared with a growth of 2.3 percent 2019. Export of goods, private consumption expenditure, and total investments contracted by 6.6 percent, 1.0 percent, and 4.8 percent, respectively. The headline inflation was at -0.8 percent and the current account registered a surplus of 3.3. percent of GDP.
- **The Thai economy in 2021** is projected to expand by 2.5 - 3.5 percent, supported mainly by (i) the recovery of the world economy and the global trade volume; (ii) the government stimulus measures; (iii) the rebound of domestic demand; and (iv) the unusually low base effect in 2020. Accordingly, it is expected that export value in US dollars term will expand by 5.8 percent while private consumption and total investment are expected to increase by 2.0 percent and 5.7 percent, respectively. Headline inflation tends to be in the range of 1.0 - 2.0 percent and the current account is estimated to register a surplus of 2.3 percent of GDP.
- **The economic management during the year 2021** should put emphasis on following issues: **(1) Containing the outbreak and preventing a new wave** by (i) complying with government's control and preventive measures, and (ii) acquiring sufficient vaccines and widely distributing in order to create herd immunity, and prioritizing in key tourism destinations and manufacturing production bases, coupled with prioritizing public health guidelines; **(2) Preserving domestic political environment; (3) Supporting affected sectors experiencing limitations on the recovery,** particularly tourism and related services, as well as providing additional measures for SMEs; **(4) Maintaining the economic growth momentum with the supporting from public spending, (5) Encouraging export of goods** by: (i) boosting exports of commodities which are highly demanded due to the outbreak, (ii) building up confidence in Thai products along with ensuring strict outbreak containment in key manufacturing bases, (iii) extending economic and trade cooperation under key international agreements, (iv) focusing on international agreements that could be used as obligations and lead to trade restrictions, (v) uplifting standards of the products, (vi) reducing production costs to alleviate the pressure from currency appreciation, and (vii) preventing risks from exchange rate fluctuations; **(6) Stimulating private investment** by: (i) speeding up projects already approved by the Board of Investment and those with investment promotion certificates during 2018 - 2020 to start their operations, (ii) resolving difficulties hindering business investments and operations, (iii) implementing proactive investment promotions and facilitate investors particularly in target industries, (iv) stimulating investments in special economic zones, and (v) continually driving measures for uplifting potential economic growth; **(7) Preparations for re-opening to foreign tourists; (8) Arranging preemptive measures for risks of drought and the corresponding effects on farmers' income;** and **(9) Monitoring and preparing for cushioning the impact of world economic and financial fluctuations,** which are still highly volatile and may affect the Thai economy, along with maintaining domestic economic stability.

1. The Thai Economy in Q4/2020

Expenditure Side:

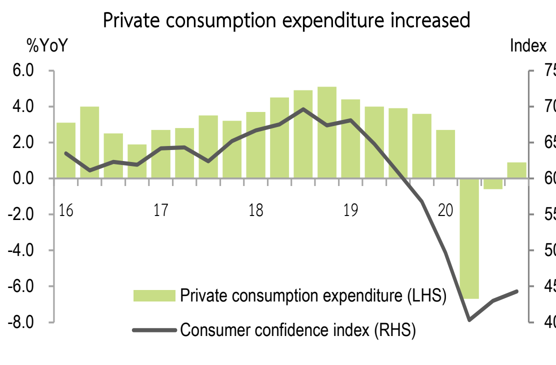
Private consumption expenditures expanded by 0.9 percent, improved from a 6.7-percent drop and a 0.6-percent drop in the second and third quarter, respectively. This was partly due to the implementation of economic stimulus packages. The expenditure in services expanded by 7.5 percent, accelerated from a 3.8-percent growth in the previous quarter, following the accelerated expenditures of major categories such as health and education which grew by 4.9 percent and 1.7 percent, respectively, while the growth in housing, water, electricity, gas and other fuels expenditures rose by 1.5 percent. On the other hands, a spending on restaurants and hotels continued to decrease by 58.7 percent. **The expenditure on non-durable goods** expanded by 1.1 percent, continued from a 2.8-percent growth in the previous quarter, following the growth in food and non-alcoholic spending (one of major spending categories) which grew by 1.8 percent compared to a 2.9-percent growth in the previous quarter. The **expenditure on durable goods** decreased by 9.2 percent, improved from a 19.6-percent drop in the previous quarter following the improvement of spending on purchase of vehicles which decreased by only 0.1 percent, compared to a 17.5-percent drop in the previous quarter. **The expenditure on semi-durable goods** decreased by 12.4 percent, continued from a 13.6-percent drop in the previous quarter. The improvement in private consumption was in line with an increase in consumer confidence index from 43.0 in the previous quarter to 44.3 in the last quarter of 2020.

In the fourth quarter of 2020, private consumption expenditures gradually returned to grow.

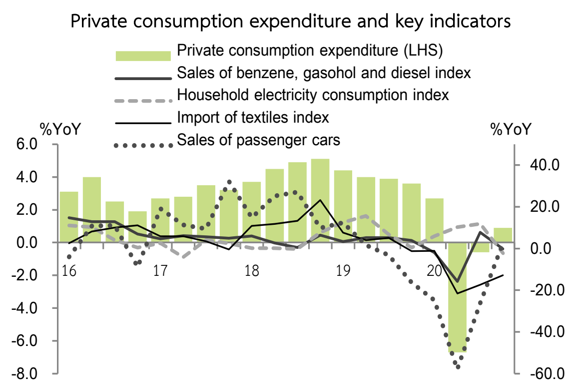
Meanwhile, private investment and export of goods decreased at a slower rate.

Private consumption returned to grow at 0.9 percent, improved from a 0.6-percent decrease in the previous quarter.

In 2020, private consumption expenditure decreased by 1.0 percent, compared with a 4.0-percent growth in 2019.



Source: NESDC, University of the Thai Chamber of Commerce

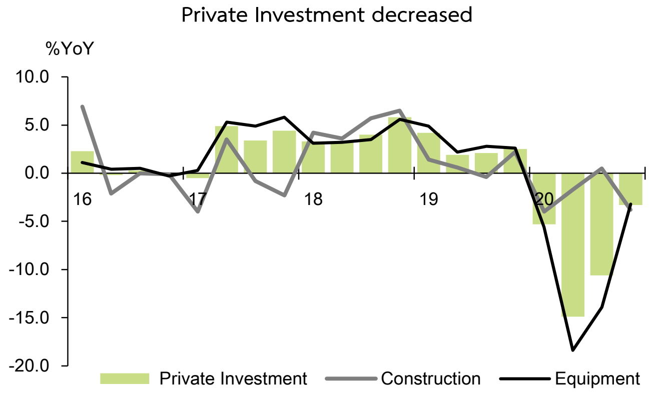


Source: NESDC, BOT, Department of Energy Business

Private investment decreased by 3.3 percent, improved from a 10.6 percent decrease in the previous quarter, following the investment in machinery and equipment which decreased at a slower rate, while the investment in construction fell. **The investment in machinery and equipment** decreased by 3.2 percent compared with a 13.9-percent drop in the previous quarter. This was in line with the imports of capital goods which decreased at a slower rate, compared with a 13.7-fall in the previous quarter, while the domestic machinery sales and newly registered motor vehicles for investment expanded by 5.3 percent and 5.8 percent, compared with a reduction of 5.6 percent and 9.4 percent in the previous quarter, respectively. **The investment in construction** decreased by 3.8 percent, compared with a 0.5-percent growth in the previous quarter. This was in line with the reduction of municipal construction permitted areas which recorded a 7.5-percent drop, compared with a 1.3-percent drop in the previous quarter, and the domestic construction material sales index which rose by 1.0 percent. The Business Sentiment Index (BSI) grew to 46.6 from 45.4 in the previous quarter.

Private investment decreased by 3.3 percent, improved from a 10.6 percent drop in the previous quarter. The investment in machinery and equipment decreased at a slower rate, while investment in construction fell.

In 2020, private investment decreased by 8.4 percent, compared to a 2.7 expansion in 2019. In summary, investment in machinery and equipment declined by 10.0 percent while investment in construction declined by 2.2 percent, compared to an expansion of 3.1 percent and 0.9 percent, respectively.



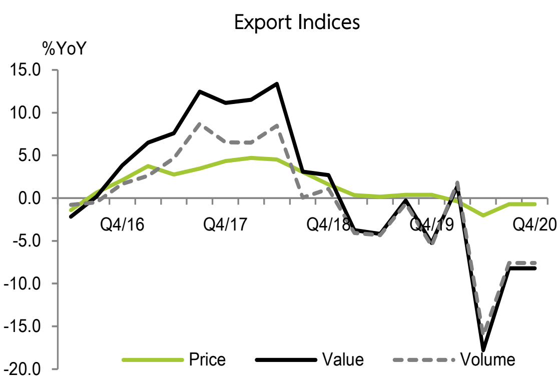
Source: NESDC

Exports in US dollar term contracted at a slower pace than the previous quarter following the economic recovery in key trading partners, and the growth in exports of products benefited from the spread of the COVID-19 and trade protection measures. Export Value in the fourth quarter of 2020 was recorded at 58.1 billion US dollars, decreased by 1.5 percent, but improved from an 8.2-percent decline in the previous quarter. The exports volume index dropped by 1.6 percent, compared with a 7.6-percent decrease in the previous quarter following the reduction in export volume of manufacturing and fishery products decreased by 1.4 percent and 17.9 percent, compared with a 9.1-percent drop and a 16.0-percent decline in the previous quarter, respectively. The exports volume of agricultural commodities increased by 3.8 percent, compared with a 10.0-percent decline in the previous quarter. The exports price expanded by 0.1 percent, compared with a 0.7-percent decline in the previous quarter. Excluding unwrought gold, exports value fell by 0.9 percent, compared with a 10.5-percent decrease in the previous quarter. **In Baht term,** export value was recorded at 1,778 billion Baht, decreased by 0.4 percent, compared with a 6.3-percent drop in the previous quarter.

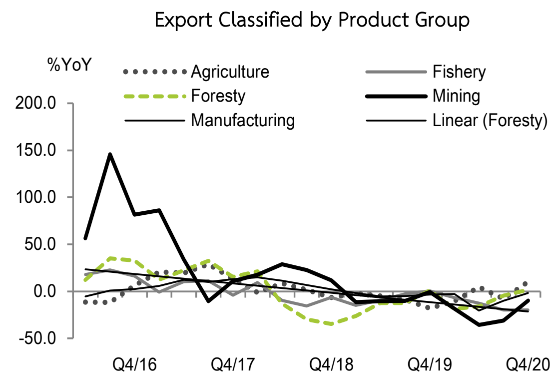
Export in US dollar terms contracted at a slower pace by 1.5 percent due to the economic slowdown in key trading partners, and the growth in exports of products benefited from the spread of the COVID-19 as well as trade protection measures.

In 2020, Exports in US dollar term recorded at 226.7 billion US dollars, declined by 6.6 percent. The export volume index and export price fell by 5.9 percent and 0.8 percent, respectively. In Baht term, exports value was recorded at 7,091 billion Baht, declined by 5.9 percent, compared with a 7.1-percent drop in 2019.

Export value excluding unwrought gold fell by 0.9 percent.



Source: Bank of Thailand



Source: Bank of Thailand

Export value of agricultural commodities increased by 10.2 percent, compared with a 7.9-percent drop in the previous quarter. The exports quantity expanded by 3.8 percent, in line with the increases in exports volume of rubber and tapioca while the export price increased by 6.1 percent, in line with the growth in export price of rubber and sugar. **Export value of manufacturing products** declined by 1.8 percent, improved from a 10.1-percent drop in the previous quarter mainly due to the economic recovery in key trading partners. **Export value of fishery products** decreased by 19.9 percent as a result of the reduction of both exports volume and price. **Export value of other products** declined by 38.0 percent as a result of the contraction in exports of non-monetary gold by 37.5 percent.

Export value of agricultural commodities expanded following the growth in exports of rubber and tapioca.

Export value of manufacturing products improved from the same period last year and the previous quarter due to the economic recovery in key trading partners.

In summary, export items with increased value included rubber (25.4 percent), tapioca (30.2 percent), rubber products (29.8 percent), computer (2.6 percent), air conditioning machines (11.2 percent), passenger car (0.5 percent), machinery & equipment (9.3 percent), and petro-chemical products (0.5 percent). On the other hands, **export items with decreased value** included rice (-0.9 percent), sugar (-67.4 percent), computer parts & accessories (-11.4 percent), pick up & trucks (-10.9 percent), chemicals (-0.6 percent), petroleum products (-27.3 percent), crustaceans (-26.8 percent), and fish (-10.8 percent), as detailed in the following table.

Export value of fishery products declined in accordance with the domestic production.

Export Value of Major Product in US Dollar Term

%YoY	2019					2020					Share Q4/20 (%)
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	
Agriculture	**-8.4**	**-2.1**	**-4.9**	**-8.9**	**-17.8**	**-1.2**	**-10.4**	**4.6**	**-7.9**	**10.2**	**7.0**
Rice	-25.9	-10.6	-23.9	-35.0	-33.2	-11.4	-24.9	0.7	-18.3	-0.9	1.7
Rubber	-10.0	-8.9	-11.8	-3.9	-15.2	-14.9	-2.7	-41.0	-35.5	25.4	2.0
Tapioca	-21.7	-14.2	-8.5	-27.3	-37.7	5.3	-18.3	0.3	27.9	30.2	0.8
Fruits	38.4	66.0	39.0	41.4	9.8	11.8	-20.8	47.4	-3.3	10.9	1.0
Manufacturing	**-3.9**	**-1.7**	**-5.4**	**-4.9**	**-3.4**	**-8.7**	**-2.8**	**-20.6**	**-10.1**	**-1.8**	**90.1**
Food	2.4	1.0	-3.7	4.2	8.6	-6.3	3.1	-4.6	-8.8	-13.6	6.7
Sugar	3.3	-15.0	-19.6	10.9	54.9	-36.4	20.2	-28.0	-49.6	-67.4	0.5
Fish, canned, prepared, or preserved	-1.1	7.7	0.9	-3.0	-8.4	5.5	-3.4	17.9	10.1	-2.3	1.3
Fruits & vegetables, canned, prepared, or preserved	10.0	9.0	5.9	4.3	21.1	4.1	12.5	5.0	7.2	-6.0	0.6
Beverages	6.8	-0.7	11.9	5.0	11.4	-4.2	3.8	-11.1	0.3	-8.8	1.1
Rubber products	-8.6	4.8	-23.1	-14.2	-0.5	23.4	7.2	23.4	34.1	29.8	3.3
Animal food	4.3	12.6	-0.6	2.1	3.7	18.7	10.3	24.0	18.0	22.4	0.9
Electronics	-6.7	-11.4	-9.4	-6.7	0.7	1.3	5.2	-6.8	1.6	4.9	16.7
- Computer	22.0	42.7	21.1	26.4	6.6	0.6	11.0	5.8	-14.4	2.6	0.3
- Computer parts & accessories	-9.4	-18.9	-12.1	-10.6	5.2	-2.4	15.0	-9.1	-1.8	-11.4	5.6
- Integrated circuits & parts	-8.9	-11.3	-14.3	-8.6	-1.1	-5.7	-6.3	-5.1	-9.7	-1.8	3.3
Electrical appliances	1.0	-4.5	1.9	2.7	5.2	0.2	5.8	-18.8	5.6	9.5	6.0
- Air conditioning machines	4.4	-3.3	10.6	4.0	8.2	-3.4	14.8	-28.8	-7.2	11.2	1.9
- Microwave ovens; other ovens	-14.0	-13.4	-20.7	-7.7	-13.3	24.6	-6.5	6.7	71.8	30.2	0.3
- Refrigerators	7.6	0.1	6.9	9.1	15.5	7.1	1.1	-12.8	21.9	18.4	0.9
- Parts of electrical appliances	3.9	-6.2	6.0	7.5	9.1	2.8	12.6	-4.8	4.7	-0.5	1.9
Metal & steel	-6.8	-5.0	-8.6	-4.6	-9.1	-5.2	1.7	-20.0	-8.9	7.1	4.9
Automotive	-3.1	-2.9	-3.5	-0.5	-5.8	-17.8	-4.7	-47.8	-19.4	0.4	15.2
- Passenger car	-7.6	-8.2	-12.9	-4.4	-4.9	-18.6	-7.3	-44.7	-22.9	0.5	4.2
- Pick up and trucks	-3.8	11.1	-4.3	1.0	-22.3	-32.5	-21.2	-67.1	-29.5	-10.9	2.4
- Vehicle parts & accessories	-0.7	-0.9	0.9	0.2	-3.2	-13.6	0.7	-45.0	-16.0	6.1	7.5
Machinery & equipment	-6.2	-3.3	-6.4	-6.9	-8.1	-8.2	-8.5	-23.4	-9.6	9.3	9.2
Chemicals	-17.7	-7.2	-18.0	-18.8	-26.0	-10.9	-14.8	-20.4	-6.7	-0.6	3.0
Petro-chemical products	-8.7	-6.2	-10.2	-9.1	-9.3	-10.3	-10.7	-18.9	-11.7	0.5	5.5
Petroleum products	-22.0	-9.3	-14.4	-29.8	-30.9	-26.7	-4.5	-42.9	-32.4	-27.3	2.3
Fishery	**-6.5**	**-15.0**	**-9.2**	**-2.8**	**0.4**	**-15.2**	**-6.7**	**-12.7**	**-19.8**	**-19.9**	**0.7**
Crustaceans	-6.3	-14.3	-7.4	1.1	-5.9	-21.6	-13.8	-15.3	-27.1	-26.8	0.4
Fish	-6.4	-17.4	-14.6	-9.0	18.9	-3.0	2.3	9.4	-11.0	-10.8	0.2
Other Exports	**80.3**	**6.7**	**66.2**	**317.3**	**-11.5**	**58.7**	**212.1**	**68.5**	**27.3**	**-38.0**	**1.1**
Non-monetary gold (excl. articles of goldsmiths)	84.9	7.6	68.2	348.2	-16.4	62.3	223.0	73.3	28.8	-37.5	1.0
Total Exports (Customs basis)	**-2.6**	**-1.9**	**-3.8**	**-0.5**	**-4.4**	**-6.0**	**1.0**	**-15.2**	**-7.8**	**-2.0**	**100.0**
Exports, f.o.b. (BOP basis)	**-3.3**	**-3.7**	**-4.2**	**-0.3**	**-5.2**	**-6.6**	**1.3**	**-17.7**	**-8.2**	**-1.5**	**99.5**
Export Value (exclude gold)	**-5.0**	**-4.0**	**-5.8**	**-5.0**	**-5.0**	**-9.0**	**-3.3**	**-21.3**	**-10.5**	**-0.9**	**98.5**

Source: Bank of Thailand

Export markets: exports to the US, Japan, and Australia increased, while exports to China, ASEAN (9), EU (27) excluding UK, and the Middle East (15) contracted. Exports to the US continually increased by 16.0 percent, following the growth in exports of computer & accessories, rubber products, motor cars, parts and accessories, and electrical equipment and parts, etc. Exports to Japan expanded by 4.2 percent, following an increase in exports of motor cars, parts & accessories, teleprinters, telephone sets and parts, and computer & accessories, etc. Exports to Australia rose by 14.8 percent, supported by the growth in exports of motor cars, parts & accessories, air conditioning machine and parts, precious stones and jewelry, and rubber products. However, Exports to China fell by 2.6 percent, compared with a 0.2-percent drop in the previous quarter as a result of the contraction in exports of polymers of ethylene, rubber products, and motor cars, parts & accessories. Export to ASEAN (9) decreased by 13.6 percent, compared with a 14.9-percent drop in the previous quarter as a result of the contraction in exports to ASEAN (5) and CLMV by 15.0 percent and 12.0 percent, respectively. In addition, Exports to EU (27) excluding UK declined by 1.8 percent following the decrease in exports of precious stone and jewelry, motor cars, parts & accessories, and electronic integrated circuits. Also exports to the Middle East (15) decreased by 13.0 percent, as a result of the reduction in exports of motor cars, parts & accessories, canned, prepared or preserved fish, as well as precious stone and jewelry.

Exports to the US, Japan, and Australia increased, while exports to other main markets declined.

Export Value to Key Markets in US Dollar Term

%YOY	2019					2020					Share Q4/20 (%)
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	
Total Exports (Mil US$) (Customs basis)	246,269	62,110	60,963	63,597	59,598	231,468	62,725	51,698	58,653	58,392	100.0
(%YoY)	-2.6	-1.9	-3.8	-0.5	-4.4	-6.0	1.0	-15.2	-7.8	-2.0	
United States	11.8	32.0	3.3	7.7	5.5	9.6	-2.6	8.9	17.6	16.0	15.4
Japan	-1.7	-1.4	-2.5	2.8	-5.3	-6.7	-5.5	-13.5	-12.2	4.2	10.8
EU (27) excluding UK	-6.0	-7.2	-7.4	-5.3	-4.0	-10.6	-2.3	-28.0	-10.5	-1.8	8.0
United Kingdom	-5.4	-1.1	0.2	-5.1	-15.4	-19.8	-8.0	-41.6	-19.4	-9.9	1.3
China	-3.8	-10.3	-9.0	2.8	1.6	2.0	-0.9	12.1	-0.2	-2.6	13.0
ASEAN (9)	-8.3	-4.4	-5.9	-14.2	-8.3	-11.7	4.2	-22.4	-14.9	-13.6	23.6
- ASEAN (5)*	-9.8	-7.6	-8.7	-12.7	-9.9	-12.2	5.3	-19.7	-19.0	-15.0	12.7
- CLMV**	-6.3	0.1	-2.0	-16.2	-6.2	-11.1	2.8	-25.9	-9.2	-12.0	10.9
Middle East (15)	0.4	-0.3	-5.6	1.9	5.6	-13.3	2.8	-19.7	-24.2	-13.0	3.2
Australia	-5.1	-10.2	-9.5	14.0	-14.9	-3.9	-2.3	-15.9	-8.9	14.8	4.3
Hong Kong	-3.8	-13.6	-5.1	-5.4	-1.1	-3.6	12.3	-8.6	-13.9	-2.0	4.6
India	-6.5	1.4	4.3	-7.8	-14.3	-25.2	-11.4	-67.2	-21.6	9.0	2.8
South Korea	-4.3	-5.9	-0.3	-10.2	-0.9	-10.3	-4.9	-25.3	-7.1	-0.7	1.9
Taiwan	0.9	-14.4	-5.3	10.3	15.3	-5.6	13.5	-11.9	-14.7	-5.8	1.7

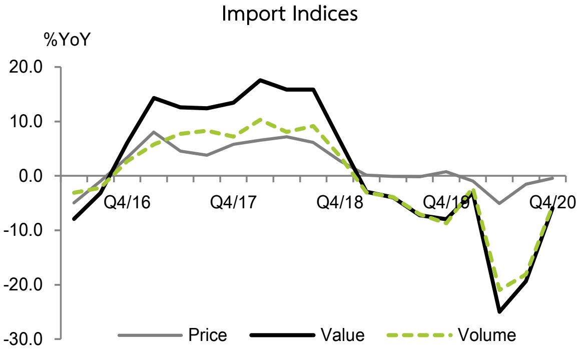
Note: * ASEAN (5) consist of Brunei, Indonesia, Malaysia, Philippines, and Singapore
** CLMV consist of Cambodia, Laos, Myanmar, and Vietnam
Source: Bank of Thailand

Import value in US dollar terms decreased by 5.9 percent compared with a 19.4-percent decline in the previous quarter.

Import value in US dollar term was recorded at 49.9 billion US dollars, declined by 5.9 percent, improved from a 19.4-percent decrease in the previous quarter associated with a better situation of economic activities compared to the previous quarter. Import quantity fell by 5.5 percent, compared with an 18.1-percent decline in the previous quarter associated with the decrease in import quantity of consumer goods and capital goods which contracted by 6.2 percent and 9.8 percent, respectively. However, raw materials & intermediate goods increased by 1.0 percent. The price of imports decreased by 0.5 percent, compared with a 1.5-percent drop in the previous quarter. Import value excluding unwrought gold declined by 6.0 percent. In Thai Baht term, the import value was recorded at 1,526 billion Baht, contracted by 4.9 percent, compared with a 17.8-percent decline in the previous quarter.

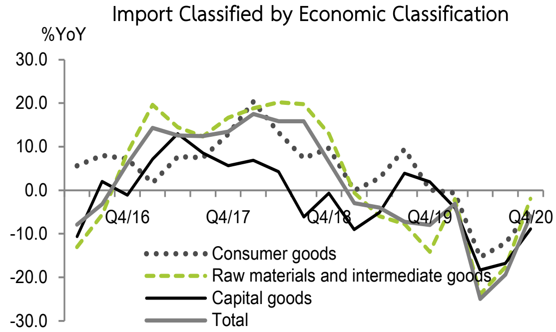
In 2020, import value was recorded at 186.9 billion US dollars, decreased by 13.5 percent. Import quantity and import price fell by 11.7 percent and 2.0 percent, respectively. In Thai Baht term, import value decreased by 12.9 percent, compared with a 9.3-percent decrease in 2019.

Import Indices



Source: Bank of Thailand

Import Classified by Economic Classification



Source: Bank of Thailand

By categories, import value of raw materials and intermediate goods, capital goods, consumer goods, and other imports declined. **Import value of raw materials and intermediate goods** reduced by 2.0 percent compared with a 17.6-percent decline in the previous quarter, following import price dropped by 3.0 percent while import quantity increased by 1.0 percent. **Import value of capital goods** declined by 8.9 percent, compared with a decrease in the previous quarter by 16.8 percent. Import quantity contracted by 9.8 percent while import price expanded by 1.0 percent. **Import value of consumer goods** declined by 4.6 percent, compared with a 12.1-percent fall in the previous quarter. Import quantity decreased by 6.2 percent while import price increased by 1.7 percent. **Import value of other goods** fell by 3.3 percent, compared with a 35.7-percent decline in the previous quarter, following the decrease at slower pace in non-monetary gold (exclude articles of golds) and automotive, respectively.

Import Value of Major Product in US Dollar Term

%YoY	2019					2020					Share
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Q4/63 (%)
Consumer goods	**3.0**	**-0.03**	**2.8**	**9.5**	**0.1**	**-8.2**	**-0.6**	**-15.4**	**-12.1**	**-4.6**	**11.6**
Food, beverage & dairy products	5.2	5.4	4.9	10.2	1.1	4.0	11.1	-0.3	1.4	4.0	3.0
Animal & fishery products	-4.1	-3.6	2.8	-2.9	-12.5	-8.9	-12.5	-25.7	-8.5	13.9	2.0
Medicinal and pharmaceutical products	-4.3	-7.9	-11.1	4.9	-1.4	-0.4	0.8	8.9	-1.0	-10.0	1.2
Textiles	3.5	8.2	4.3	4.6	-2.1	-13.6	-2.0	-22.6	-17.6	-12.4	1.1
Raw materials and intermediate goods	**-7.2**	**-0.6**	**-5.9**	**-7.7**	**-14.1**	**-11.6**	**-2.0**	**-23.9**	**-17.6**	**-2.0**	**53.2**
Parts of electronics and electrical appliances	-5.9	-4.7	-7.4	-6.4	-5.0	1.6	1.4	-3.2	-0.03	8.2	14.6
- Integrated circuits & parts	-4.6	-1.1	-6.5	-4.5	-6.2	8.3	2.7	5.6	7.6	17.1	5.9
Materials of base metal	-6.1	-4.9	-3.8	-6.4	-9.2	-16.6	-6.3	-27.1	-27.2	-4.2	8.3
Crude oil	-21.2	-0.4	-12.2	-20.6	-46.0	-20.0	3.3	-52.8	-28.1	2.2	7.5
Chemicals	-8.0	-1.3	-9.8	-7.2	-13.6	-4.7	-3.7	-10.5	-12.8	10.2	5.9
Plastics	-5.5	-3.2	-5.9	-1.8	-11.1	-7.3	-2.6	-7.6	-19.9	1.6	3.7
Petroleum products	7.8	10.0	-2.7	0.7	25.2	-41.6	-12.9	-63.8	-29.4	-53.2	1.7
Natural gas	10.5	43.5	10.6	0.7	-3.1	-24.9	-12.7	-20.0	-33.4	-34.3	1.4
Capital goods	**-2.2**	**-9.0**	**-5.1**	**3.9**	**2.0**	**-12.0**	**-4.1**	**-18.3**	**-16.8**	**-8.9**	**24.4**
Other machinery and mechanical appliances & parts	2.1	4.0	-1.1	5.9	-0.3	-11.7	0.7	-21.0	-18.7	-7.7	8.9
Telecommunications equipment	-9.4	-4.3	-15.0	-18.0	-1.5	-4.6	-12.3	-1.4	7.4	-9.2	4.4
Transformers, generators, motors and accumulators	-8.7	4.7	-15.9	-13.8	-7.1	-4.7	-4.4	-13.0	-13.9	13.0	2.1
Measuring, checking and precision instruments	8.8	23.2	14.5	7.5	-7.3	-16.5	-13.8	-31.2	-25.1	5.7	1.7
Computer	12.0	9.2	8.4	21.7	8.0	-1.64	-14.1	8.1	-1.6	-0.6	1.0
Office automations & parts (excl. computer)	0.2	-1.7	0.0	-0.7	3.3	2.6	-12.8	-21.3	13.1	32.5	0.7
Other Imports	**-5.6**	**10.3**	**2.0**	**-29.3**	**3.8**	**-21.5**	**-6.4**	**-45.9**	**-35.7**	**-3.3**	**10.8**
Non-monetary gold	-33.4	-50.7	7.0	-56.6	12.5	-33.3	17.5	-76.1	-60.8	-4.1	3.7
Automotive	3.9	10.9	1.9	5.3	-1.9	-22.8	-5.5	-39.3	-37.4	-10.0	5.0
- Vehicle parts	-1.3	8.7	-1.4	0.9	-12.2	-20.8	-5.7	-39.7	-37.0	0.7	4.0
Total Imports (Customs basis)	**-4.8**	**-1.4**	**-4.1**	**-6.5**	**-7.1**	**-12.4**	**-2.9**	**-23.8**	**-18.6**	**-4.2**	**100.0**
Imports, f.o.b. (BOP basis)	**-5.6**	**-2.9**	**-4.0**	**-7.2**	**-8.0**	**-13.5**	**-3.1**	**-25.0**	**-19.4**	**-5.9**	**90.1**
Import Value (exclude gold)	**-4.1**	**-0.2**	**-4.3**	**-3.0**	**-8.7**	**-12.7**	**-3.7**	**-23.1**	**-17.8**	**-6.0**	**86.4**

Source: Bank of Thailand

Import Quantity Indices by Economic Classification

Quantity indices	2019					2020				
%YoY	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4
Consumer goods	2.2	-0.2	2.4	8.2	-1.3	-9.4	-2.1	-16.2	-13.1	-6.2
Raw materials and intermediate goods	-5.9	-1.0	-5.4	-4.6	-12.6	-6.2	2.1	-14.2	-13.4	1.0
Capital goods	-3.2	-9.0	-5.4	2.1	-0.3	-13.1	-5.7	-19.4	-17.6	-9.8
Total Imports	**-5.7**	**-3.1**	**-3.9**	**-7.0**	**-8.7**	**-11.7**	**-2.2**	**-21.0**	**-18.1**	**-5.5**

Source: Bank of Thailand

Import Price Indices by Economic Classification

Price indices	2019					2020				
%YoY	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4
Consumer goods	0.8	0.1	0.3	1.1	1.5	1.3	1.5	1.0	1.1	1.7
Raw materials and intermediate goods	-1.3	0.4	-0.6	-3.3	-1.8	-5.8	-4.0	-11.3	-4.9	-3.0
Capital goods	1.1	-0.1	0.3	1.7	2.3	1.2	1.7	1.3	0.9	1.0
Total Imports	**0.2**	**0.2**	**-0.1**	**-0.2**	**0.8**	**-2.0**	**-0.9**	**-5.1**	**-1.5**	**-0.5**

Source: Bank of Thailand

Import major items with increased value included food, beverage & dairy products (4.0 percent), animal & fishery products (13.9 percent), parts of electronics and electrical appliances (8.2 percent), crude oil (2.2 percent), chemicals (10.2 percent), plastics (1.6 percent), transformers, generators, motors and accumulators (13.0 percent), measuring, checking, and precision instruments (5.7 percent), and office automations & parts (excl. computer) (32.5 percent). On the other hand, **import items with decreased value** included medicinal and pharmaceutical products (-10.0 percent), textiles (-12.4 percent), materials of base metal (-4.2 percent), petroleum products (-53.2 percent), natural gas (-34.3 percent), other machinery and mechanical appliances & parts (-7.7 percent), telecommunications equipment (-9.2 percent), computer (-0.6 percent), non-monetary gold (excl. articles of golds) (-4.1 percent), and automotive (-10.0 percent).

Term of trade increased from the same period last year, as export price increased by 0.1 percent while import price fell by 0.5 percent. Thus, the term of trade increased from 108.0 in the same quarter last year to 108.6 in the fourth quarter of 2020.

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

In 2020, Term of trade recorded at 109.7 increased from 108.3 in 2019, as import price declined by 2.0 percent faster than the reduction of export price by 0.8 percent.

Term of trade

%YoY	2019					2020				
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4
Term of trade*	108.3	108.8	108.3	108.3	108.0	109.7	109.4	111.7	109.3	108.6
%YOY	0.2	0.2	0.2	0.6	-0.4	1.3	0.6	3.2	0.9	0.5

Note: *Term of trade : TOT represents the ratio between a country's export prices and its import prices. When Term of trade improves, it refers to a country that gains benefit from international trade due to export prices higher than import prices.

Source: Bank of Thailand

Trade balance recorded a surplus of 8.2 billion US dollars (equivalent to 252.6 billion Baht) lower than a surplus of 13.6 billion US dollars (equivalent to 424.9 billion Baht) in the previous quarter and higher than a surplus of 6.0 billion US dollars (equivalent to 180.7 billion Baht) in the same quarter of last year.

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

In 2020, Trade balance recorded a surplus of 39.8 billion US dollars (equivalent to 1,249.4 billion Baht) higher than a surplus of 26.7 billion US dollars (equivalent to 826.9 billion Baht) in 2019.

Production Side:

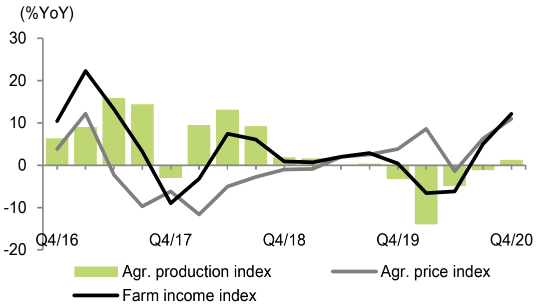
Agricultural sector increased for the first time in five quarters. Meanwhile, accommodation and food service activities, transportation and storage, wholesale and retail trade, and manufacturing sectors declined but improving from a contraction in the previous quarter. Electricity, gas, continued to decline. Construction dropped.

Agricultural sector increased for the first time in five quarters by 0.9 percent improved from a 1.1 percent contraction in the previous quarter. The expansion mainly supported by favorable weather conditions, including the sufficient water for crops, and a low base of some agricultural products in 2019. This was in line with an expansion of **Agricultural Production Index** of 1.3 percent, compared to a 1.2 percent decreased in previous quarter. Major agricultural products with production expansion included: (i) **paddy** (5.9 percent), mainly due to favorable weather conditions during the growing season, (ii) **poultry** (6.7 percent), caused by the higher domestic consumption, (iii) **egg** (13.6 percent), (iv) **cassava** (3.1 percent), owing to the weather condition is favorable, and (v) **maize** (3.1 percent), due to the higher in price last year that caused farmers to increase planting areas as well as the government policy that encouraged farmers to grow maize after harvest season. On the other hand, major agricultural products with production contraction included **fruits** (-22.0 percent), **sugarcane** (-10.8 percent), **white shrimp** (-5.6 percent), **rubber** (-0.8 percent), and **oil palm** (-2.7 percent), etc. **Agricultural Price Index** rose by 11.0 percent which was two consecutive quarters of expansion, following price increases of main agricultural products, such as **rubber** (50.2 percent) as a result of falling in rubber products , combined with the higher of domestic and foreign demands, **oil palm** (71.4 percent), due to the reduction of product, **swine** (22.9 percent), owing to the surge in domestic and foreign demands, especially China, Vietnam, Cambodia and Laos, and **fruits** (5.9 percent), as a result of inadequate production for foreign demand such as durians. In contrast, major agricultural price index with the contraction, included **paddy** (-10.8 percent), **poultry** (-9.4 percent), and **egg** (-1.7 percent). Rising in both agricultural production index and agricultural price index, thus led to overall increase for two consecutive quarters in **Farm Income Index** by 12.1 percent.

Agriculture sector expanded by 0.9 percent, owing to favorable water supply and weather condition. The increase in price of key agricultural products thus led to overall Farm Income Index increased for two consecutive quarters.

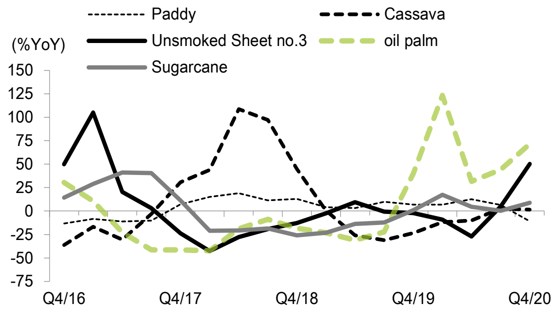
In 2020, production in agricultural sector contracted by 3.4 percent, comparing with a 0.6-percent decrease in 2019. Agricultural Production Index decreased by 4.4 percent, while Agricultural Price Index increased by 6.0 percent, and Farm Income Index rose by 2.3 percent.

Farm Income Index increased by 12.1 percent due to the increase of agricultural price index



Source: Office of Agricultural Economics

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



Source: Office of Agricultural Economics

Manufacturing sector dropped by 0.7 percent, improved from 5.3 percent contraction in the previous quarter, following the rebound in export volume of manufacturing products. This was in line with the improvement in Manufacturing Production Index decreased by 0.9 percent, compared to an 8.1 percent decline in the previous quarter. **Manufacturing Production Index of the industries (with export share of more than 60 percent to total production)** fell by 3.0 percent, compared to a 5.7 percent contraction in the previous quarter. This was mainly caused by the production of other rubber product, which declined by 7.7 percent, comparing with an 8.1 percent contraction in the previous quarter, and production of computers and peripheral equipment decreased by 1.8 percent, comparing with a 9.1 percent contraction in previous quarter. Besides, electronic components and boards grew for the first time in three quarters by 6.8 percent. **Manufacturing Production Index of the domestic-oriented industries (with export share of less than 30 percent to total production)** fell by 0.5 percent, improved from 1.6 percent decline in the previous quarter, mainly due to the increase of basic iron and steel production by 5.0 percent, improving from 6.5 percent drop in the previous quarter as well as refined petroleum products slightly expanded by 0.2 percent, improved from a 7.5 percent decline in the previous quarter. Meanwhile, palm oil and plastics and synthetic rubber in primary forms decreased by 15.9 percent and 3.3 percent, respectively. **Manufacturing Production Index of the industries (with 30 - 60 percent export share to total production)** expanded for the first time in seven quarters by 0.4 percent, significantly improved from a 23.3 percent contraction in the previous quarter. The expansion was caused by the increase of motor vehicle production by 3.7 percent, compared to a 30.1 percent decrease in the previous quarter, together with and the expansion of electric motors by 32.5 percent, accelerated from an 8.1 percent increase in the previous quarter. Besides, production of sugar continued to decreased for 7 quarters by 43.9 percent. **The average capacity utilization rate** was at 64.22 percent, compared to 60.63 percent in the previous quarter and 63.33 percent in the same quarter last year. **The top 5 highest capacity utilization rate** consisted of plastic (90.26 percent), parts and accessories for motor vehicles (90.07 percent), slaughtering and packing of poultry (85.50 percent), vegetable oil (83.25 percent), and computers and peripheral equipment (82.34 percent), respectively.

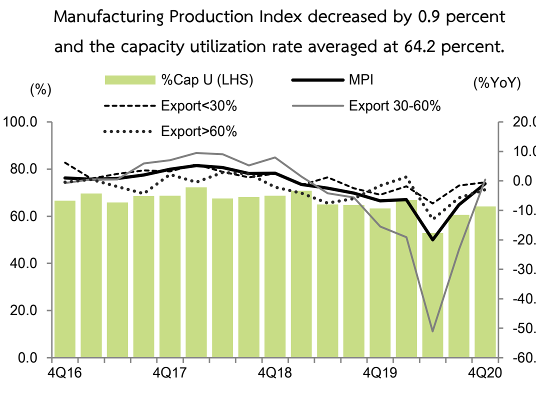
Manufacturing sector declined by 0.7 percent, improved from the previous quarter. Following the rebound of the industries with 30-60 percent export, the slower decline of the export-oriented industries and the domestic-oriented industries.

The average capacity utilization rate stood at 64.22 percent, improved from 60.63 percent in the previous quarter.

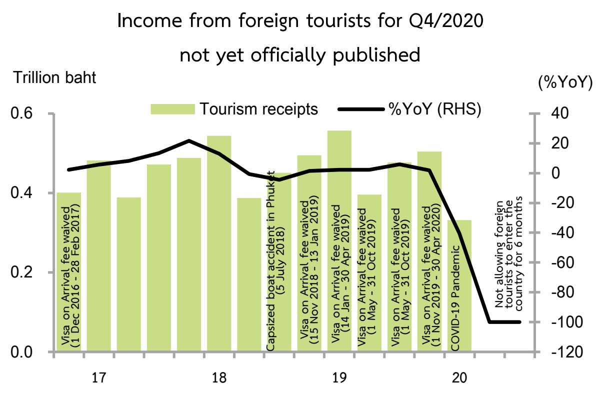
Manufacturing production index with positive growth mainly attributed to motor vehicles (3.7 percent), electronic components (6.8 percent), electric motor (32.5 percent), domestic appliances (18.8 percent), rubber tires (11.4 percent), basic iron and steel (5.0 percent), furniture (11.0 percent), processing and preserving of fruit and vegetables (7.2 percent), paper and paperboard (11.9 percent), and pharmaceutical products (9.8 percent).

Manufacturing production index with negative growth mainly included sugar (43.9 percent), clothing and textile (17.2 percent), rubber products (7.7 percent), jewelry (19.2 percent), palm oil (15.9 percent), cooking products (19.7 percent), processing and preserving of fish and fish products (9.6 percent), plastics (3.3 percent), rectifying and blending of spirits (16.9 percent), and footwear (26.8 percent).

In 2020, manufacturing sector dropped by 5.7 percent, compared with a 0.7 percent contraction in 2019. Manufacturing Production Index (MPI) decreased by 8.8 percent and the **average capacity utilization rate** was at 61.15 percent, compared with 65.99 percent in 2019.



Source : Office of Industrial Economics



Source: Ministry of Tourism and Sports

Accommodation and food service activities sector declined by 35.2 percent, following the contraction in number of foreign tourists. However, it improved from a 39.3-percent decrease in the previous quarter, in tandem with the improvement in domestic tourism. In this quarter, **Thai tourism receipts recorded at 0.159 trillion Baht**, declined by 45.1 percent, but slightly improved from a 57.1-percent decrease in the previous quarter. This was in line with the improvement in domestic tourism after the first wave of COVID-19 pandemic ended, as well as the implementation of the economic measures to support the domestic tourism sector. In addition, issuing the Thailand Special Tourist Visa (STV) for foreign tourists resulted in the **number of foreign tourists stood at 10,822 persons (included Thailand Privilege Card holders)**, the first time in three quarters. However, the number of foreign tourists still decreased by 99.9 percent in this quarter. **The Average Occupancy Rate** was at 32.49 percent, improved from 26.69 percent in the previous quarter, however the figure was still lower than 70.71 percent expansion in the same period last year. Moreover, the new wave of COVID-19 pandemic in the last two weeks of December 2020 brought about the pressure over domestic tourism.

Accommodation and food service activities sector declined for four consecutive quarters by 35.2 percent, following the contraction in number of foreign tourists. Meanwhile, domestic tourism improved, but still at a lower level than the same period last year

Average occupancy rate was at 32.49 percent, increased from 26.69 percent in the previous quarter.

In 2020, accommodation and food service activities sector declined by 36.6 percent, compared with a 7.8-percent growth in 2019. The number of foreign tourists was at 6.70 million persons in 2020 (decreased by 83.2 percent). Receipts from foreign tourists were at 0.441 trillion Thai Baht (figure from Balance of Payment), which decreased by 76.2 percent. Receipts from Thai tourists were at 0.482 trillion Thai Baht (decreased by 55.4 percent). The average occupancy rate was at 29.51 percent, compared with70.08 percent in 2019.

Wholesale and retail trade; repair of motor vehicles and motorcycles sector declined by 3.1 percent, improved from a 6.1-percent contraction in the previous quarter. This was in line with the recovery of household spending and the better performance in the production activities, including agricultural sector, manufacturing sector and export. Additionally, this was consistent with the contraction in **Wholesale and Retail Sales, and Repair of Motor Vehicles Index** of 3.2 percent, improved from a 6.4-percent drop in the previous quarter. **Retail Sales Index (except motor vehicles and motorcycles) decreased by 6.2 percent**, improved from a 7.3-percent decrease in the previous quarter, mainly supported by an 11.2-percent drop in retail sales of other household goods (i.e. construction material supplies), improved from a 14.7-percent contraction in the previous quarter, together with an 11.1-percent decline in retail sales of automotive fuel, improved from a 15.0-percent drop in the previous quarter. Meanwhile, retail sale of other goods in specialized stores decreased by 4.2 percent. **Wholesales Index (except motor vehicles and motorcycles) dropped by 3.1 percent**, improved from a 4.1-percent decrease in the previous quarter, mainly driven by 1.3 percent growth in non-specialized wholesale trade. On the one hand, wholesale of food beverages and tobacco decreased by 5.9 percent, along with 7.2-percent decline in wholesale of household goods. **Wholesale and Retail Sales, and Repair of Motor Vehicles Index increased by 2.8 percent**, improved from a 12.2-percent decrease in the previous quarter, which was the expansion for the first time in six quarters. This was mainly attributed to a 2.8-percent growth in sale of motor vehicles, a 3.1-percent growth in sale of motor vehicle parts and accessories, and a 9.0-percent growth in maintenance and repair of motor vehicles.

Wholesale and retail trade sector declined by 3.1 percent, less than a drop in the previous quarter, in line with a sign of recovery in household spending as well as a better direction of the production in agricultural sector, manufacturing sector and export.

In 2020, wholesale and retail trade; repair of motor vehicles and motorcycles sector declined by 3.7 percent, compared to an expansion of 4.5 percent in 2019.

Transportation and storage sector continued to decrease by 21.1 percent, comparing with a 22.1-percent decrease in the previous quarter, following the decline of air transport services which was essentially affected by the COVID-19. In the fourth quarter of 2020, transport services declined by 23.6 percent, improved from a drop of 24.4-percent in the previous quarter. This was attributed to (i) 68.1-percent decline in air transport services, (ii) 12.7-percent decline in land and tube transport services, and (iii) 4.3-percent decline in water transport services. Besides, shipping support services dropped by 22.1 percent, compared with a 22.8-percent decrease in the previous quarter. However, postal services increased by 27.2 percent, accelerated from 12.8 percent growth in the previous quarter.

Transportation and storage sector dropped by 21.1 percent owing to falling in all transportation services, especially the contraction of air transport services by 68.1 percent, which were affected by the COVID-19 pandemic.

In 2020, transportation and storage sector contracted by 21.0 percent, comparing with a 3.0-percent growth in 2019. Land and tubes transport services dropped by 19.1 percent, water transport services decreased by 1.1 percent, and air transport services contracted by 59.4 percent. In addition, shipping support services decreased by 18.2 percent as well as while postal services expanded by 20.4 percent.

Electricity, gas, stream and air conditioning supply sector decreased 13.3 percent, compared to a 9.4 percent decline in the previous quarter, following the contraction in electricity production and gas separation plant activities, which were affected by the falling of average temperature along with the outbreak of COVID-19. This was mainly attributed to (i) electricity production activity droped by 12.9 percent continued from 9.4 percent contraction in household electricity consumption which caused by a lower level of average temperature compared to the same period last year, together with the continued decline of electricity demand in business sector, which was impacted by the COVID-19 pandemic. However, electricity consumption in the industrial sector showed a rebound sign for the first time in six quarters, in tandem with the expansion in production of main industries such as automotive, electronic components and printed circuit boards, and electric motors and generators, (ii) gas separation activity decreased by 8.0 percent, continuing from a 7.3 percent contraction in the previous quarter, according to the reduction in amount of gas delivered to separation plant, along with the decline in demand for natural gas, as a fuel for power generation and transportation sectors.

Electricity, gas, stream and air conditioning supply sector continued to decrease for the fourth quarter by 13.3 percent, in tandem with the decline in electricity production activities and gas separation plant activities.

In 2020, electricity, gas, stream and air conditioning supply sector decreased by 8.4 percent, compared to a 4.6 percent expansion in 2019. Power generation activity drop by 8.5 percent as well as a 7.2 percent contraction in gas separation plant activity.

Construction sector decreased by 0.3 percent compared to a 10.8 percent expansion in the previous quarter. This was in line with the decline in private construction and the slowdown in public construction. Public construction expanded by 2.9 percent, slowing down from a 17.7 percent expansion in the previous quarter. (government construction rose by 19.0 percent, decelerating from a 28.1 percent growth in the previous quarter whereas state enterprise construction declined by 19.4 percent, continued from 3.2 percent contraction in the previous quarter). Besides, **private construction declined** by 3.8 percent, compared to a 0.5 percent expansion in the previous quarter, as a result of the falling in construction of residential buildings and non-residential buildings (such as commercial buildings and factory buildings). Meanwhile, construction in service and transportation category and other construction continued to expand from the previous quarter. **Construction Material Price Index** rose by 0.4 percent, the first increase in six quarters following the increase in price index of floor tile and ceramic plate (2.8 percent) and ready mixed concrete (2.0 percent).

The construction sector declined by 0.3 percent, following a contraction in private construction and a slowdown in public construction.

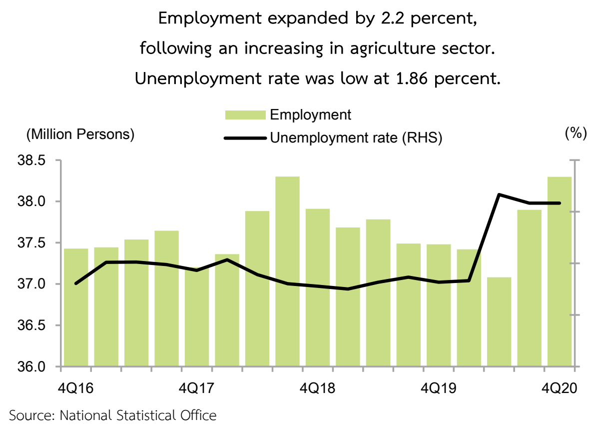
In 2020, construction sector expanded by 2.3 percent, accelerating from a 1.6 percent growth in 2019, mainly due to a 5.7 percent expansion of government construction (government construction expanded 8.4 percent and state enterprise construction grew by 0.6 percent), while private construction declined by 2.2 percent.

Employment improved following an increase in employment in both agricultural and non-agricultural sectors, whereas the unemployment rate slightly declined from the previous quarter, but it still remained at a higher level than the same quarter last year. In the fourth quarter of 2020, employment continued to increase for two consecutive quarters by 2.2 percent, accelerated from 1.2 percent in the previous quarter. **Agricultural sector employment** (share 32.30 percent) increased by 3.0 percent, which was the first expansion in eight quarters, in line with the increase in production of several key agricultural products such as paddy, cassava and maize, etc. In addition, **non-agricultural employment** (share 67.70 percent) continued to increase for two consecutive quarters for 1.9 percent, following the increase in employment in construction, and accommodation and food service sectors. However, employment in manufacturing and wholesale, retail and automotive repair sectors declined. The unemployment rate in this quarters stood at 1.86 percent, slightly declined when compared to 1.90 percent in the previous quarter but higher than the unemployment rate (1.0 percent) in the same quarter last year. **The average number of unemployed** was at 7.3 hundred thousand people, compared with 3.7 hundred thousand people in the same quarter last year.

Employment continued to increase from the previous quarter, as a result of an increase in both agricultural and non-agricultural sector employment.

The unemployment rate stood at 1.86 percent, slightly down from the previous quarter.

In 2020, the average unemployment was at 6.5 hundred thousand people. The unemployment rate stood at 1.7 percent.



Employed Persons by Industry

%YOY	Share Q4/20	2019 Year	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Year	2020 Q1	2020 Q2	2020 Q3	2020 Q4
Employed	100.00	-0.7	0.9	-0.3	-2.1	-1.1	0.2	-0.7	-1.9	1.2	2.2
- Agricultural	32.30	-2.9	-4.2	-4.0	-1.8	-1.6	-0.2	-3.7	-0.3	-0.1	3.0
- Non-Agricultural	67.70	0.4	3.2	1.5	-2.3	-0.9	0.4	0.5	-2.5	1.8	1.9
Manufacturing	15.53	-2.1	1.0	-0.5	-5.2	-3.9	-2.3	-1.4	-4.4	-1.4	-1.8
Construction	5.89	3.7	10.5	6.2	-2.2	0.2	1.9	-0.2	-6.3	6.6	9.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	16.44	-0.5	2.4	-0.4	-4.1	0.1	0.5	-1.1	-1.0	4.6	-0.4
Accommodation and food service activities	7.62	0.8	-0.2	1.1	3.1	-0.7	0.9	3.7	-2.8	-0.4	3.1
Total labor force (Million persons)		38.2	38.4	38.4	38.0	38.0	38.6	38.2	38.2	38.7	39.1
employed (Million persons)		37.6	37.7	37.8	37.5	37.5	37.7	37.4	37.1	37.9	38.3
Unemployment (Hundred thousand persons)		3.7	3.5	3.8	3.9	3.7	6.5	3.9	7.5	7.4	7.3
Unemployment Rate (%)		0.98	0.92	0.98	1.04	0.98	1.69	1.03	1.95	1.90	1.86

Source : National Statistical Office (NSO)

Fiscal Conditions:

On the revenue side, in the first quarter of the fiscal year 2021 (October - December 2020), the net government revenue collection stood at 515.7 billion Baht, decreased by 15.2 percent compared to the same quarter last year. The decline in the net government revenue collection was mainly due to: (i) a decrease in revenue submission from the state-owned enterprises in the energy sector, high calculation base in the same quarter last year as the state-owned enterprises submitted revenue carried over from fiscal year 2019, and the implementation of electricity bill subsidy measure in order to alleviate burden on citizens and entrepreneurs affected by the COVID-19, (ii) a decrease in a collection of CIT since the overall economic activities contracted so the revenue of corporations experienced a severe decline, and a reduction of withholding tax rate (P.N.D. 53) from 3.0 to 1.5 percent, (iii) a decline of VAT collection on imports, and (iv) revenue collection from an excise tax on oil and petroleum products decreased from the same period last year as a result of changes in oil tax payment dates in October 2019, from within the 15th next month to within 10 days after bringing products out of the factory, making the revenue collection period in October 2019 expanded by 21 days (one-time revenue).

The net government revenue collection decreased and was lower than the target due to a decrease in revenue submission from SOEs in the energy sector, contraction of economic activities, and the implementation of tax measures to alleviate burdens for citizens and entrepreneurs affected by the COVID-19 pandemic.

On the expenditure side, the total budget disbursement in the first quarter of fiscal year 2021 was at 1,162.6 billion Baht[1], increased by 33.2 percent compared with the same quarter of fiscal year 2020 in which current and capital expenditure disbursements increased by 30.1 percent and 48.7 percent, respectively.

Classified by sources of funds, the government disbursements were as follows: (i) **the 2021 annual budget disbursement** stood at 938.4 billion Baht, rose from the same quarter last year by 28.6 percent. The disbursement rate was at 28.6 percent, greater than the rate of 22.8 percent in the same quarter of last year.

In details, the current expenditure disbursement amounted to 865.5 billion Baht, increased by 23.0 percent compared with the same quarter of the previous year. The disbursement rate was at 32.8 percent, higher than the rate of 26.6 percent in the same quarter last year. The capital expenditure disbursement marked at 73.0 billion Baht, rose by 180.1 percent compared with the same quarter of last year. The rate of disbursement was at 11.2 percent, higher than the rate of 4.7 percent of the same quarter last year.

In Q1/FY2021, the total budget disbursement increased by 33.2 percent as a result of an expansion in a disbursement of the 2020 annual budget, the state-owned enterprises capital, and the 1-trillion Baht COVID-19 loan.

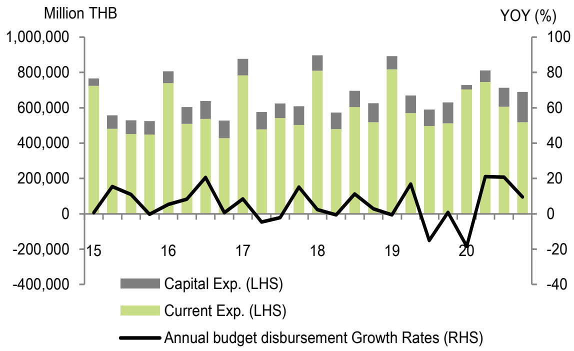
Meanwhile, the disbursement of the carry-over budget declined.

[1] The total budget disbursement consists of (i) the disbursement of the grand total of annual budget, (ii) the carry-over budget, (iii) the state-owned enterprises capital expenditure budget, and (iv) the 1-trillion-Baht COVID-19 loan.

The expansive growth of capital expenditure disbursement was partly due to the less calculation base in Q1/FY2020 where the capital expenditure disbursement decreased by 65.4 percent, as a result of the delay of the 2020 Budget Bill.

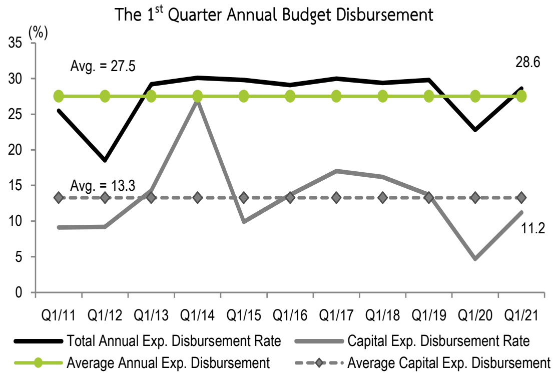
In Q1/FY2021, the disbursement rate of annual budget was at 28.6 percent, where the rates of current and capital expenditure disbursement stood at 32.8 percent and 11.2 percent, respectively.

Annual Budget Disbursement



Source: GFMIS

The 1st Quarter Annual Budget Disbursement



Souce: GFMIS

(ii) **The carry-over budget disbursement** stood at 79.9 billion Baht, decreased by 0.9 percent compared to the first quarter of fiscal year 2020. The disbursement rate was at 37.1 percent, greater than the rate of 30.6 percent in the same quarter last year. (iii) **Capital expenditure disbursement of state-owned enterprises (excluding PTT)** was at 86.9 billion Baht[2], rose from the same period last year by 35.5 percent in accordance with the amendments in the investment plan of the Provincial Electricity Authority (PEA), TOT Public Company Limited Metropolitan Electricity Authority (MEA), Provincial Waterworks Authority, and CAT Telecom Public Company Limited. (iv) **The 1-trillion-Baht COVID-19 loan**[3] was disbursed at 60.7 billion Baht.

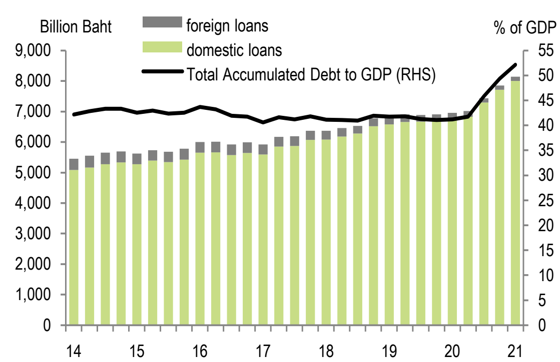
Public Debt: at the end of December 2020, public debt was accumulated at 8.1 trillion Baht, equivalent to 52.1 percent of GDP. The total public debt comprised 8.0 trillion Baht of domestic loans (51.2 percent of GDP) 138.8 billion Baht of foreign loans (0.9 percent of GDP).

The distribution of public debt was detailed as follows: Government Debt (7,054.9 billion Baht), non-financial-institute SOEs debt (787.2 billion Baht), financial-institute SOE debt (286.4 billion Baht), and debt of other government agencies (7,613.5 million Baht), which were accounted to 86.7 percent, 9.7 percent, 3.5 percent, and 0.1 percent of public debt, respectively.

Fiscal Balance: in the first quarter of fiscal year 2021, the budgetary balance recorded a deficit of 412.5 billion Baht whereas non-budgetary balance recorded a deficit of 27.4 billion Baht. In the meantime, the government conducted a cash balance management through the borrowing of 340.8 billion Baht. As a result, the cash balance after debt financing recorded a net deficit of 99.1 billion Baht. The treasury reserve at the end of the fourth quarter of fiscal year 2020 stood at 572.1 billion Baht. Therefore, the fiscal balance at the end of December 2020 equaled to 473.0 billion Baht.

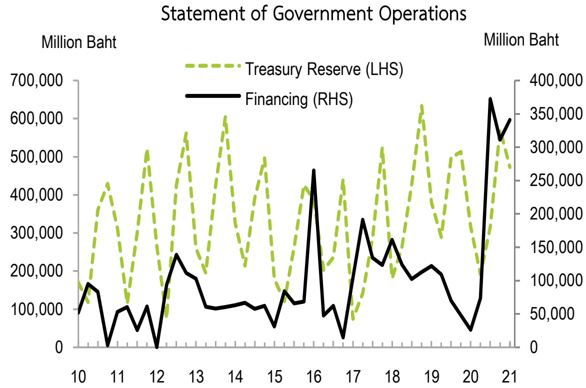
At the end of December 2020, the Fiscal Balance stood at 473.0 billion Baht.

Public Debt (Accumulated)



Source: PDMO

Statement of Government Operations



Source: MOF

[2] Include the 3,373.5 million Baht of the capital spending allocated from the annual budget and the carry-over budget.
[3] Loan under the Emergency Decree Authorizing the Ministry of Finance to Raise Loans to Solve Problem, to Remedy, and Restore the Economy and Society as Affected by the Coronavirus Disease Pandemic, B.E. 2563 (2020) (1-trillion Baht COVID-19 loan)

Financial Conditions:

MPC maintained the policy rate at 0.50 percent per annum. Similarly, major economies and other regional economies.

In the fourth quarter of 2020, the policy interest rate remained unchanged at 0.50 percent per annum. In both meeting on 18th November and 23th December 2020, the Monetary Policy Committee (MPC) decided to maintain the policy rate at 0.50 percent per annum. The decision was made based on the assessment that the Thai economy continued to recover but at a slow pace in the period ahead. Therefore, the economy need would thus need support from the continued low policy rate. Nonetheless, the economic recovery remained highly uncertain depending on the new wave of COVID-19 outbreak as well as corresponding containment measures. Besides, efficacy and coverage of COVID-19 vaccination, and unemployment rate remained high. Moreover, financial system remained sound whereas vulnerabilities among households and SMEs remained. Likewise, major economies and other regional economies continued to keep their policy rates unchanged in this quarter. Similarly, Federal Reserve (Fed) maintained its policy rate at a range of a 0.00 - 0.25 percent per annum until reaching maximum levels of employment and exceeding 2 percent inflation target. Meanwhile, the central banks of Indonesia and the Philippines lowered their policy rate by 0.25 basis points in November.

In 2020, the Monetary Policy Committee (MPC) decided to lower the policy rate in February, March and May. As a result, the policy rate was decreased from 1.25 percent per annum at the end of 2019 to 0.50 percent per annum at the end of 2020.

In January 2021, the Monetary Policy Committee (MPC) maintained the policy rate, in line with the central bank of major advanced economies and regional economies.

Policy Interest Rate

(%) At the end of period	2019					2020						
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Jan.	Feb.
USA	1.50-1.75	2.25-2.50	2.25-2.50	1.75-2.00	1.50-1.75	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
England	0.75	0.75	0.75	0.75	0.75	0.10	0.10	0.10	0.10	0.10	0.10	0.10
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
Canada	1.75	1.75	1.75	1.75	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Australia	0.75	1.50	1.25	1.00	0.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25
New Zealand	1.00	1.75	1.50	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Russia	6.25	7.75	7.50	7.00	6.25	4.25	6.00	4.50	4.25	4.25	4.25	4.25
China	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Korea, South	1.25	1.75	1.75	1.50	1.25	0.50	0.75	0.50	0.50	0.50	0.50	0.50
India	5.15	6.25	5.75	5.40	5.15	4.00	4.40	4.00	4.00	4.00	4.00	4.00
Indonesia	5.00	6.00	6.00	5.25	5.00	3.75	4.50	4.25	4.00	3.75	3.75	3.75
Philippines	4.00	4.75	4.50	4.00	4.00	2.00	3.25	2.25	2.25	2.00	2.00	2.00
Malaysia	3.00	3.25	3.00	3.00	3.00	1.75	2.50	2.00	1.75	1.75	1.75	1.75
Thailand	1.25	1.75	1.75	1.50	1.25	0.50	0.75	0.50	0.50	0.50	0.50	0.50

Source: Collected by NESDC (5 February 2021)

The majority of financial institutions maintained both deposit and loan rates. However, the medium-sized commercial banks cut their deposit rates.

Large-sized commercial banks and specialized financial institutions (SFIs) maintained their deposit interest rates and lending rates. Meanwhile, medium-sized commercial bank kept their lending rate unchanged and decreased the deposit rate. In the fourth quarter of 2020, the average 12-month fixed deposit rates and the average Minimum Loan Rate (MLR) stood at 0.49 percent per year and 5.36 per year, respectively. In addition, SFIs maintained the average deposit and MLR rates at 1.03 per year and 6.13 per year, respectively. Meanwhile, medium-sized commercial banks declined the average deposit rate from 0.62 in the previous quarter to 0.55 percent per year, while the average MLR rate was at 6.13 per year. The average real deposit and MLR rates declined as a result of a rise in the inflation rate.

In 2020, average deposit rates and average lending rates of large-sized commercial banks decreased to 0.68 and 5.57 percent, respectively, as well as the SFIs that lowered average deposit and lending rates to the level of 1.12 and 6.22 percent respectively.

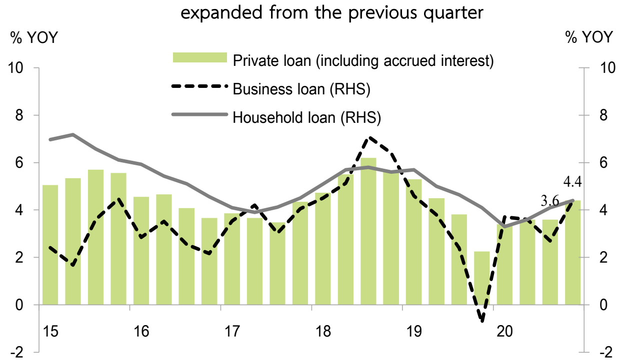
In January 2021, large, medium-sized commercial banks and specialized financial institutions maintained their deposit and lending rates. Meanwhile, the real interest rates increased following the slowing inflation rate.

Private loans continuously expanded in both depository and specialized financial institutions, especially in household loans.

Private business loans outstanding continued to expand. At the end of the fourth quarter of 2020, private loans of depository corporations grew by 4.4 percent, accelerated from 3.6 percent in the previous quarter. Household loans continued to expand by 4.4 percent, comparing with the growth of 4.1 percent in the previous quarter. Besides, business loans expanded by 4.4 percent, accelerating from 2.7 percent in the previous quarter. **Specialized financial institutions (SFIs)** rose at accelerating rate by 6.6 percent from 5.8 percent in the previous quarter. This was mainly due to the acceleration of household loans which expanded by 6.1 percent, compared to 5.0 percent in the previous quarter. The expansion was partially supported by the government financial support measures related to COVID-19 that implemented through specialized financial institutions. In addition, business loan slowed down from the growth of 10.5 percent in the previous quarter to 8.5 percent. Meanwhile, **commercial bank loans** expanded by 4.2 percent, accelerating from a 3.0 percent in the previous quarter, following the acceleration of business loans from a 2.1 percent in the previous quarter to 4.1 percent and the expansion of household loan from 4.1 percent in the previous quarter.to 4.2 percent. Major lending sectors with expansion mainly attributed to financial and insurance activities (15.5 percent), real estate activities (0.7 percent), electricity, gas, steam and air conditioning supply (1.6 percent), accommodation and food service activities (23.3 percent), and public administration and defense (166.5 percent). Major lending sectors with contraction principally included manufacturing (-1.5 percent), wholesale and retail trade (-0.7 percent), and agriculture, forestry and fishing (-4.1 percent). **The commercial bank loan for consumption** expanded by 4.6 percent, comparing with 4.8 percent in the previous quarter. This was mainly due to the continuous expansion of housing loans, along with leasing and hire purchase financing for cars and motorcycle. In particular, l**oans for small and medium-sized businesses** (excluding financial and insurance activities) indicated that outstanding loans declined by 21.4 percent which declined for six consecutive quarters and falling in almost all sectors apart from accommodation and food service activities, which accelerated by 15.2 percent, compared to a 9.1 percent growth in the previous quarter.

In 2020, private credit outstanding of depository institutions at the end of the year grew by 4.4 percent, accelerated from a 2.3-percent at the end of 2019, as a result of the favorable expansion in both household and corporate loans.

Private loans (including accrued interest) of depository corporations expanded from the previous quarter



Source: Bank of Thailand

Thai Baht against US Dollar appreciated, following the more holding risky assets of investors after the clear-sight of new US economic stimulus measures and the positive development of COVID–19 vaccine.

Thai Baht against US dollar appreciated. In the fourth quarter of 2020, an average exchange rate was at 30.62 Baht per US dollar, appreciated by 2.25 percent from the previous quarter, in tandem with the net inflow of foreign investors in terms of both bond and portfolio investment, together with the depreciation of US dollar. During the fourth quarter of 2020, an average US dollar index stood at 92.16, declined from 94.05 percent in the previous quarter. The movement of Thai Baht partly due to the new US economic stimulus package for 900 billion US dollars, combined with the clear-sighted of annual expenditure budget of 1.4 trillion US Dollars. Besides, the COVID-19 vaccine development continuously advancing. As a result, risky assets appeared to be desired by investors, especially in emerging market and Thailand, even though the Bank of Thailand (BOT) implemented measures to advance the development of the new Thai FX Ecosystem in November. In addition, comparing with trading partners/competitors, Thai Baht appreciated, reflecting by an increase in average of Nominal Effective Exchange Rate (NEER)[4] by 0.42 percent from the previous quarter (an average of 122.48). Furthermore, the other regional currencies such as Philippine Peso, Malaysian Ringgit, South Korea Won, Singapore dollars, Indian Rupees, Indonesian Rupiah, Japanese Yen, and Vietnamese Dong against the US dollar were appreciated from the previous quarter.

In 2020, Thai Baht fluctuated within a range of 29.80 – 33.09 Baht per US dollar (an average of 31.29 Baht per US dollar), depreciating by 0.80 percent from the 2019 average rate. The depreciation was mainly caused by the combination of the slowdown of global and Thai economy due to the COVID-19 pandemics, along with the impacts of lockdown measures in many countries.

In January 2021, the monthly average of Thai Baht was at 30.01 Baht per US dollar, appreciated by 0.30 percent relative to the average rate in the previous month, following the continued decreased in US dollar index. However, the movement of Thai Baht was fluctuated, according to the US political situation and implementing monetary policy of the Federal Reserve (Fed). Additionally, Thai Baht against trading partners (NEER) slightly depreciated from the previous month by 0.11 percent.

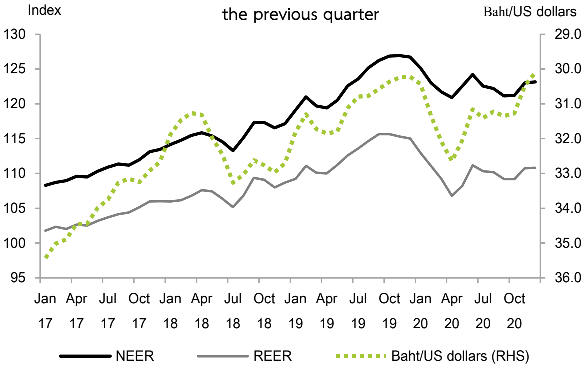
SET Index increased from the previous quarter caused by easing of lockdown measures and the development of COVID-19 vaccine.

SET index increased from the previous quarter. At the end of the fourth quarter of 2020, SET index continued to increase by 17.2 percent to 1,449.4 points from the previous quarter. SET index moved in the same direction as other Asian stock markets. The upward movement of SET index was mainly driven by (i) the relaxation of lockdown measures within country, (ii) the positive development of COVID-19 vaccine, (iii) a clear signal of political situation of the US, after the unofficial results showed that Joe Biden was expected to be the next president, (iv) the new US stimulus package with a 900 billion US dollars, and (v) the EU and the UK agreed the Trade and Cooperation Agreement before the Brexit transition period ended. As a result, foreign investors were the net buyers for the first time in five quarters.

Overall in 2020, SET index approximately decreased by 130.5 points, comparted to the end of 2019, equivalent to a 8.3-percent contraction from 2019. The high volatility of SET index in 2020 was resulted from COVID-19 outbreak, the developments of COVID-19 vaccine, domestic and international political situations, and monetary policy together with economic stimulus package in many countries.

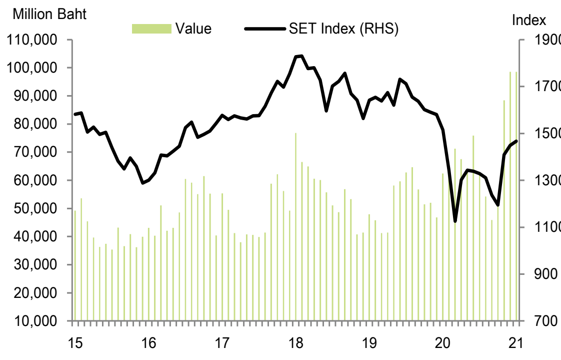
In January 2021, SET index increased by 1.2 percent to 1,467 points from the end of December, which was resulted by the American Rescue Plan which was a 1.9 trillion US dollar economic stimulus package proposed by President Joe Biden as well as many countries started vaccinating their people against COVID-19.

Thai Baht appreciated against US dollars from the previous quarter



Source : CEIC, Bank of Thailand

SET Index and turnover increased in the fourth quarter of 2020



Source: SET

Both short-term and long-term government bond yields shifted downward, following the greater demand in bond markets.

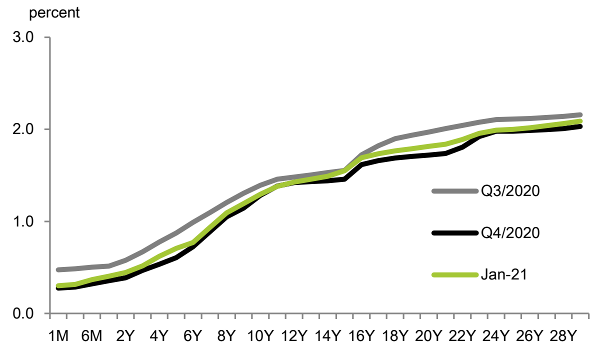
Both short-term and long-term government bond yield shifted downward. In the fourth quarter, the movement of Thai government bond yield curve was seen tilted to the downside in all maturities. Short-term bond yield declined following investors' capital requirements for managing liquidity, along with the policy rate remained at low levels. The downward trend of long-term bond yield mostly contributed by investors anxiety over the COVID-19 pandemic, although the political situation in the US showed a clear sight and the development of COVID-19 vaccine produced favorable results. At the end of the fourth quarter, foreign investors registered a net buy in both short-term and long-term bonds, which recorded at 1.4 billion Baht and 15.4 billion Baht respectively. In addition, Thai bond expired recorded at 8.0 billion Baht, resulting in totally 8.8 billion Baht of net inflows of foreign investors, marking as the continuous net inflows from 38.5 billion Baht in the previous quarter.

[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.

Overall in 2020, government bond yields declined in both short-term and long-term. In details, 1-Year government bond yield was at 0.36 percent compared to a 1.21 percent at the end of 2019. Meanwhile, 10-Year government bond yield recorded at 1.28 percent, compared to 1.49 percent at the end 2019. Consequently, the clean price index increased by 0.1 percent.

In January 2021, government bond yields increased in all maturities compared with the previous month. This was partially due to portfolio diversification of investors by holding more risky assets as fear and anxious over the COVID-19 pandemic were showing signs of abating, together with clarity of the US economic stimulus package. Besides, this was caused by the increase of issuing government bond and Bank of Thailand bond. For short-term bond, foreign investors registered as a net sell of 1.9 billion Baht, while it was registered as a net buy for long-term bond at 2.0 billion Baht. There was the bond expired for 0.7 billion Baht, resulting in totally 0.6 billion Baht of outflows which continued from the net outflows at 18.2 billion Baht in the previous month.

Government short-term yield and long-term yield decreased



Source: ThaiBMA

Capital and financial account recorded a net outflow of 4.93 billion US dollars in the third quarter of 2020. This was mainly caused by a net outflow in term of both direct and portfolio investments of Thai investors. However, there was a continual inflow of other terms of investment such as loans, commercial loans, deposits, and etc.

Capital and financial account recorded a net outflow which was caused by an outflow of Thai investor in terms of both direct and portfolio investment.

In the first nine months of 2020, capital and financial account registered a net outflow of 3.52 billion US dollars, which essentially caused by the outflow of Thai investors in term of direct and portfolio investment, along with foreign investors outflow in term of portfolio investment.

Capital Flow

(Billion USD)	2019					2020		
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3
- Direct Investment	-5.3	-3.0	0.0	-0.1	-2.2	-3.0	-5.4	-4.2
Thai investor	-10.1	-3.4	-1.9	-3.4	-1.4	-5.8	-5.2	-4.1
Foreign investor	4.8	0.4	1.9	3.3	-0.9	2.8	-0.2	0.0
- Portfolio Investments	-8.6	-2.4	2.2	-6.4	-2.0	-7.2	1.3	-3.3
Thai investor	-7.7	-1.1	-0.4	-2.8	-3.4	0.1	2.8	-2.5
Foreign investor	-1.0	-1.3	2.6	-3.7	1.5	-7.3	-1.5	-0.7
Others	-1.7	-0.8	-4.6	5.0	-1.3	1.9	13.9	2.5
Capital and financial account	-15.7	-6.2	-2.4	-1.6	-5.5	-8.4	9.8	-4.9

Source: BOT

Current account registered a deficit of 1.2 billion US dollars (34.5 billion Baht). This was a result of a deficit in services, and primary and secondary income of 9.4 billion US dollars, while a trade surplus of 8.2 billion US dollars.

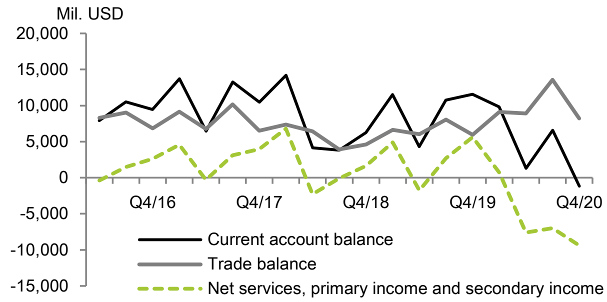
Current account deficit, compared with a surplus of the same period last year and the previous quarter.

In 2020, current account registered a surplus of 16.5 billion US dollars (518.6 billion Baht), compared with a surplus of 38.2 billion US dollars (1,179.7 billion Baht) in 2019.

International reserve at the end of December 2020 stood at 258.1 billion US dollars (7,747.6 billion Baht) increased from 224.3 billion US dollars (6,756.9 billion Baht) at the end of December 2019.

International reserve at the end of December 2020 stood at 258.1 billion US dollars.

Current account balance, Trade balance,
Net services, primary income and secondary income



Source: Bank of Thailand

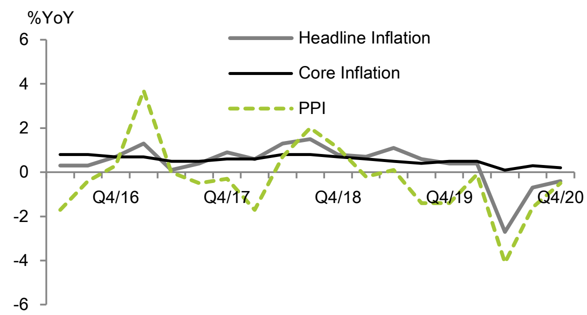
Headline inflation: In the fourth quarter of 2020, headline inflation was averaged at -0.4 percent, decreased at a slower pace from -0.7 percent in the previous quarter. **Food-and-beverage** price index increased by 1.6 percent, compared to 1.2 percent growth in the previous quarter due to an increase in prices of vegetables and fruits, meats poultry & fish, and seasoning & condiments, which rose by 6.6 percent, 3.4 percent, and 2.8, respectively. **Non-food and beverage** price index decreased by 1.5 percent compared with a 1.8-percent decline in the previous quarter, following a drop of energy price index by 8.4 percent. Core inflation was averaged at 0.2 percent.[5]

Headline inflation was at -0.4 percent, compared with -0.7 percent from the previous quarter.

The food-and-beverage price index continually increased while non-food-and-beverage price index decreased following the decline of energy price index.

In 2020, headline inflation was averaged at -0.8 percent. Core inflation was averaged at 0.3 percent compared with an average of 0.7 percent and 0.5 percent, respectively in 2019.

Headline inflation in the fourth quarter of 2020
decreased by 0.4 percent



Source: Ministry of Commerce

Producer Price Index (PPI): In the fourth quarter of 2020, Producer Price Index decreased by 0.5 percent, compared with a 1.6-percent fall in the previous quarter, following the increase in price of agricultural products and fell at a slower pace in price of manufacturing products. **The price of agricultural products** increased by 7.5 percent, compared with a 2.7-percent rise in the previous quarter as price of crops, livestock, and forestry increased**. The price of manufacturing products** fell by 0.7 percent compared with a 1.6-percent decrease in the previous quarter. However, **the price of mining products** dropped by 20.2 percent compared with a 15.1-percent decline in the previous quarter, following the decrease in price of petroleum, and natural gas by 25.8 percent, compared with a 19.1-percent decline in the previous quarter.[6]

Producer Price Index (PPI) decreased by 0.5 percent, compared with a 1.6- percent drop in the previous quarter.

In 2020, producer price index decreased by 1.6 percent, compared with decreased by 0.7 percent in 2019.

[5] In January 2021, headline inflation was -0.3 percent, core inflation was 0.2 percent.
[6] In January 2021, producer price index (PPI) fell by 0.6 percent.

2. Crude Oil price in Q4 of 2020

The crude oil price in the global market declined compared with the same period last year, yet improved from third quarter of 2020. In the fourth quarter of 2020, the average crude oil price in four major markets (Dubai, Oman, Brent, and WTI) stood at 44.3 US dollars per barrel, declined by 27.2 percent from the average at 60.9 US dollars per barrel recorded at the same period last year. However, crude oil price increased by 4.0 percent from an average of 42.6 US dollars per barrel recorded at in the previous quarter.

The crude oil price in the global market declined compared with the same period last year, yet improved from previous quarter.

Key reasons for the decline in the global crude oil price this quarter were (i) a slowdown in the world economy and concerns towards the rapid spread of coronavirus variants, leading to a slow decrease in crude oil demand, (ii) new lockdown and more strictly on preventive measures to controlling spread in the EU, (iii) unsuccessfulness of agreement of oil production cut that OPEC+ and Libya receiving privilege of OPEC agreement exemption.

In 2020, the average crude oil price in the four major markets stood at 41.6 US dollars per barrel, a decrease of 32.9 percent, lower than 61.9 US dollars per barrel in 2019.

Crude oil price

Year		USD per Barrel					(%YoY)				
		WTI	BRENT	DUBAI	OMAN	Average	WTI	BRENT	DUBAI	OMAN	Average
2017	Year	50.9	54.8	53.0	53.2	53.0	18.1	21.6	27.8	27.4	23.7
2018	Year	65.1	71.8	69.5	69.8	69.1	27.8	31.1	31.2	31.3	30.4
2019	Year	56.9	64.0	63.3	63.6	61.9	-12.6	-10.9	-9.0	-8.9	-10.3
	Q1	54.9	63.8	63.2	63.3	61.3	-12.8	-5.2	-0.9	-1.2	-5.0
	Q2	59.6	68.2	67.2	67.4	65.6	-12.4	-9.4	-7.0	-6.8	-8.9
	Q3	56.4	62.0	61.0	61.5	60.2	-18.9	-18.4	-17.6	-17.3	-18.0
	Q4	56.7	62.3	62.1	62.4	60.9	-4.8	-9.7	-8.9	-9.0	-8.1
2020	Year	39.2	43.0	42.1	42.1	41.6	-31.0	-32.8	-33.5	-33.8	-32.9
	Q1	45.8	50.5	50.5	50.5	49.3	-16.6	-20.9	-20.1	-20.2	-19.6
	Q2	28.0	33.4	30.5	30.4	30.6	-53.1	-51.1	-54.5	-54.9	-53.4
	Q3	40.9	43.4	43.1	42.9	42.6	-27.4	-30.0	-29.4	-30.2	-29.3
	Q4	42.7	45.2	44.7	44.7	44.3	-24.7	-27.5	-27.9	-28.4	-27.2
	Oct.	39.7	41.6	40.9	40.9	40.8	-26.4	-30.1	-31.4	-31.7	-30.0
	Nov.	41.1	43.5	43.1	43.1	42.7	-27.9	-30.6	-30.7	-31.2	-30.2
	Dec.	46.9	50.0	49.8	49.6	49.1	-21.5	-23.2	-23.4	-23.9	-23.0
2021	Jan.	51.9	55.1	54.7	54.5	54.1	-10.0	-13.5	-15.1	-15.6	-13.7

Source: Thaioil Plc. and EPPO

3. The World Economy in Q4 of 2020

The world economy in the fourth quarter of 2020 improved from the previous quarter, following the economic recovery of the major industrialized countries, particularly the US, Japan, China, the NIEs, and the developing and emerging countries. This economic rebound was benefited from the relaxation of lockdown measures and continual massive economic stimulus which supported manufacturing production and domestic consumption. The Composite Purchasing Managers' Index (PMI) in most countries returned above 50, and stood higher than the pre-COVID-19 level. At the same time, domestic expenditure was boosted by the extensively easing fiscal and monetary policies, consumer adaptation to containment measures, and a pent-up demand from the previous period. In addition, exports rebounded in the last quarter as the world economy picked up, specifically in Japan, India, and Singapore. Nonetheless, the Eurozone economy still contracted due to the resurgence of the pandemic and the new variants of the virus. In response, leading member countries had to re-impose stringent containment measures during the end of 2020, especially in the UK, Germany, and Austria. In the fourth quarter, governments in many countries had extended economic measures to help mitigate the impact of the COVID-19 outbreak. Major central banks continued the expansionary monetary policy, including committing a record low policy rate, acquiring asset purchases to increase economic liquidity, providing low-interest loans to commercial banks, and providing credit guarantee. Furthermore, many Asian central banks had further cut their policy rates, including Vietnam, the Philippines, and Indonesia. Moreover, key economies, in particular the US, the Eurozone, and Japan, implemented massive fiscal measures to support those suffering from COVID-19, such as the EU's long-term expenditure budget framework and the 3rd economic stimulus package of Japan.

The US economy dropped by 2.5 percent, improving from the previous quarter, due to the regained private investment, particularly in residential investment, private consumption and the recovery of labor market.

The US economy dropped by 2.5 percent, improving from a 2.8-percent decline in the last quarter. After seasonally adjustment, the US economy expanded by 1.0 percent, continuing from a 7.5-percent expansion in the previous quarter (%QoQ sa). This improvement was primarily due to the rebounded industrial production and domestic spending. In the fourth quarter, the manufacturing and service Purchasing Managers' Index (PMI) were at 55.7 and 56.7, respectively, up from 52.4 and 53.2, greater than 50 for two consecutive quarters, and higher than the level of 52.1 and 51.7 in the same period of last year. Meanwhile, private investment rose by 3.2 percent, the first expansion in five quarters due to an increase in residential investment. Likewise, private consumption improved in line with the continual recovery of the labor market. The unemployment rate stood at 6.8 percent, a substantial decline from 13.1 percent and 8.8 percent in the second and third quarters, but remained higher than 3.6 percent in the same period of last year. During the fourth quarter, the US government implemented several measures in response to those affected households and businesses, including a 900 billion US dollars pandemic relief package, which covers stimulus checks, unemployment compensation, financial support to small businesses, funding for testing and vaccination, and assistance programs for food and living expenses. Besides, at the Federal Reserve's Monetary Policy Committee (FOMC) meeting on 15 - 16 December 2020, the Committee voted unanimously to maintain the policy rate at 0.00 - 0.25 percent and signaled to continuously maintain asset purchases in order to provide liquidity. This included acquiring both large-scale asset purchases (LSAP) at least 80 billion US dollars per month in government bonds and mortgage-backed debt securities at least 40 billion US dollars per month. Thus, **the US economy in 2020** declined by 3.5 percent from a 2.2 percent expansion in 2019, the first drop in 11 years since 2008, a drop of 2.5 percent during the financial crisis in 2008 - 2009.

The Eurozone economy declined by 5.1 percent, continuing from the previous 4.3-percent decrease. The decline was mainly due to a drop in retail sales and trade activities contributed by the second wave of COVID-19 in several member economies.

The Eurozone economy contracted by 5.1 percent (%YoY), decelerating from 4.3 percent in the previous quarter. After seasonally adjustments, the Eurozone economy declined by 0.7 percent (%QoQ swda.), compared with the 12.4-percent expansion in the third quarter. This was a consequence of the declines in key member economies including Belgium, France, Italy, and Austria, which have been enduring the effects of new waves of COVID-19 outbreak and therefore had to re-employ strict containment measures. Therefore, retail sales index in the first 2 months of the fourth quarter declined by 4.8 percent, compared with the 2.4-percent growth in the previous quarter, in line with the declining consumer confidence and persistently high unemployment rate. In addition, the services sector declined, as reflected by the services PMI falling to 45.0 compared with 51.1 in the previous quarter. The index in November also fell to 41.7, the lowest level in 6 months. In spite of the declines, the manufacturing sector in the fourth quarter improved as manifested by the higher manufacturing PMI at 54.6, 10-quarter highest and compared with the previous quarter's level of 52.4. Inflation was at -0.3, which has been below zero for the second consecutive quarter and lowest in 23 quarters. For key economic policies, on December 16th, 2020, the European Parliament approved the EU's long-term expenditure budget for 2021-2027 with a total budget of 1.0743 trillion Euro. Moreover, the ECB has agreed on December 10th, 2020, to hold its policy rate at 0.0 percent and increased its asset purchases under the Pandemic Emergency Purchase Programme

(PEPP) to have a total envelope of 1.85 trillion Euro instead of 1.35 trillion euro. The asset purchases were also extended until at least March 2022.[7] In addition, Pandemic Emergency Longer-Term Refinancing Operations (PELTROs) were also extended to cover 2022. **For the year 2020,** the Eurozone economy declined by 6.8 percent, from its previous year growth rate of 1.3 percent. The decline was the first one in 7 years since the 0.2-percent decline due to the European debt crisis.

Japanese economy tended to recover from the last quarter, in line with increases in manufacturing PMI, exports and retail sales. In addition, the Cabinet has approved an additional economic relief package worth 73.6 trillion yen.

Japanese economy tends to recover from the previous quarter, in line with the manufacturing PMI of 49.2, higher than 46.7 in the previous quarter, but is still below 50.0 for the 8th consecutive quarters. This was also consistent with an expansion of 3.3 percent in export values, registering a positive growth for the first time in 8 quarters. In addition, retail sales increased by 2.0 percent, the first expansion in 5 quarters, in line with a continuous increase in consumer confidence index. However, the unemployment rate was at 3.0 percent, the highest rate in 16 quarters. Nonetheless, on December 8th 2020, the Cabinet approved an additional economic relief package worth 73.6 trillion yen (13.1 percent of 2019 GDP)[8], bringing the total economic relief budget that has been approved to 277.8 trillion yen. In addition, during December 17th – 18th, 2020, the Bank of Japan (BOJ) decided to hold its policy rate at (-0.1) percent as well as purchase a necessary amount of Japanese government bonds (JGBs) without an upper limit so that the 10-year JGB yields remained at around 0.0 percent (Yield Curve Control measure)[9]. **For the year 2020**, Japanese economy is expected to decline by 4.0 percent, compared with a 0.7-percent growth in 2019, which was the first economic recession in 10 years.

Chinese economy expanded by 6.5 percent, continuously recovering from the severe economic reduction in the first quarter. This was consistent with a recovery of manufacturing production, export sectors and domestic retail sales.

Chinese economy grew by 6.5 percent, registered the highest growth rate in 9 quarters, and accelerated from 4.9 percent in the previous quarter. This was in line with an increase of Caixin manufacturing PMI to a record high of 53.8 as well as an increase of the export of goods by 17.0 percent, accelerating from 8.9 percent in the previous quarter, which was the highest growth in 31 quarters. Besides, domestic retail sales grew by 6.6 percent, a first positive growth in 4 quarters. Furthermore, on 23rd December 2020, Chinese government announce additional economic stimulus measures such as extension of deferring loan payments scheme for the small businesses, which business dis not fully recover yet, until the first quarter of 2021, together with other fiscal measures to keep the growth momentum under the high uncertainty period. Nonetheless, the People's Bank of China (PBOC) continued to implement expansionary monetary policy by keeping interest at low rates together with maintaining levels of required reserved ratio for financial institutions[10]. Furthermore, the PBOC had also provided liquidity to the financial market by holding the seven-day reverse repo rate at a historical low level of 2.2 percent. Henceforth, **the Chinese economy in 2020** expanded by 2.3 percent, the lowest growth rate in 44 years, decelerating from a 6.0 percent growth in 2019. However, it was the only major economy registering an economic expansion this year.

The NIEs improved from the previous quarter, from the recoveries in exports and manufacturing. However, the South Korean economy fell at a faster pace.

The Newly Industrial Economies (NIEs) continued to recover from the previous quarter. This was driven by the improved domestic spending and exports, in line with the rebound of global demand. The South Korean economy, however, contracted at a higher rate. In the fourth quarter, **Taiwan's economy** expanded by 4.9 percent, an acceleration when compared with a 3.9-percent expansion in the previous quarter. The growth was highest in 25 quarters and was driven by the improved private consumption and the expansions of government spending and exports. **Hong Kong's economy** declined by 3.0 percent, the fifth consecutive quarter of contraction, however, improving from a 3.6-percent contraction in the previous quarter. This can be attributed to the revival of investments and the acceleration of goods exports. However, private consumption fell for the sixth quarter due to the third wave of COVID-19 outbreak as well as unresolved political conditions. **Singapore's economy** declined by 3.8 percent, the fourth consecutive quarter of declines, but improving from the 5.6-percent decrease in the third quarter. The improvement aligns with the developments in the sectors of construction, services, and exports, as well as manufacturing which continues to grow. In contrast, **the South Korean economy** declined by 1.4 percent, compared with 1.1 percent in the previous quarter. This was due to fall in private consumption. However, exports recovery and manufacturing improvements contributed to the economy's

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[7] ECB will continue to purchase assets under the program at least until March 2022 or when the ECB has considered that the Covid-19 outbreak has subsided. In addition, the ECB also stated that the policy rate will be maintained at the current level, or lower, until the inflation robustly converges to a level sufficiently close to, but below, 2 percent.

[8] With the following key measures (i) extend "Go To Travel" subsidy program to support domestic tourism sector, (ii) provide financial aids for businesses as to keep employed workers, (iii) contain COVID-19 (iv) promote structural change and positive economic cycles for Post-Corona era, and (v) secure safety and relief with respect to disaster management.

[9] In addition, BOJ also extended the Special Funds Supplying Operations to Facilitate Financing in Response to the Novel Coronavirus, which provides no-interest loans to financial institutions in order to provide liquidity to businesses sectors, from the end of March 2021 to September 2021, and eliminated the 100 billion yens ceiling for maximum outstanding of loans for each financial institution.

[10] During the 4th quarter, the PBOC held the interest rate on excess reserve, one-year medium-term lending facility (MLF) and loan prime rate at low levels of 0.35 percent, 2.95 percent, and 3.85 percent consecutively. The reserve requirement ratio (RRR) was also maintained at 9.4 percent.

growth. The overall inflation for the group mostly showed slight increases following the higher food and housing prices. On the other hand, transportation and recreation prices continued to decline. **For the year 2020,** Taiwan's economy grew by 3.0 percent, the same pace as in 2019. The economies of Singapore and South Korea experienced recession for the first time in 19 and 22 years, respectively, with the negative rates of 5.8 percent and 1.0 percent, compared with the previous year's growth by 0.7 percent and 2.0 percent, respectively. The economy of Hong Kong contracted, for the second consecutive year, by 6.1 percent, continuing from a 1.2-percent decline in 2019.

The ASEAN economies improved from the previous quarter, following the expansion of the production and export sector in most countries in line with the recovery of the global economy and global trade volume. **Vietnamese economy** expanded by 4.5 percent, accelerating from 2.7 percent in the third quarter as a result of the increase in manufacturing and export sectors. **The economies of the Philippines and Indonesia** decreased by 8.3 percent and 2.2 percent, respectively, improving from 11.4 percent and 3.5 percent decline in the previous quarter because of the recoveries of manufacturing and export sector as well as the slower declines of the household consumption and private investment. Meanwhile, **Malaysian economy** fell by 3.4 percent, compared with a decline by 2.6 percent in the previous quarter due to the faster reduction of household consumption and investment resulted from the new wave of the pandemic. For monetary policy, the Central Banks of Vietnam, the Philippines and Indonesia decided to cut the policy rates further while the Central Bank of Malaysia maintained its low rate[11]. For the whole 2020, **the economy of Vietnam** expanded by 2.9 percent, the lowest growth in 35 years, decelerating from a 7.0 percent in the previous year, while **the economies of Philippines and Indonesia** experienced the first economic recession in 23 years with 9.5 percent and 2.1 percent contractions, compared to the expansion of 6.0 percent and 5.0 percent in the previous year, respectively. Likewise, **the Malaysian economy** fell 5.6 percent, the first decrease in 12 years, compared with a 4.3 percent increase in the previous year.

The ASEAN economies improved from the previous quarter, following the expansion of the production and export sector in most countries in line with the recovery of the global economy and global trade volume.

GDP and Export growths in several key economies

(%YoY)	GDP					Export Value							
	2018	2019	2020			2018	2019	2020					
	Year	Year	Q3	Q4	Year	Year	Year	Q3	Q4	Oct	Nov	Dec	Year
USA	3.0	2.2	-2.8	-2.5	-3.5	7.9	-1.5	-13.5	-5.7	-7.2	-7.6	-2.3	-13.2
Euro Area	1.9	1.3	-4.3	-5.1	-6.8	8.7	-2.5	-4.0	1.2*	-3.2	6.0	-	-8.9*
UK	1.3	1.4	-8.7	-7.8	-9.9	10.2	-3.4	-12.6	-7.6*	-14.7	0.5	-	-14.7*
Australia	2.9	1.9	-4.1	-	-	11.3	5.3	-13.1	4.3	0.4	0.4	11.4	-7.7
Japan	0.6	0.3	-5.7	-	-	5.7	-4.4	-12.0	3.3	2.6	-0.1	7.2	-9.1
China	6.7	6.0	4.9	6.5	2.3	9.7	-0.1	8.9	17.0	11.4	21.1	18.3	4.0
India	6.8	4.9	-7.5	-	-	8.8	-0.1	-5.3	-4.3	-4.7	-8.6	0.1	-14.8
South Korea	2.9	2.0	-1.1	-1.4	-1.0	5.4	-10.4	-3.5	4.1	-3.8	4.1	12.6	-5.5
Taiwan	2.8	3.0	3.9	4.9	3.0	5.9	-1.5	6.0	11.7	11.2	12.0	12.0	4.9
Hong Kong	2.8	-1.2	-3.6	-3.0	-6.1	6.8	-4.1	2.3	6.4	0.1	6.7	12.4	-0.5
Singapore	3.4	0.7	-5.6	-3.8	-5.8	10.3	-5.2	-2.1	-1.7	-5.1	-4.4	4.5	-4.1
Indonesia	5.2	5.0	-3.5	-2.2	-2.1	6.6	-6.8	-6.5	6.7	-3.5	9.4	14.6	-2.6
Malaysia	4.8	4.3	-2.6	-3.4	-5.6	14.2	-3.4	3.5	6.6	1.1	5.7	13.3	-2.6
Philippines	6.3	6.0	-11.4	-8.3	-9.5	0.9	2.3	-6.5	0.8	-1.2	4.0	-0.2	-10.1
Vietnam	7.1	7.0	2.7	4.5	2.9	13.3	8.4	10.6	15.1	12.2	10.7	22.7	7.0

Remark: * Data is up to November 2020

Source: CEIC, compiled by NESDC

[11] Vietnamese, Philippines and Indonesian Central Banks lowered the policy interest rates to 2.50 percent, 2.00 and 3.75 percent, down from 3.00 percent, 2.25 percent and 4.0 percent, respectively. Meanwhile, the Central Bank of Malaysia maintained the policy interest rates at 1.75 percent.

4. The World Economic Outlook for 2021

The world economy in 2021 is expected to recover from a severe contraction in 2020. The main contributions to this recovery are the revived economic activities and increasing domestic expenditure following a strong momentum due to a faster-than-expected economic growth in the last quarter of 2020, particularly in the US, China, and the NIEs. There are also supports from the progress on vaccine approvals and the launch of vaccination in some countries since mid-December 2020, coupled with easing fiscal and monetary policies, particularly additional fiscal stimulus packages from the Eurozone and Japan, as well as the American Rescue Plan of the US. Meanwhile, the pickups of the global economic and trade volume are expected to provide potential positive impact to the recovery of developing and emerging Asian economies, specifically those export-dependent countries.

Key assumptions for the world economic growth and trade volumes in 2021 under the base case scenario include: (i) the development of COVID-19 vaccine that can efficiently develop human immune system together with vaccine distribution in major economies could lead to a successful containment of the outbreak. Nonetheless, the distribution capacity of the vaccine will vary across countries. Under the baseline conditions, most major economies will be able to distribute vaccines to at least 50 percent of their populations by the first half of 2021 and 75 percent by the end of 2021. For developing and emerging economies, 50 percent of the population is expected to be vaccinated by the end of 2021 and 75 percent by the first half of 2022. (ii) There are no severe resurgence of infections and virus mutation that leads to higher degree of containment and restrictions, and (iii) there are no contagious impacts spreading from the real sector crisis to the financial sector, causing a financial or fiscal catastrophe. Under this baseline scenario, the global economy and trade volume in 2021 will pick up steadily and show a stronger expansion during the latter half of the year due to the widespread vaccination campaigns across major economies, which eventually achieve the COVID-19 herd immunity. Thus, under these conditions, **the world economy and global trade volume in 2021 is projected to expand by 5.2 percent and 6.7 percent**, respectively, notably improving from the 3.5-percent and 11.0-percent contractions in 2020, and an upward revision from the growth of 4.9 percent and 5.0 percent in the previous projection. Prospect on key economies are as follows:

The US economy is expected to expand by 4.8 percent, recovering from a 3.5-percent decline in 2020, the highest rate in 22 years, and an upward revision from the 3.4-percent growth in the previous estimation. This enhanced economic condition is mainly due to the recovery of economic activities in both production and domestic spending as well as the progress on vaccination against COVID-19 across the country. The US has started distributing vaccines since December 18th, 2020, and currently has achieved a vaccination rate of 1.47 million doses per day (as of February 15th). Meanwhile, the key economic indicators in January 2021 also show a solid recovery path. The manufacturing and service PMIs reach the level of 59.2 and 58.3, respectively, representing the record highs in 36 months and 2 months, and higher than the pre-pandemic level at 51.9 and 53.4 in January 2020, respectively. Also, the unemployment rate in January 2021 decreased to 6.3 percent, the lowest rate since the pandemic began, and the 9-consecutive months of decreases compared to the historical high at 14.8 percent in April 2020, while the inflation rate in the fourth quarter was 1.2 percent. Additionally, the economy in the remainder of 2021 is likely to be supported by the notable economic stimulus plan worth 1.9-trillion US dollars put forth by President Joe Biden to help those affected by the COVID-19 which include grants for the general public, the unemployed workers, small businesses as well as large-scale investment plan. Moreover, the Federal Reserve is expected to maintain their easing monetary policy with low policy rates and asset purchases to provide liquidity for the financial and capital market.

The Eurozone economy is expected to grow by 4.3 percent, regaining from a contraction of 6.8 percent in 2020, but the pace is downwardly revised from the previously expected 4.8 percent. The recovery is buttressed by the relaxation of containment measures which will support the resumption of economic activities. In particular, the manufacturing sector has already shown positive signs, reflected by the January 2021 manufacturing PMI of 54.8, compared with 47.9 during the same month of the previous year. Notwithstanding, there remains some limitation to economic recovery particularly the new waves of infections in several countries that lead to the containment measures, and hence undermine the recovery of the services sector. This was apparent by the services PMI data in January 2021 which was at 45.4, lower than 52.5 during January 2020, and has been lower than 50.0 for 5 months consecutively. The situation is in line with the declining domestic consumption following the weakened consumer confidence. Nevertheless, the Eurozone economy in 2021 is expected to be strongly reinforced by major fiscal measures which are consisted of: (i) long-term expenditure budget of the EU 2021-2027 worth 1.0743 trillion Euro, which has been approved by the European Council since December 17th, 2020; (ii) the "Next Generation EU" economic recovery plan worth 0.75 trillion Euro; (iii) EU4Health, which is the EU's response to Covid-19 under EU Health Programmes, worth 5.1 million Euro; and (iv) the 87.4 billion Euro in financial support for 16-member states under the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) which, as of February 2nd, 2021, has already been disbursed by 14 billion Euro. In addition, in terms of monetary policies, the ECB has increased the total envelope of the asset purchases under the Pandemic Emergency Purchase Programme (PEPP) from 1.35 to 1.85 trillion Euro until March 2022 or until the ECB has considered that the COVID-19 crisis has subsided. In the latest meeting on January 21st, 2021, the ECB held its supportive policy rate at zero percent. It is expected that the ECB will hold its expansionary stance throughout 2021 until the Eurozone's rate of inflation will approach 2.0 percent.

Japanese economy is expected to expand by 2.4 percent, unchanged from the previous projection, registering the highest growth rate in 9 years, and recovering from the 5.7-percent decline in 2020. This will be consistent with recoveries in economic activities after lifting measures to control COVID-19 pandemic as well as with the results from implementing massive economic stimulus packages. In addition, exports tend to increase following economic recoveries in major trading partner countries. At the same time, public investment is also expected to increase due to a record high of 106.6 trillion yens government budget for FY2021, increasing by

3.8 percent from the last year budget, together with the additional economic recovery budget aiming to relief the impacts from COVID-19 outbreak. Besides, the Bank of Japan (BOJ) maintains its expansionary monetary policy in order to provide liquidity. Furthermore, in the latest meeting on January 20th – 21st, 2021, the BOJ decided to keep its policy rate at (-0.1) percent and maintain the yield curve control measure at target of 10-year JGB yields at 0 percent through purchasing a necessary amount of JGBs without an upper limit. BOJ also decided to extend the loan disbursements under the Fund-Provisioning Measure to Stimulate Bank Lending and the Fund Provisioning Measure for one year in order to uninterruptedly support the economic recovery progress. Nevertheless, the Japanese economic recovery in 2021 still has some constraints, especially under the recent escalation of COVID-19 outbreak. Thus, Japanese government had to declare a state of emergency in affected areas, including Tokyo, which is effective from January 8th – March 7th, 2021. Consequently, the manufacturing and services PMIs in January 2021 declined to 49.8 and 46.1, the lowest levels in 2 and 5 months respectively, which are also in line with the lower consumer confidence. Moreover, the new outbreak might also affect the arrangement for hosting Tokyo Olympic Games which is supposed to be held during July 23rd - August 8th, 2021. If the Olympic Games has to be postponed, the domestic consumption, investment, and tourism sector are likely to pick up slower than anticipated.

Chinese economy is expected to expand by 7.7 percent, accelerating from 2.3 percent in 2020, higher than the previous projection of 7.5 percent, owing to a success in containing COVID-19 outbreak, which subsequently leads to a rapid revival of economic activities back to the pre-COVID level. Certainly, the Caixin manufacturing and services PMIs in January 2021 were at 51.5 and 52.0, respectively, higher than 51.1 and 51.8 in the same period of last year respectively. The economic expansion was also supported by the recovery of global economy and the receding of trade tension with the US. In addition, Chinese economy is also supported by the continuing fiscal stimulus spending with the following key measures: (i) increased spending on epidemic prevention and control, as well as the medical equipment, (ii) acceleration of unemployment insurance payment and extension to migrated workers, (iii) tax relief and waived social security contributions, and (iv) additional public investment. The recovery is also supported by dovish monetary policy, adopted by the People's Bank of China (PBOC). As of January 15th, 2021, the PBOC has already injected 0.5 trillion yuan (around 77 billion US dollar) into the market via a medium-term lending facility (MLF) as well as injecting 2 billion yuan via purchasing securities from commercial bank (reverse repos), as to maintain enough liquidity in the system. In addition, the PBOC also maintain the loan prime rate (LPR) at 3.85 percent for 10 consecutive months. Furthermore, The Chinese economy is expected to also be supported by the economic structural reform under the 14th national economic development plan (2021 - 2025), grounded by the dual circulation strategy, which aims to create conditions that allow domestic and external demands to balance each other. Thus, the instability from heavily depending on foreign markets would be limited[12].

The Newly Industrialized Economies (NIEs) tend to further accelerate, with major support from the recovery of manufacturing and export sectors in line with the world economy and merchandised trade revival. The restoration of domestic demand due to the relaxation of COVID-19 containment measures as well as accommodative fiscal and monetary policy will also play a crucial role in this strong recovery. In particular, **the economies of South Korea, Hong Kong, and Singapore** are expected to expand by 3.3 percent, 4.1 percent, and 5.9 percent, respectively, improving from the contractions of 1.0 percent, 5.9 percent, and 6.0 percent, respectively, in 2020. Also, these projections are upwardly revised from the previously forecasted growth rates of 2.9 percent, 3.5 percent, and 4.0 percent, respectively. Regardless, the political condition in Hong Kong is still a significant risk factor to its economy and investors' confidence. An elevation and prolongation of the conflict may put a drag on businesses as well as the overall economy to expand less than what is expected under the baseline scenario. Besides, **Taiwanese economy** is anticipated to grow by 4.2 percent, unchanged from the previous projection, accelerating from 2.9 percent in the previous year due to the continually expansion of export.

The ASEAN economies are likely to recover continually from the latter half of 2020 due to the rebound of the manufacturing and export sector stimulated by the better condition of the world economy and global trade, especially major economies and China which have been the key ASEAN trading partners. However, the new wave of COVID-19 outbreak and the limited capacity of the vaccine rollout will hinder the economic growth in 2021. Thus, **the economies of Malaysia and the Philippines** are expected to expand by 6.4 percent and 6.1 percent, respectively, lowering from 6.5 percent and 7.0 percent in the last forecast, due to the worsen pandemic situation in both countries since January 2021. Thus, this will especially curb the domestic demand recovery in the first half of 2021. For **Indonesia and Vietnam,** their economies are expected to increase by 6.0 percent and 6.2 percent, respectively, equal to the previous estimations, and improving from a 1.7-percent contraction and a 2.8-percent growth in the previous year, respectively.

Notwithstanding, there remains uncertainties that could derail the world economy and merchandise trade over 2021 from our baseline projection. The key limitations and risk factors needed to be consistently monitored include: (i) The COVID-19 pandemic that could be more severe and prolonged than expected, and the possibility of the resurgence of infections which could lead to longer and higher degree of lockdown measure and international travel restrictions over the remaining 2021. This factor could affect the recovery pace of the global economy and trade volume to be slow than expected. (ii) The effectiveness of COVID-19 vaccine, the distribution of vaccine globally, the virus variants which could undermine the effectiveness of vaccines and also the sluggish increasing of production capacity of COVID-19 vaccines could affect the baseline assumption on vaccine rollout in various countries to be slower than expected. (iii) The

[12] The 14th plan has key objective to boost Chinese domestic demand since its economy heavily relies on external demand. Hence, the plan aims to rebalance domestic (Internal Circulation) and foreign (External Circulation) markets through the following important measures: (1) replacing high growth with high-quality growth and reach GDP per capita level of developed country within 2035, (2) achieving technological independence and self-reliance by modernization through innovation and technological advancements, especially semi-conductor technology, and (3) reforming important areas such as intelligent property rights, income inequality between rural and urban areas and reform of land distribution.

fluctuations in the global economy and financial system which depend on the US policy direction of the new President administration, the volatility of international capital flow under the highly uncertain outbreak situation which may result in exchange rate fluctuation, and the geopolitical conflicts and political stability, particularly the China-Taiwan tension, the political situation in Hong Kong and Myanmar, and the conflicts in the Middle East, and (iv) the impact of the COVID-19 outbreak which could affect economic stability, specifically the weakened business and household balance sheet, in particular, higher debt levels, and the fragile labor market which has not fully recovered yet. This situation may halt the recovery of domestic consumption. Moreover, the limited policy space in several countries after the aggressively response to pandemic recently will become key constraints for the economic recovery.

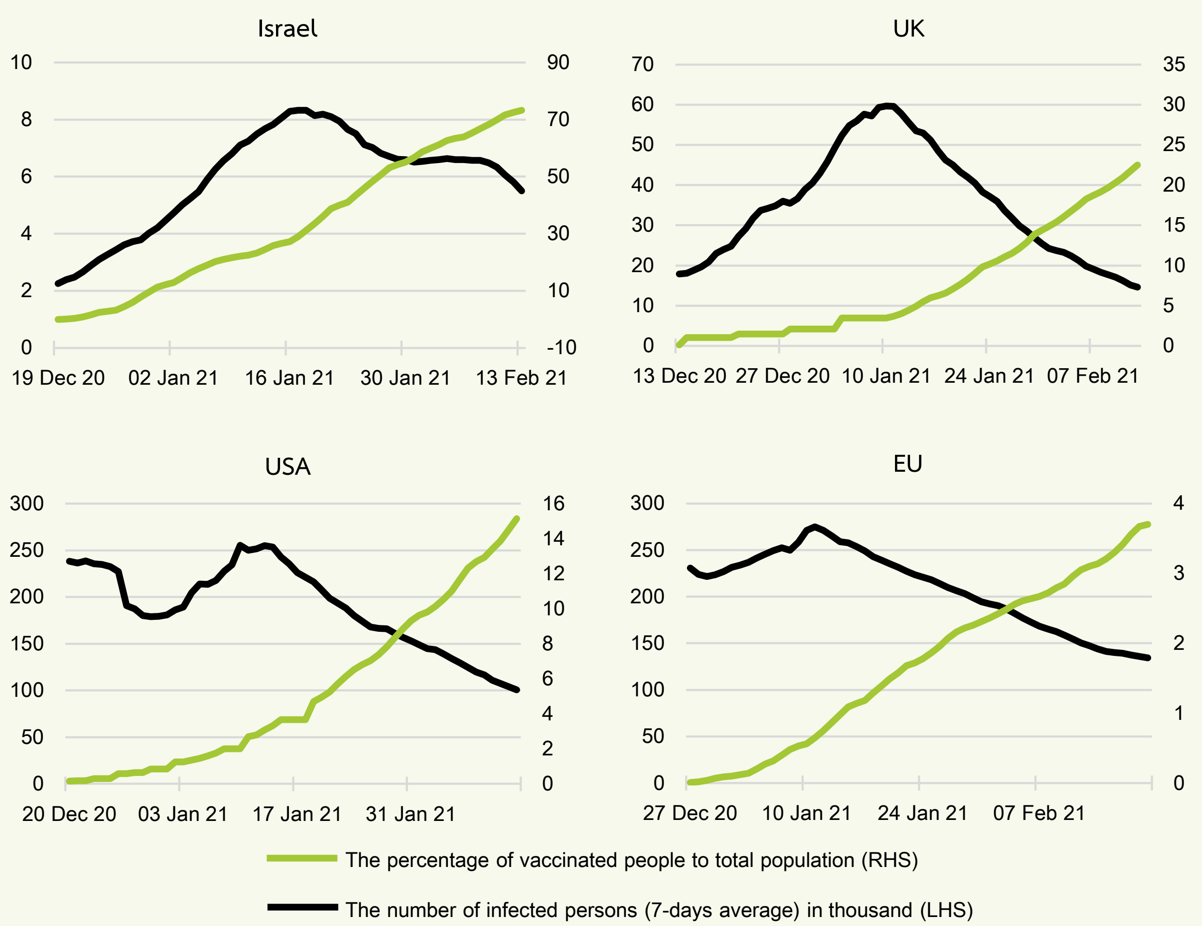
COVID-19 vaccination

The latest data on February 13th, 2021 suggests that many countries show the progress on vaccination to the citizens. Notably, Israel has reached the highest vaccination rate of 71 percent. Meanwhile, some developed countries with ability to produce vaccines, specifically the UK and the US reached the vaccination rate of 21 percent and 14 percent, respectively. On the other hand, some countries still have a low rate of vaccination, such as the European Union with 4 percent, China with 3 percent, Singapore with 4 percent, India with 1 percent and Indonesia with 0.5 percent. Also, many countries in Asia have not started the vaccination process, particularly South Korea, the Philippines, Malaysia and Thailand. In all, as observed countries with higher vaccination rate, the infected number is likely to decrease.

The percentage of vaccinated people to total population

Country	Data as of Feb 13th, 2021	Projection		
		H1/2021	H2/2021	H1/2022
Israel	71	>75	>75	>75
UAE	48	>75	>75	>75
UK	21	50	>75	>75
US	14	50	>75	>75
Europe	4	20	>75	>75
Singapore	4	60	>75	>75
China	3	40	>75	>75
India	1	60	>75	>75
Indonesia	0.5	7	40	67
Malaysia	0	44	>75	>75
Japan	0	30	>75	>75
Philippines	0	25	68	>75
South Korea	0	20	>75	>75
Thailand	0	12	50	70

Source: Compiled by NESDC as of Feb 13th, 2021



Source: Our World in Data

5. Thai Economic Outlook for 2021

The Thai economy in 2021 tends to recover continually from the latter half of 2020, with key supporting factors as follows: (i) the recovering trend of the world economy and the global trade volume in 2021, driven by the better-than-anticipated progress of the approval and distribution of the COVID-19 vaccine as well as possible additional monetary and fiscal boosts in major economies; (ii) the supports from government disbursements under the annual budgetary framework, state-owned enterprises' capital budget following progresses of key infrastructure projects, and the 1-trillion Baht loan decree; (iii) the gradual recovery of domestic demand both consumption and investments; and (iv) the uncommon low growth base of the economy in 2020. Nevertheless, the limitations and risks to the recovery during 2021 are (i) the uncertainties surrounding the pandemic both domestic and foreign, which may intensify or prolong the situation and thus leads to more stringent containment measures; (ii) the delays in the recovery of the tourism sector; (iii) financial conditions of the households and business sectors, especially amidst a non-fully recovered labor market and business activities; (iv) risk of drought; and (v) volatilities in the global economy and financial market.

Supporting factors for the economic growth:

1) **The recovery of global economy and the global trade volume in 2021,** continuing from the global economic recovery in the latter half of 2020, especially in the US, China, and the NIEs Economies that recovered faster than expected due to the relaxation of containment measures along with continued large-scale stimulus packages of major economies particularly the Eurozone and Japan, and the possible additional stimulus plans for the US. In addition, key supporting factors also include the progress of the faster-than-anticipated approval and distribution of the COVID-19 vaccine in major economies, resulting in declining number of new COVID-19 cases in countries such as Israel, the US, England, and the Eurozone.

2) **The support from government spending both in the annual budget, and other economic stimulus measures,** which consists of: (i) the FY2021 annual budget disbursement rate in the baseline assumption is expected to be at 93.5 percent of the overall budget framework, including the current budget and the capital budget which are expected to disbursed at 98.0 percent and 75.0 percent of total budget respectively, Consequently, it is expected that the FY2021 annual government budget should be disbursed around 3,072 billion Baht, increasing by 4.3 percent from 2,944 billion Baht in FY2020. Besides, the FY2021 carry-over budget disbursement rate is anticipated to be at 85.0 percent, accounting for approximately 183,000 million Baht; (ii) the disbursement under the 1 trillion loan decree[13] is expected to be disbursed around 800 billion Baht by the end of FY2021, in which 510 billion Baht will be disbursed during FY2021 with 76 percent growth compared to FY2020; (iii) the disbursement by state-owned enterprises' capital budget in FY2021, especially investments in key infrastructure investment projects, is projected to have a disbursement rate of 70.0 percent of the approved investment budget, compared with 65.0 percent in FY2020; and (iv) the support from other economic measures, such as soft loans provided by Specialized Financial Institutions and debt relief measures, policies to support affected labours, and discounted utilities expenses.

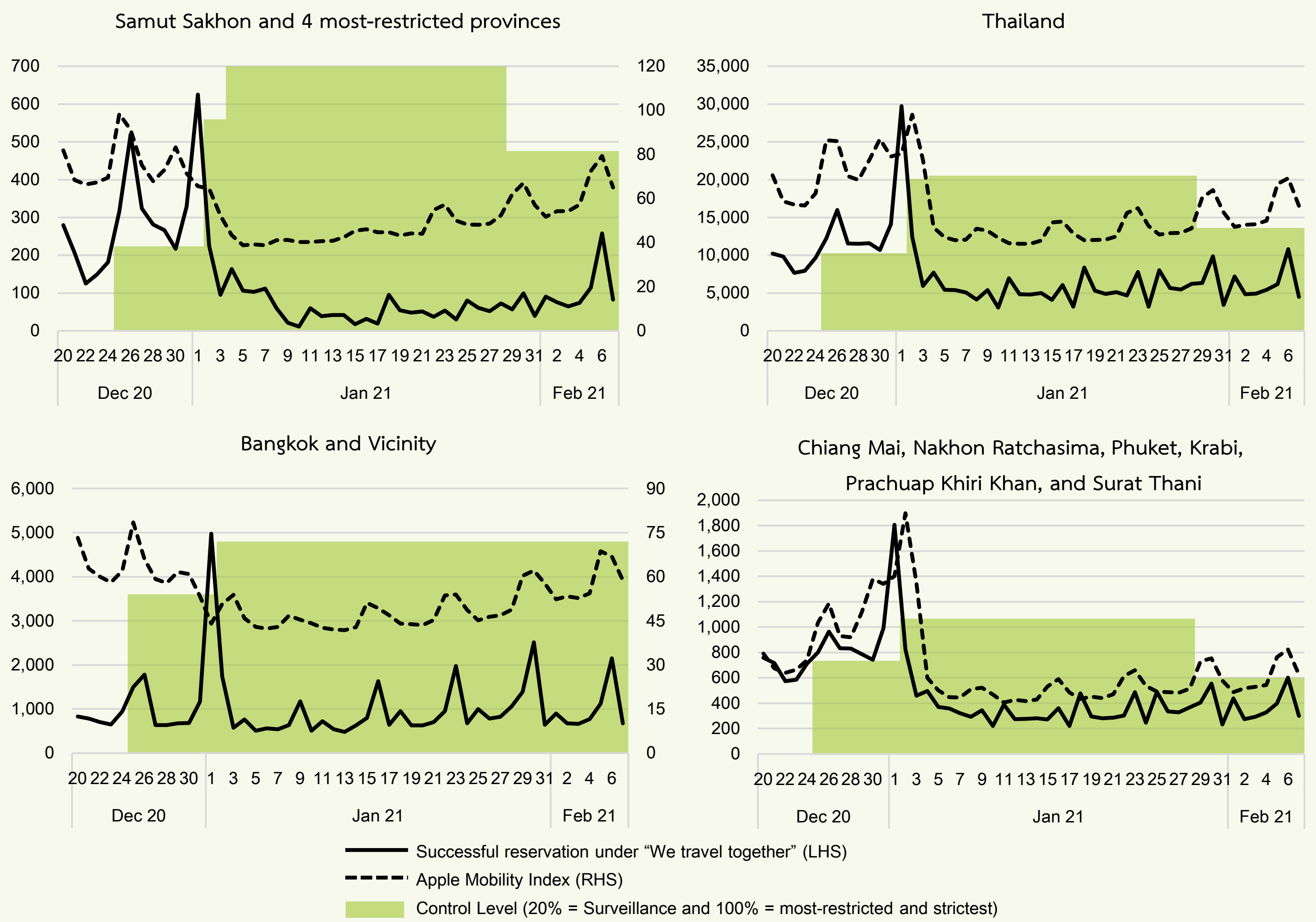
3) **The gradual recovery of domestic demand** after declining in 2020, mainly due to the rebound in household and business incomes following the improvement of manufacturing production, and export. Additionally, the government stimulus measures such as half-half scheme (co-payment for consumer spending), Shop Dee Mee Khuen scheme (tax rebate), and financial measures to provide liquidity to business sector have also contributed to the domestic demand boost. Moreover, the implementation of the partial lockdown restriction during the new wave of outbreak which have been varied across provinces depend on severity of the COVID-19 situation in each area, hence the impacts on economic activities from such lockdown are different from the nationwide lockdown during the first wave. The adaptation of business and consumers to social distancing and COVID-19 preventive measures also contribute to the recovery of domestic demand. Reflecting in the latest high-frequency data during January to February 2021, the indicators illustrated the higher level of tourism and economic activities than the first wave. For the pandemic situation, the number of new inflection report on February 13th, 2021 was 126 cases lower than the peak at 959 cases on January 26th, 2021, since then the number of new cases has been gradually descended. This improved situation together with the vaccination plan that tends to roll out vaccine to more people in the second half of 2021, will notably boost consumer and business confidences. Similarly, the private investment tends to recover in 2021, mainly due to a rebound of exports, resume manufacturing capacity utilization and high prospects of public investment. These circumstances will encourage private confidence to increase their investments.

4) **The unusually low growth base of the economy in 2020 due to the COVID-19 outbreak.** In fact, the Thai economy in 2020 decreased by 6.1 percent which was the first recession in 11 years. Likewise, the global economy also declined by 3.5 percent, the lowest rate since the World War II. Due to such low base effect, the global and the Thai economy in 2021 will recover under the recovery of exports, manufacturing production, and domestic demand.

[13] Emergency Decree Authorizing the Ministry of Finance to Raise Loans to Solve Problems, to Remedy and Restore the Economy and Society as Affected by the Coronavirus Disease Pandemic, B.E. 2563 (2020).

High frequency data indicates the recovering sign in traveling

Although the daily and cumulative cases of the new COVID-19 outbreak had been higher than the first wave during March to May 2020, it seemed to have less economic impact. This was primarily due to the partial lockdown measure which allowed the low infected areas to maintain economic activities, and the businesses' and consumers' adoption to the restriction and social distancing policies. Considering the high frequency data in January 2021, the Apple mobility index and actual daily check-in under the "We travel together program" showed that people had still traveled during the new outbreak as the new rounds of restrictions was not yet implemented and the period coincided with the new year holidays. The check-in showed a small decrease when the new lockdown was implemented and picked up after the ease of the restrictions in some areas since January 27th, 2021. Thus, this indicates the gradual sign of recovery of economic activities, especially in Bangkok and vicinity area. Nonetheless, other key tourism provinces in the Northern and Southern regions tend to show a slower recovery compared with the other areas.



Source: Tourism Authority of Thailand, processed by the NESDC

Risks and limitations to economic growth:

1) **The uncertainty of the pandemic situation and the possibility of delay in the vaccine rollout** could derail the growth forecasts under the baseline scenario. The current global newly infected cases per day remain high, although it gradually declined from its peak around mid-January, 2021. However, in some countries, the number of newly infected people per day continually increase, such as in Italy, Finland, Brazil, Turkey, and Iran. Furthermore, neighboring countries, particularly Malaysia, and Indonesia, still experiences high newly infected cases. At the same time, there are uncertainties regarding vaccines' efficiency, especially against virus mutations, possibilities of delays in vaccine rollout both in Thailand and abroad, as well as the limited capacity of healthcare system and inefficient management in each country, which could not effectively deliver country-wide vaccine distributions.

2) **The sluggish recovery of the tourism sector** causes by the uncertainty in a new wave of outbreak situation and vaccine distribution, both in Thailand and other countries, if the vaccination progress is not enough to restore the consumer confidence to travel safety particularly in major international tourism markets. Although most major economies have distributed vaccines and are expected to cover most of the population by the end of 2021, the vaccine rollouts in Thailand and some of major international tourist market are expected to be slower, compared to those developed countries. Thus, the international travel restriction and control measures are possible to be implemented longer than expected, which could cause the recovery of the tourism sector to be delay than expected in the baseline scenario, where it is expected to allow vaccinated tourists to enter Thailand without requirement for quarantine in the last quarter of 2021.

3) **Weakened financial conditions of the households and business sectors,** especially through rising household debt burden due to the pandemic, as well as labor market and business activities which are not fully recovered yet, will undermine the recovery of household spending and private investment. Even though, the ratio of non-performing loans (NPLs) to total loans in the third quarter of 2020 was relatively steady at 3.1 percent thanks to the government scheme to support small-size businesses such as reducing and postponing interest rate payment and debts restructuring, the ratio of special mention loans (SML) to the total loans stood at 7.2 percent, rising from 2.6 percent in the third quarter of last year. Moreover, household-debt-to-GDP ratio at the end of the third quarter was at 86.6 percent, increasing from 83.8 percent and 78.9 percent in the previous quarter and the third quarter of last year, respectively. At the same time, the labor market did not fully recover reflected by the high unemployment rate in the fourth quarter which remained at 1.86 percent, compared to 1.90 percent and 0.98 percent in the previous quarter and the same quarter of last year, consecutively. Essentially, the unemployment rates in sectors that had limitation to recover, such as accommodation sector, travel agency sector, office administration sector and construction sector, remain high, in line with the number of labors affected by temporary business closures[14] at the end of the fourth quarter was around 1,207,000 persons, increasing from 761,000 persons in the third quarter. This represented a sluggish recovery of the labor market which will be a crucial constraint for domestic demand recovery.

4) **Drought situation** as of February 11th, 2021, the total level of usable water in all dams and reservoirs was 16,424 million cubic meters, which accounted for 23.2 percent of total capacity and lowered than 22,698 million cubic meters of the 10-year average usable water level at the same period of the year. Record-low water levels were registered in Bhumibol, Srinakarin, and Vajiralongkorn dams. In the event that the water levels are not rising enough for agriculture uses especially for off-season rice of the crop year 2020/2021, the agricultural sector will be affected by the drought for the second consecutive year, and the agricultural production may not be able to recover as expected.

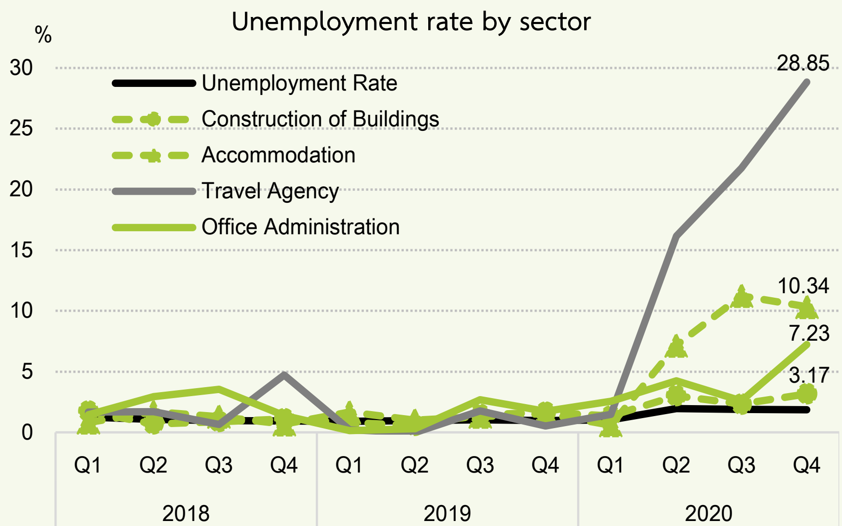
5) **The volatility and uncertainty of the world economy and financial market** need to be closely monitored and assessed are as follows: (i) the policy direction under the new US president administration, (ii) the fluctuation of capital flow under uncertainties in the pandemic situation and economic recovery, (iii) monetary policies adopted by major central banks over the next period, under a higher inflation pressure causing by economic recovery and higher commodity prices, (iv) risk of economic vulnerability, especially in those countries with weak economic stability and are severely impacted by COVID-19 such as Spain, Italy, Brazil, Argentina, Peru, Turkey and South Africa, and (v) geopolitical conflicts and political instability such as the conflict between China and Taiwan, the domestic political situation in Hong Kong and Myanmar, and conflict in the Middle East.

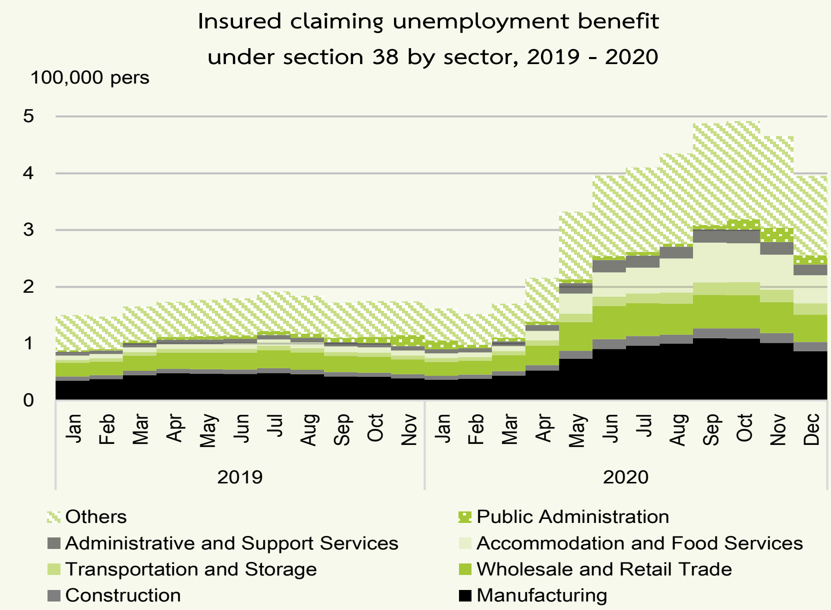
[14] Insured workers under section 75 of the Labor Protection Act 1998.

Labor market's Indicator reflects fragility of the Thai labor market.

The COVID-19 outbreak has a treme-ndous impact to the Thai economy and labor market. The unemployment rate in the fourth quarter of 2020 was at 1.86 percent, close to the level in the previous quarter, and increasing from the rate of 0.98 percent during the same period in 2019. Nonetheless, the impact of pandemic on each sector is different. Sectors with limitations to recovery, particularly the tourism-related sectors, still exhibit high unemployment rates. These include travel agency, accommodations, tourism agency, and related activities. Other sectors that still have high unemployment rate are office administration, office support service and other support service, and construction. Besides, unemployment claim (under section 33 of the Social Security act) remains high at 395,013 persons in December 2020, increasing from 161,984 persons in January 2020 despite a gradual decrease in the last quarter of 2020.

In all, the labor market is still fragile due to the resurgence of the outbreak and the slow recovery of tourism sector. Thus, further policy should focus specifically on sectors and workers in affected businesses and areas, such as job retention, job creations for unemployed workers, and skill training for those who may need to reskill and shift the job.





Source: National Statistical Office and Social Security Office

Key assumptions for 2021 economic projection:

Key Assumptions

	Actual Data			Projection for 2021	
	2018	2019	2020	Nov 16, 2020	Feb 15, 2021
World Economic Growth (%)[1]	3.8	3.0	-3.5	4.9	5.2
USA	3.0	2.2	-3.5	3.4	4.8
EU	1.9	1.3	-6.8	4.8	4.3
Japan[2]	0.3	0.7	-5.7	2.4	2.4
China	6.7	6.1	2.3	7.5	7.7
World Trade Volume (%)	3.9	1.0	-11.0	5.0	6.7
Exchange Rate (Baht/US Dollar)	32.3	31.0	31.3	30.3 – 31.3	29.5 – 30.5
Dubai Crude Oil (US Dollar/Barrel)	69.5	63.3	42.1	41.0 – 51.0	48.0 – 58.0
Export Price (US Dollar) (%)	3.4	0.3	-1.0	0.5 – 1.5	1.5 – 2.5
Import Price (US Dollar) (%)	5.6	0.2	-2.0	1.0 – 2.0	2.0 – 3.0
Income from Tourism (Trillion Baht)	1.82	1.85	0.44	0.49	0.32

Note: [1] World economic growth is calculated by trade weight of key economic partners in 2019 (15 economies)
[2] Forecasted, since the data available is only up to the 3rd quarter of 2020.

Source: NESDC

1) **The assumptions for the pandemic and vaccines** are as follows: (i) The new outbreak in Thailand does not intensify and spread to other provinces which can lead to further restriction measures. In the base case, it is expected that the number of new cases in the country will be peak in February 2021, and the pandemic will be kept within the limited area by March, (ii) the vaccines are expected to be effective against COVID-19 and compatible with the human immune system, and (iii) the assumptions for vaccines roll out in the base case scenario is such that in the developed countries at least 50 percent of a population are expected to receive the vaccine by the first half of 2021 and 75 percent of the population by the end of 2021, and in the developing countries, and the emerging market and developing countries including Thailand, at least 50 percent of a population are expected to receive the vaccine by the late 2021 and to reach 75 percent by the first half of 2022. Accordingly, under this baseline assumptions, Thailand and major tourist originating countries are expected to ease their international travel restrictions in the last quarter of 2021. However, the relaxation will be under strict COVID-19 prevention guidelines.

2) **The world economy and the global trade volume in 2021 are expected to expand by 5.2 percent and 6.7 percent, respectively,** which are upward revisions from the growth of 4.9 percent and 5.0 percent in the previous projection, and improving from the 3.5-percent and 11.0-percent contractions in 2020. The adjustments were in accordance with the faster-than-expected economic recovery of major countries, particularly the US, China, and Newly Industrialized Economies. There is also support from the progress on vaccine approval and vaccine rollout to the population in the key economies starting from mid-December 2020. Simultaneously, additional stimulus measures from the government in terms of easing fiscal and monetary policies are expected to be continually implemented in order to boost domestic demand.

3) **The average value of Thai Baht in 2021 is expected to be in the range of 29.5 – 30.5 Baht per US dollar,** appreciating from 31.3 Baht per US dollar in 2020 and 30.3 – 31.3 Baht per US dollar in the assumption of the previous estimation. This expectation is in line with the progress of vaccination and a faster-than-expected global economic recovery, resulting in investors being more encouraged to move their capital from safe assets to emerging market economies and Thailand. However, there is a risk from the fluctuation of the Baht under the uncertainty of the pandemic situation, vaccine efficiency, and the direction of the policies of major economies which will be implemented to cope with the rising inflation. At the same time, the increase of the US government's long -term bond yield will undermine the depreciation of the US dollar.

4) **The average Dubai crude oil price in 2021 is expected to be within the range of 48.0 – 58.0 US dollars per barrel, an increase from 42.1 US dollars per barrel average in 2020** and is higher than the previous assumed range of 41.0 - 51.0 US dollars per barrel in the previous projection. The factors contributing to upside risks are: (i) the prospect of better-than-expected global economic recovery during 2021, which will drive oil demand. In particular, the US Energy Information Administration (EIA) has forecasted in January 2021 that global oil demand in 2021 will increase by 5.1 million barrels per day from 2020, a growth by 6.0 percent compared to the 8.9-percent decline in 2020, (ii) the agreement among the OPEC as well as its alliances (OPEC+) leading to production cuts during 2021, with Saudi Arabia agreeing to cut further by 1 million barrel per day during February and March 2021, (iii) the low level of US crude oil inventory, which at the end of January was at 70.7 percent of total working storage capacity, which is a 44-week low and lower than before COVID-19 outbreak in the US, and (iv) within-OPEC geopolitical conflicts which could cause delays in production cut such as the events of Indonesia seizing Iranian tanker and explosions in Saudi Arabia. Nevertheless, the oil price is also subject to downward pressures as follows: (i) the highly uncertain COVID-19 situation as well as the tendency to mutate which will undermine vaccines' efficiency, (ii) the increasing number of oil rigs in the US to 305

rigs at the end of December 2020, which is the fifth consecutive month of increases, and (iii) high levels of petroleum and other liquids commercial inventory of the US and OECD economies at the end 2020 which was higher than anticipated by the EIA in October 2020.

5) **The export and import prices in US dollar term in 2021 are expected to increase by 1.5 - 2.5 percent and 2.0 - 3.0 percent, respectively, with midpoints being at 2.0 percent and 2.5 percent, respectively, compared with the previous year's rates of 1.0 percent and 2.0 percent.** These are upward revisions from the previous projection, in line with the oil price assumption and global economic and trade volume expected recovery in 2021.

6) **The revenue from foreign tourists in 2021 is expected to be 320 billion Baht,** which is lower from 440 billion Baht in 2020 or a decrease by 27.1 percent, and downwardly revised from 490 billion in the previous projection. The estimation was in line with a lower assumption of anticipated inbound foreign tourists from 5.0 million people in the previous projection to 3.2 million people in this forecast, or decreased by 52.9 percent from 2020. The projection is under the baseline assumption of prolonged COVID-19 outbreaks in many countries and the new wave of outbreak in Thailand. Besides, there are still uncertainties stemming from vaccines' efficiency, especially against virus mutations, and probabilities of delays in vaccine rollouts in many countries, especially in major tourist originating countries. Hence, the international travelling policy in this year will depend primarily on those factors. Nevertheless, in the baseline scenario, it is expected that most countries, including Thailand, would be able to widely distribute vaccine within the fourth quarter of 2021. Thus, the international travelling restriction particularly quarantine requirement is possibly relaxed in the last quarter, by shortening a length of mandatory quarantine period or entirely eliminating quarantine requirement. As a result of that the number of foreign tourists coming to Thailand is expected to increase in the last quarter of the year. However, the process of easing quarantine restrictions would be made gradually under the condition that vaccination could reduce infection significantly and would be allowed only to some specific cases, such as those from the vaccinated countries.

7) **The budget disbursement are as follows:** (i) The FY2021 annual budget disbursement rate of 93.5 percent of overall budget, downwardly revised from 94.4 percent in the previous projection. The current budget is expected to be disbursed by 98.0 percent, equal to the previous estimation. The capital budget is expected to be disbursed by 75.0 percent, lower than an 80.0-percent disbursement rate in the past projection due to a lower-than-expected disbursement rate of capital budget in the first quarter of FY2021. (ii) The carry-over budget disbursement rate of 85.0, the same level as in the previous estimate. (iii) State-owned enterprises' capital budget disbursement of 70.0 percent, equal to the previous assumption. (iv) As of February 11th, the budget under the 1 trillion Baht loan Decree has been disbursed by 402 billion Baht, and expected that about 510 billion Baht will be disbursed during FY2021, compared with a disbursement of 290 billion Baht in FY2021. Therefore, the cumulative disbursement by the end of FY2021 is expected to be 800 billion Baht, accounting for an 80.0 percent disbursement rate of the total budget, and an upward revision from a disbursement rate of 70.0-perceent in the previous projection. The adjustment was in regard to new measures to support those affected people from the new transmissions, particularly the Rao-Cha-Na and Rao-Rak-Kan programs worth 247 billion Baht in total.

Economic Projection for the Thai Economy in 2021:

The Thai economy in 2021 is projected to expand by 2.5 - 3.5 percent (with a midpoint of 3.0 percent), compared with the 6.1-percent contraction in 2020. Headline inflation is expected to be within 1.0 - 2.0 percent compared with -0.8 percent in the previous year and the current account is projected to record a surplus of 2.3 percent of GDP, compared with 3.3 percent in 2020.

In the February 15th, 2021, press release, the NESDC estimated that the Thai economy in 2021 is expected to expand by 2.5 - 3.5 percent, with the midpoint forecast at 3.0 percent and was downwardly revised from the range of 3.5 - 4.5 percent in the previous projection released on November 16th, 2020. The corresponding revisions in key growth components to be consistent with changing conditions and revised assumptions are as follows:

1) **The revision on the estimated private consumption and investment:** Due to the new wave of the coronavirus intensifying since December 2020, the government had to announce the containment measures in some areas on January 3rd, 2021. The intensity of the measures varied across areas depending on the pandemic situation[15], which will inevitably negatively affect the recovery of consumption and investments during the first quarter of 2021 to be slower than previously projected. In 2021, private consumption and investments are forecasted to expand by 2.0 percent and 3.8 percent, compared with the previously estimated 2.4 percent and 4.2 percent, respectively.

2) **The revision on the exports of service projection:** Exports of services was re-estimated to be more in line with the slower-than-forecasted recovery of the tourism sector, resulted from both domestic and global pandemic situation which delayed the international traveling in Thailand and foreign countries. Therefore, the number of tourists in 2021 is expected to be 3.2 million people, lower than 5.0 million people in the November projection and 6.7 million people in 2020. The corresponding receipts are therefore forecasted at 0.32 trillion Baht, compared with 0.49 trillion Baht in the previous forecast and 0.44 trillion Baht in 2020.

[15] The announcement by the Centre for COVID-19 Situation Administration (CCSA) numbered 1/2021 dated January 3rd, 2021, grouped the 77 provinces into (i) the maximum controlled, (ii) the controlled, and (iii) the vigilant. Subsequently on January 5th, 5 provinces were classified as the maximum controlled and strict.

3) **The revision on the public investment:** Public investment is adjusted to comply with the data from the first quarter of FY2021, where the capital budget was disbursed by 11.2 percent, lower than expected. As such, the capital budget disbursement is expected to be 75.0 percent throughout the FY2021, in comparison with 80 percent in the previous estimation. The overall budget disbursement in FY2021 is therefore expected at 93.5 percent of the total budget, a downward revision from 94.4 percent in the previous forecast.

4) **The revision on the global economy and trade volume assumption:** The adjustments were in tandem with the better-than-expected performance of the major economies, especially in the US, China, India, and the NIEs. In addition, the world economy tends to be buttressed by the progresses in vaccine distribution in the developed economies, which will consequently lead to better-than-expected recoveries in the manufacturing sector and domestic demand. In 2021, the world economy and global trade volume are expected to expand by 5.2 percent and 6.7 percent, respectively, upward revisions from the 4.9-percent and 5.0-percent growths in the previous estimation. The faster-than-expected global economy will be major supporting factors to growth of Thai exports and manufacturing production.

Key components of the economic growth:

1) **Total consumption: (1) Private consumption expenditure** is expected to grow by 2.0 percent, improving from a decrease of 1.0 percent in 2020, but a downward revision from a 2.4 percent growth in the previous estimation. This was mainly due to the resurgence of domestic infections since December 2020 which affected consumer confidence and has led to a partial containment and lockdown measures in some areas with highly infected cases. Nevertheless, under the baseline scenario, the new wave of domestic outbreak will be contained within the first quarter of 2021. Meanwhile, private consumption for the remainder of the year will be bolstered by the improved income base from export and farmers' income, together with supports from government measures to alleviate the vulnerable group and stimulate domestic demand. **(2) Government consumption expenditure** is estimated to expand by 5.1 percent, accelerating from a 0.8-percent growth in 2020, and an upward revision from a 4.7-percent growth in the previous projection. This follows the expectation that the budget under the 1-trillion-baht loan decree will be disbursed by 80 percent by the end of FY2021, an upward revision from 70 percent disbursement in the previous projection. The upward revision was also in line with the current budget disbursement assumptions for FY2021 at the rate of 98.0 percent, compared with 97.4 percent disbursement rate in FY2020.

2) **Total investment** is expected to grow by 5.7 percent, compared with a decline of 4.8 percent in 2020. **(1) Public investment** is projected to increase by 10.7 percent, speeding up from 5.7 percent in 2020 but revised down from a 12.4-percent expansion in the previous projection. This downward revision is mainly due to the expected lower capital budget disbursement to be at 75 percent, revising from the 80-percent disbursement in the previous estimation. **(2) Private investment** is likely to expand by 3.8 percent, improving from an 8.4-percent contraction in 2020 but a downward revision from a 4.2-percent growth in the last projection. This downward revision is mainly due to the impact from the resurgence of domestic infections. Nevertheless, the pickup of manufacturing production and exports following the recovery of the world economy and global merchandize trade will be key supporting factors for private investment to improve from last year.

3) **Export value of goods in US dollar terms** is anticipated to grow by 5.8 percent, improving from a 6.6-percent contraction in 2020, and an upward revision from a 4.2-percent expansion in the previous projection. Export volume is forecasted to grow by 3.8 percent, revised upwardly from 3.2 percent in the previous projection due to (i) the change in the growth assumptions of the world economy and global trade volume in 2021 from 4.9 percent and 5.0 percent in the previous assumption to 5.2 percent and 6.7 percent, respectively, and (ii) the revision of export prices from a 1.0-percent to a 2.0-percent growth. On the other hand, the downward adjustment of revenue from foreign tourists resulted in slower-than-expected growth of export of services. Therefore, export quantity of goods and services is expected to decline by 0.2 percent, revised from a 0.1-percent increase in the previous estimation and compared with a 19.4-percent decline in 2020.

4) **Import value of goods in US dollar term** is expected to grow by 6.5 percent, compared with a 13.5-percent contraction in 2020 and an upward revision from 5.3 percent in the previous projection. This was a direct result from the import volume which is expected to grow by 4.0 percent following export recovery and import price which is expected to increase by 2.5 percent due to the oil price adjustment. Together with service import downward adjustment, it is expected that the import volume of goods and services in 2021 will fall by 0.5 percent, in contrast to a 0.3-percent increase in the last projection and a 15.3-percent decline in 2020.

5) **Trade balance** is estimated to register a surplus of 40.8 billion US dollars, compared with a surplus of 39.8 billion US dollars in 2020 and revised upwardly from a surplus of 37.9 billion US dollars in the previous projection. The revision owes to the growth of export value which is expected to be higher than that of the import value. Considering with higher services account deficit, the current account is expected to register a surplus of 12.4 billion US dollars, accounting for 2.3 percent of the GDP, compared with a surplus of 16.5 billion US dollars or 3.3 percent of GDP in the previous year.

6) **Economic stability:** The average headline inflation in 2021 is expected to be in the range of 1.0 – 2.0 percent, compared with (-0.8) percent in 2020 and the range of 0.7 – 1.7 percent in the previous projection. The upward adjustment was in consistent with the faster-than-expected prices of crude oil and major agricultural commodities prices.

6. Economic Management for the Year 2021

The Thai economy in the year 2021 is expected to continually recover from the latter half of 2020, with key supporting factors consisting of (i) the global economic and merchandise trade volume recovery, which will support the expansion of exports and manufacturing production, (ii) the supports from government expenditure, investment, and economic measures, and (iii) the gradual pace of domestic private demand recovery. However, the economic recovery is subject to several risks and limitations including an uncertain situation of COVID-19, delayed tourism recovery, financial conditions of both households and businesses, together with risks of drought and volatilities in the global economy and financial markets. Under such constraints, the economic management during the year 2021 need to prioritize on the following policy issues:

1) **Containing the outbreak and preventing another wave in order to curve down the number of infected as well as contain the affected areas** by (i) complying strictly with government's control and preventive measures, and (ii) acquiring sufficient vaccines and widely distributing vaccines in order to create herd immunity, as well as prioritizing vaccination in key tourism destinations and manufacturing production bases, coupled with prioritizing public health concerns.

2) **Preserving domestic political environment** to prevent further downward pressure on the economic recovery and overall confidence, which will adversely affect economic recovery and expansion amidst vulnerabilities arising from the COVID-19 outbreak.

3) **Supporting affected sectors experiencing limitations on the recovery,** particularly tourism and related services which are still constrained from international travel restrictions, and providing additional liquidity and debt relief measures for small and medium firms. Special emphases should be put upon (i) expediting and monitoring ongoing financial and fiscal measures to precisely and efficiently support the target groups, together with considering additional measures and conforming the existing measures to be more coincide with the volatile situation and to assist sector-specific and region-specific difficulties and limitations over the recovery path, (ii) considering additional financial measures for tourism and related services, particularly accommodation services, to be able to maintain their business and return to normal course of activities after the crisis, (iii) Formulating measures assisting the labor force and SMEs, especially those within sectors and economic regions impacted by the pandemic, such as labor retention, new job creation for the unemployed, and upskilling and reskilling labors for those need to transition to other lines of work, and (iv) promoting domestic tourism during the period in which re-opening to foreign tourists is not yet possible, along with encouraging consumption of domestically produced goods.

4) **Maintaining growth momentum from government expenditure and investments,** by (i) expediting the FY2021's annual budget disbursement rate to be at least 93.5 percent of the total budget, with current and capital budget disbursement rates of no less than 98.0 and 75.0 percent, respectively, (ii) speeding up the carry-over budget disbursement rate to be at least 85.0 percent, (iii) accelerating the state-owned enterprises' capital budget disbursement rate to be no less than 70.0 percent, and (iv) ensuring that the disbursement under the Emergency Decree Authorizing the Ministry of Finance to Raise Loans to Solve Problems, to Remedy and Restore the Economy and Society as Affected by the Coronavirus Disease Pandemic, B.E. 2563 (2020) is at least 80.0 percent of the 1 trillion Baht loan line.

5) **Encouraging export of goods,** in order to increase foreign income from trade and bolster manufacturing and private investment recovery by focusing on: (i) boosting exports of commodities which are highly demanded due to the outbreak, (ii) building confidence in Thai products along with ensuring strict disease containment in key manufacturing bases, (iii) utilizing benefits from Regional Comprehensive Economic Partnership (RCEP), along with extending economic and trade cooperation under key international agreements in forms of bilateral or multilateral agreements, with the intention to expand export markets. In particular, clear means of negotiation should be prepared to decide whether Thailand should join Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). In addition, ongoing free trade area (FTA) negotiations should be accelerated and possibility of FTA with new partners should be studied, especially the EU, European Free Trade Association (EFTA), and UK after Brexit, (iv) prioritizing international agreements that could be used as obligations and lead to trade restrictions, (v) developing quality and uplifting standards of the agricultural, food, and manufactured products to be in accordance with the importing countries' requirements, (vi) reducing production costs of key products in order to alleviate the pressure from neighboring economies' rising competitiveness and Thai Baht's appreciation, and (vii) shielding the export sector from exchange rate fluctuations;

6) **Stimulating private investment** by: (i) speeding up projects already approved and holding investment promotion certificates during 2018 – 2020 to start their actual investments, especially those projects within the target industries as specified under Thailand's investment promotion policy, (ii) minimizing difficulties and obstacles hindering foreign investors and entrepreneurs from investing and conducting businesses in Thailand, (iii) implement proactive investment promotions and facilitate investors particularly in target industries, by utilizing investment promotions, readiness and connectivity of transportation infrastructure, and the potential of the special economic areas, (iv) encourage investments in special economic zones (10 provinces) and southern border provinces, in order to boost up regional investments, and (v) emphasizing policies for uplifting Thailand's long-run potential economic growth, particularly the developments of special economic zones and transportation infrastructures to be as scheduled, together with the restructuring of key manufacturing and services sectors.

7) **Preparations for re-opening to foreign tourists,** in order that the tourism and related sectors may promptly recover after wide vaccine distribution both in Thailand and foreign countries in which tourists originate, as well as ensuring confidence regarding international travel health safety.

8) **Arranging preemptive measures for risks of drought and the corresponding effects on farmers' income,** with special attention to: (i) closely monitoring water levels both inside and outside of irrigation zones, together with preventing and alleviating the impact from the drought, (ii) increasing efficiency of water usage for agricultural purposes, (iii) supporting the transition of agricultural production to drought-tolerant plants, (iv) resolving some agricultural products whose prices are inadequately recovering, as well as prioritizing exports of key agricultural products, (v) promoting online marketing and commerce to support direct sales of agricultural products from farmers to consumers, in order to increase profit share to the farmers, (vi) encouraging small-scale farmers and farmlands grouping to promote economies of scale, enhancing productivity, and sharing of farm equipment, with appropriate incentives from the government, and (vii) employing credit measures to support farmers' liquidity in order to prevent oversupply.

9) **Monitoring and preparing for cushioning the impact of world economic and financial fluctuations,** which may affect the Thai economy, along with maintaining domestic economic stability.

Key Implemented Government Measures to remedy and mitigate impacts from COVID-19 outbreak

Measures	Details
1. Measures to remedy households	
Cost of living support	• Maintaining the fixed wholesale prices of LPG at the refinery (Jan – Mar 2021) • Reducing Ft surcharge from -12.43 to -15.32 Satang/unit (Jan – Apr 2021) • Extending the exemption period of the minimum electricity charge (Jan – Mar 2021) • Supporting electricity and water expenses for those with national social-welfare card (Oct 2020 – Nov 2021) • Supporting electricity, water, and internet expenses for the general public and small enterprises (Feb – Mar 2021 billing periods)
Extension of personal income tax filing deadline	• Extension of personal income tax filing deadline through online system (For the year 2019 can be filed on 31 August 2020, extending from April 8th, 2020, and for the year 2020 can be filed by June 30th, 2021, extending from April 8th, 2021)
Consumption boosting and purchasing power support	• Increasing a credit line of social welfare card by 500 Baht per person per month (until end of March 2021) • The “Kon-La-Kreung” or “Half-Half” scheme, co-paying by 50 percent from the government up to 150 Baht per person per day or 3,500 Baht in total through G-wallet on Pao-Tang Application. • “Shop-dee-mee-kuen”, tax deduction in the tax year 2020 for individual income tax payer who shopped (Maximum tax allowance of 30,000 Baht)
Compensation for self-employed worker, vulnerable groups, and agricultural workers/farmers	• 7,000 Baht per person direct cash transfer for self-employed worker, vulnerable groups, agricultural workers/farmers, low-income groups, and people with social welfare cards (Feb – Mar 2021) • Cash transfer for the insured under section 33 of the social security fund up to 4,000 Baht per person (Mar – Apr 2021)
Soft loans for SFIs	• Personal Loan for self-employed workers and regular-income earners, by Government Savings Bank (GSB) with total credit line of 25 billion Baht • Personal Loan for individuals by the Government Savings Bank (GSB) with total credit line of 10 billion Baht • Personal Loan for self-employed worker from the Bank for Agriculture and Agricultural Cooperatives (BAAC) with total credit line of 20 billion Baht • Soft Loan for low-income earners through Office of The Government Pawnshop under Government Savings Bank (GSB) with total credit line of 2 billion Baht
2. Measures to support tourism sector	
We Travel Together	• Giving subsidy of 40 percent for hotel accommodation per night, up to 15 nights per person for a total of 6 million room with e-voucher up to 900 Baht per room per night and airplane ticket cash back up to 2,000 Baht (July 2020 – April 2021)
KamLangJai	• Subsidies for the Village Health Volunteer (VHV) to travel via travel agencies
Opening for Special Tourist Visa (STV) holders	• Special Tourist VISA for long-stay tourists
Workation Thailand	• Cooperation between the government, companies, and state enterprises to book hotel accommodation in order to support job retention.
Measures to support travel for foreign tourist	• Amazing Thailand Plus Special Package to provide one-stop service, including flight booking, VISA application, hotel/ accommodation/ alternative state quarantine and tourism services booking.

Key Implemented Government Measures to remedy and mitigate impacts from COVID-19 outbreak

3. Measures to support businesses and SMEs	
Financial support measures for SMEs borrower	• Measures reduction of interest rates and Financial Institutions Development Fund (FIDF) fee as well as the adjustment of default interest calculations for debt repayment. • Soft loan measures for affected businesses under the Emergency Decree on the Provision of Financial Assistance for Entrepreneurs Affected by COVID-19 Pandemic, B.E. 2563 (2020) (500,000 million Baht) • Measures to support and mitigate debt for borrowers with multi-creditors (DR BIZ program) by Bank Of Thailand • Measures to extend supports for affected retail borrowers (until 30 June 2021) • Support Small and Medium Enterprises (SMEs) to access public procurement • Setting the new standard for credit term in Thailand (Trade debtors must settle within 30 – 45 days)
Measures to support financial liquidity	• Soft loan for tourism and related businesses which are directly or indirectly affected from COVID-19, by Government Saving Bank (150 billion Baht) • Loan for small entrepreneurs by Small and Medium Enterprise Development Bank of Thailand (SMEs Bank) (10 billion Baht) • Loan for employment support measures by Social Security Office (30 billion Baht) • The empowering loan scheme by Government Saving Bank (10 billion Baht) • Thai tourism recovery relief loan scheme by Government Saving Bank (5 billion Baht) • The Land-quarantined scheme for SMEs by Government Saving Bank (10 billion Baht)
Measures to support financial liquidity (Credit guarantee)	• SMEs portfolio guarantee scheme: Thai fight COVID-19 (Under portfolio guarantee scheme phase 9 worth 150 billion Baht) with budget of 5 billion Baht (TCG). • Micro portfolio guarantee scheme: Thai fight COVID-19 (Under portfolio guarantee scheme phase 4 worth 25 billion Baht) with budget of 5 billion Baht (TCG). • PGS soft loan (plus) portfolio guarantee scheme with budget of 57 billion Baht for the range of 8 years. As of January 4th, 2021, the total portfolio guarantee is 3 billion Baht.
Measures to promote debt restructuring	• Measures to provide additional particular support for each borrower after the debt restructuring under soft-loan decree, including holding on principal payment, reducing interest rate, and extending debt repayment period.
4. Measures to support affected workers	
Measures to reduce social security fund contributions	• Reduction of required contributions to the Social Security Fund (SSF) under section 33 from 5 percent to 3 percent in January 2021 and to 0.5 percent in February and March, or 3 months in total.
Measures to increase unemployment benefits	• Unemployment benefit for the insured under section 33, receiving compensation by 50 percent of their wage up to 90 days. • Protecting the insured under section 33 in case they are laid off or resigned
Measures for employment support	• Employment support from public and private sectors for the newly graduated, a 50 percent education-level-based wage subsidy. • Launched "Job Expo Thailand 2020 million jobs for million workers" and developed job matching system • Soft loans to support employment (30 billion Baht)

Projection for 2021[1/]

	Actual Data			Projection for 2021	
	2018	**2019**	**2020**	**Nov 16, 2020**	**Feb 15, 2021**
GDP (at current prices: Bil. Bht)	16,368.7	16,898.1	15,703.0	16,528.5	16,409.7
GDP per capita (Bht per year)	236,861.1	243,787.1	225,913.8	237,178.6	235,474.0
GDP (at current prices: Bil. USD)	506.4	544.3	501.8	536.6	547.0
GDP per capita (USD per year)	7,328.2	7,852.7	7,219.2	7,700.6	7,849.1
GDP Growth (CVM, %)	4.2	2.3	-6.1	3.5 - 4.5	2.5 - 3.5
Investment (CVM, %)[2/]	3.8	2.0	-4.8	6.6	5.7
Private (CVM, %)	4.1	2.7	-8.4	4.2	3.8
Public (CVM, %)	2.8	0.1	5.7	12.4	10.7
Private Consumption (CVM, %)	4.6	4.0	-1.0	2.4	2.0
Government Consumption (CVM, %)	2.6	1.7	0.8	4.7	5.1
Export volume of goods & services (%)	3.4	-3.0	-19.4	0.1	-0.2
Export value of goods (Bil. USD)	251.1	242.7	226.7	233.9	239.9
Growth rate (%)[3/]	7.5	-3.3	-6.6	4.2	5.8
Growth rate (Volume, %)[3/]	3.9	-3.7	-5.9	3.2	3.8
Import volume of goods & services (%)	8.3	-5.2	-13.3	0.3	-0.5
Import value of goods (Bil. USD)	228.7	216.0	186.9	196.0	199.0
Growth rate (%)[3/]	13.7	-5.6	-13.5	5.3	6.5
Growth rate (Volume, %)[3/]	7.7	-5.7	-11.8	3.8	4.0
Trade balance (Bil. USD)	22.4	26.7	39.8	37.9	40.8
Current account balance (Bil. USD)	28.4	38.2	16.5	13.9	12.4
Current account to GDP (%)	5.6	7.0	3.3	2.6	2.3
Inflation (%)					
CPI	1.1	0.7	-0.8	0.7 - 1.7	1.0 - 2.0
GDP Deflator	1.4	0.9	-1.0	0.7 - 1.7	1.0 - 2.0

Source: Office of the National Economic and Social Development Council, 15th February 2021

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

[2/] Investment means Gross Fixed Capital Formation

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