



NESDC ECONOMIC REPORT

Thai Economic Performance in Q2 and Outlook for 2022

Macroeconomic Strategy and Planning Division

Press Release 9.30 a.m. August 15, 2022



The Thai Economy in the second quarter of 2022 expanded by 2.5 percent (%YoY), accelerating from a 2.3-percent growth in the previous quarter. After seasonally adjusted, the economy increased by 0.7 percent from the first quarter of 2021 (%QoQ sa). **In the first half of 2022**, the economy grew by 2.4 percent.



On expenditure side: private consumption expenditure and export of services accelerated. Export of goods, government consumption expenditure, and private investment slowed down, while public investment declined.



On the production side: accommodation and food service activities sector, wholesale and retail trades sector, and transportation and storage sector accelerated. On the contrary, agricultural sector and the electricity, gas, steam, and air conditioning supply sector decelerated while the manufacturing sector and the construction sector decreased.

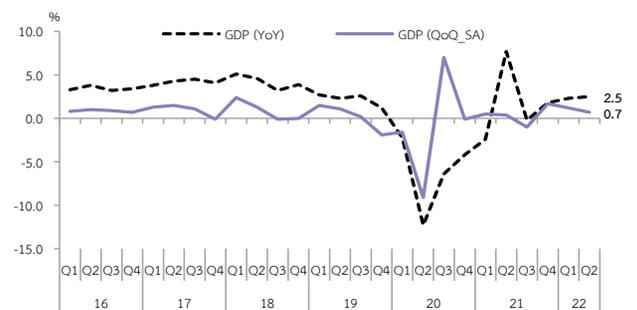
The Thai economy in 2022 is projected to expand in the range of 2.7 - 3.2 percent, mainly supported by; (i) the improvement in private consumption; (ii) the recovery of tourism sector; and (iii) the continual expansion of export of goods. Export value of goods in US dollar terms is anticipated to expand by 7.9 percent. Meanwhile, private consumption expenditure and private investment are expected to increase by 4.4 percent and 3.1 percent, respectively. Headline inflation is estimated to be in the range of 6.3 - 6.8 percent and the current account is projected to record a deficit of 1.6 percent of GDP.

Economic Projection for 2022

(%YoY)	2021		2022		
	Year	Q4	Q1	Q2	Year (f)
GDP (CVM)	1.5	1.8	2.3	2.5	2.7-3.2
Investment ^{1/}	3.4	-0.2	0.8	-1.0	2.8
Private	3.3	-0.8	2.9	2.3	3.1
Public	3.8	1.7	-4.7	-9.0	2.0
Private Consumption	0.3	0.4	3.5	6.9	4.4
Government Consumption	3.2	8.1	7.2	2.4	-0.2
Export of Goods ^{2/}	19.2	22.3	14.5	9.7	7.9
Volume ^{2/}	15.5	17.9	10.1	4.4	3.4
Import of Goods ^{2/}	23.9	23.1	16.4	22.4	12.4
Volume ^{2/}	17.9	14.2	4.6	7.5	3.4
Current Account to GDP (%)	-2.2	-1.1	-1.7	-7.0	-1.6
Inflation	1.2	2.4	4.7	6.5	6.3-6.8

Note: ^{1/} Investment means Gross Fixed Capital Formation
^{2/} based on the Bank of Thailand's data

Thai economy in Q2/2022



Source: NESDC

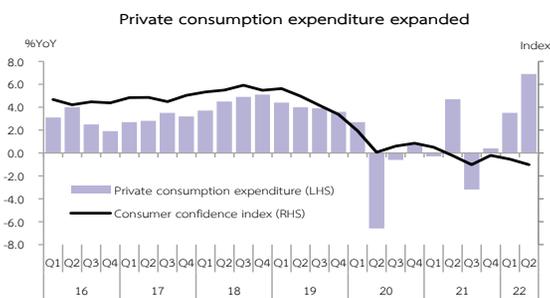
The economic management for the year 2022 needs to prioritize on following issues: **(1) Monitoring and accommodating market mechanisms for domestic price to be in line with input costs**, along with providing targeted assistance for the low-income groups and those who are vulnerable to rising prices and higher debt burden. **(2) Supporting agricultural production and farmers' income**, by: (i) assisting and alleviating farmers from material shortages and rising input costs; (ii) preparing preventive and responsive measures in case of the flood; and (iii) increasing farmers' income share in the final product margin. **(3) Closely monitoring and resolving retail debts amidst the rising interest rate**, of both households and small and medium enterprises (SMEs). **(4) Maintaining momentum from export sector**, by (i) boosting exports to major markets coupled with expanding to new markets with potential products; (ii) improving quality of agricultural, food, and manufacturing products to achieve international standard; (iii) utilizing benefits from Regional Comprehensive Economic Partnership (RCEP), along with expediting the ongoing Free Trade Agreement negotiations and endeavoring for future negotiations with new potential trading partners; and (iv) encouraging the business sector to appropriately manage risk of exchange rate fluctuation. **(5) Catalyzing the recovery in tourism and related service sector**, by: (i) promoting the development of high-quality tourism; (ii) facilitating liquidity for entrepreneurs in order to transform and operate their businesses; (iii) continually supporting the tourism promoting events; and (iv) promoting domestic tourism. **(6) Stimulating private investment**, by: (i) speeding up projects already approved and obtained investment promotion certificates in 2019 - 2021 to start their actual investments, especially those in the targeted industries; (ii) solving difficulties and obstacles hindering investors and entrepreneurs from investing and conducting businesses, including labor shortage; (iii) implementing proactive investment promotions and facilitating investors in targeted industries; (iv) stimulating investments in Eastern Economic Corridor (EEC), other special economic zones, as well as the regional economic corridors; (v) supporting investment in the key economic areas and transport infrastructure; and (vi) enhancing high-skilled labors. **(7) Maintaining growth momentum from government expenditure and public investment.** **(8) Monitoring, scrutinizing, and preparing measures to cushion effects of the volatilities from global economy and financial market as well as highly uncertain geopolitical conflicts.**

1. The Thai Economy in Q2/2022

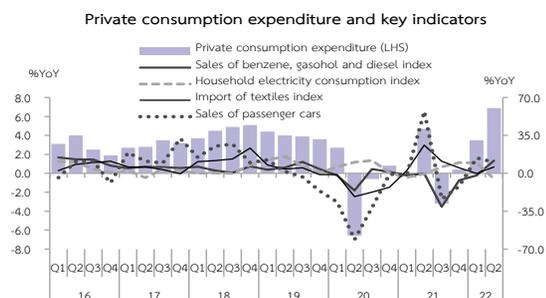
Expenditure Side:

Private consumption expenditures expanded by 6.9 percent, accelerating from a 3.5-percent expansion in the previous quarter. This was mainly supported by an easing of COVID-19 infection control measures. **Expenditure in services** increased by 13.7 percent, accelerating from a 4.1-percent growth in the previous quarter, following an accelerated expansion of spending on restaurants & hotels, and recreation & culture which grew by 56.9 percent and 6.8 percent, respectively. **Expenditure in semi-durable goods** increased by 1.9 percent, accelerating from a 0.4-percent expansion in the previous quarter, in line with an accelerated expansion of spending on furnishings & household equipment, and clothing & footwear which expanded by 1.0 percent and 2.4 percent, respectively. However, **expenditure in non-durable goods** increased by 2.7 percent, decelerating from a 3.3-percent growth in the previous quarter, in accordance with a slowdown of spending in electricity, and gas & other fuels which grew by 0.4 percent, compared with a 3.4-percent growth in the previous quarter. **Expenditure on durable goods** grew by 3.4 percent, decelerating from a 4.5-percent growth in the previous quarter, following a slowdown of spending on purchase of vehicles which grew by 10.7 percent, compared with a 14.1-percent growth in the previous quarter. However, the consumer confidence index towards the economic situation decreased to 34.9 from 37.3 in the previous quarter, due to the concern towards the rising cost of living amid prolonged geopolitical conflict between Russia and Ukraine.

In the first half of 2022, private consumption expenditures expanded by 5.2 percent, compared with a 1.4-percent drop in the second half of 2021.



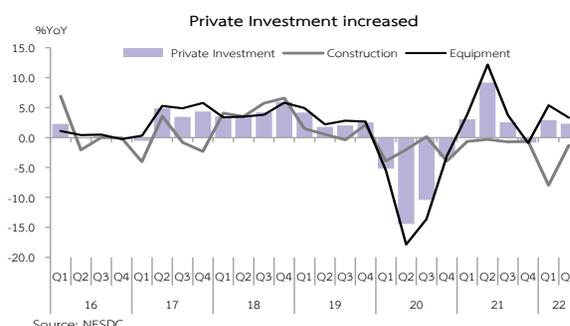
Source: NESDC, University of the Thai Chamber of Commerce



Source: NESDC, BOT, Department of Energy Business

Private investment expanded by 2.3 percent, decelerating from a 2.9-percent expansion in the previous quarter, in line with a slowdown in the investment in machinery and equipment which grew by 3.3 percent, decelerating from a 5.4-percent expansion in the previous quarter. This was in accordance with a slowdown of imports of capital goods, domestic machinery sales, and newly registered motor vehicles for investment purpose which grew by 1.3 percent, 1.0 percent, and 5.0 percent, compared with 1.4 percent, 8.1 percent, and 5.5 percent in the previous quarter, respectively. Meanwhile the investment in construction decreased for seven quarters consecutively at 1.3 percent (yet improving from an 8.0-percent drop in the previous quarter) as a result of a decline in other private construction by 40.9 percent, following a decline in the construction of Mass Rapid Transit Authority of Thailand (MRT) in yellow line and pink line projects which were in the final stages of construction process before partially operating within this year. Meanwhile, the construction in non-residential sector increased by 19.7 percent, accelerating from 12.7 percent in the previous quarter, and the residential sector turned to expand by 4.6 percent from a 3.1-percent drop in the previous quarter. However, the business sentiment index in this quarter rose to 49.3 from 48.6 in the previous quarter.

In the first half of 2022, private investment expanded by 2.6 percent, compared with a 0.7-percent growth in the second half of 2021.



Source: NESDC

In the second quarter of 2022, private consumption expenditures accelerated.

Meanwhile, private investment and export of goods decelerated.

private consumption expenditures grew by 6.9 percent, accelerating from a 3.5-percent growth in the previous quarter.

Private investment grew by 2.3 percent, decelerating from a 2.9-percent expansion in the previous quarter following a slowdown of investment in the machinery & equipment.

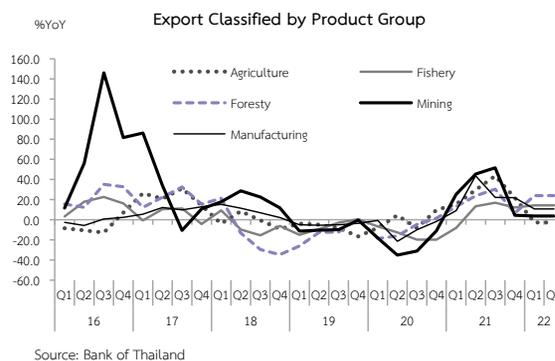
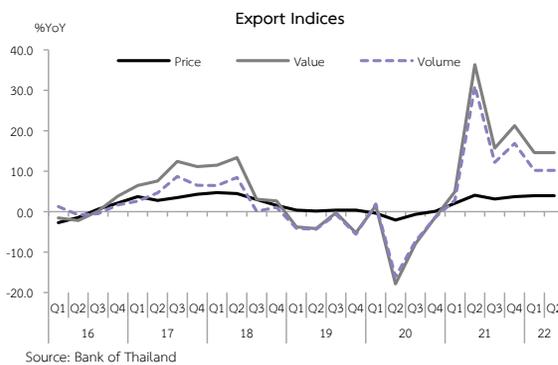
Meanwhile, the investment in construction declined.

Exports in US dollar terms favorably expanded but began to slow down due to the slowdown of major economies and the overall global economy. Export value in the second quarter of 2022 was recorded at 74.5 billion US dollars, increasing by 9.7 percent, yet decelerated from a 14.4-percent growth in the previous quarter. **The export volume index expanded by 4.4 percent, decelerating from a 10.1-percent increase in the previous quarter.** Export volume of manufacturing products and agricultural products grew by 4.7 percent and 13.2 percent, respectively. Meanwhile, fishery product fell by 8.9 percent. **The export price increased by 5.1 percent, continued from a 4.0-percent rise in the previous quarter.** Export price of manufacturing, agricultural and fishery rose by 5.4 percent, 2.7 percent and 3.5 percent, respectively. Excluding unwrought gold, export value expanded by 9.9 percent, continued from a 9.6-percent increase in the previous quarter. **In Baht terms, export value was recorded at 2,565.0 billion Baht, growing by 20.5 percent, compared with a 24.9-percent growth in the previous quarter.**

In the first half of 2022, export value stood at 147.8 billion US dollars, increased by 12.0 percent, compared with a 19.2-percent growth in the second half of 2021. The export volume and price expanded by 7.1 percent, and 4.6 percent, respectively. In Baht terms, export value was recorded at 4,988.0 billion Baht, rose by 22.6 percent, compared with a 27.6-percent increase in the second half of 2021.

Export value in US dollar terms increased by 9.7 percent, following a slowdown in export volume, while export price continually expanded.

Export value excluding unwrought gold expanded by 9.9 percent.



Export value of agricultural commodities expanded by 16.2 percent, compared with a 3.0-percent decrease in the previous quarter. The export quantity rose by 13.2 percent, following an increase in export volume of rice, rubber, durian, and other fruits. Exports price grew by 2.7 percent due to the growth in export price of sugar. **Export value of manufacturing products rose by 10.3 percent, continued from a 10.7-percent increase in the previous quarter.** **Export value of fishery products fell by 5.7 percent as a result of the reduction in exports volume, while export price increased.** **Export value of other products expanded by 7.9 percent.**

Export items with increased value included chemicals & petro-chemical products (4.9 percent), machinery & equipment (7.0 percent), integrated circuits & parts (9.4 percent), parts of electrical appliances (3.8 percent), medicinal and surgical equipment (8.0 percent), animal food (21.6 percent), rice (46.6 percent), rubber (3.0 percent), durian (9.8 percent), and sugar (113.6 percent). On the other hand, **export items with decreased value included** passenger car (48.3 percent), pick up and trucks (9.6 percent), computer parts & accessories (10.1 percent), rubber products (13.1 percent), crustaceans (11.9 percent), and fish (4.1 percent).

Export value of agricultural commodities expanded according to an increase in exports of rice, rubber, durian, and other fruits.

Export value of manufacturing products decelerated.

Export value of fishery products decreased.

Export Value of Major Product in US Dollar Term

%YoY	2021								2022			Share Q2/22 (%)
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2		
Agriculture	28.1	23.4	33.3	15.7	29.8	43.1	24.0	8.1	-3.0	16.2	8.8	
Rice	-7.2	-28.9	17.4	-17.9	-38.8	14.8	19.3	30.5	17.1	46.6	1.2	
Rubber	58.6	61.0	56.5	38.2	97.4	99.5	31.4	4.7	6.2	3.0	1.8	
Durian	68.3	58.2	89.9	-16.0	74.4	91.0	84.1	4.2	-48.2	9.8	2.9	
Other fruits	27.2	15.9	35.8	45.3	-2.7	49.5	22.3	17.0	-13.3	45.6	0.9	
Manufacturing	23.5	24.4	22.6	9.2	43.7	22.4	22.9	10.5	10.7	10.3	87.6	
Food	7.4	2.0	13.0	-1.9	5.9	5.7	20.5	30.0	28.0	31.9	8.1	
Sugar	-8.9	-35.3	36.9	-47.3	-21.2	-1.2	95.2	142.3	179.1	113.6	1.3	
Fish, canned, prepared, or preserved	-14.7	-15.4	-14.1	-2.4	-26.3	-24.7	-2.3	11.6	3.3	20.9	1.0	
Tapioca & cassava starch	44.0	45.1	43.0	63.3	25.8	50.7	36.6	11.3	5.8	18.8	0.6	
Fruits & vegetables, canned, prepared, or preserved	8.3	-2.0	17.3	-4.3	0.2	14.8	20.0	20.3	9.6	30.2	0.5	
Beverages	3.6	8.3	-1.3	-0.4	17.5	-5.3	2.9	2.5	4.6	0.5	1.0	
Rubber products	19.1	46.3	-3.5	52.4	40.1	10.4	-15.1	-19.4	-25.0	-13.1	2.3	
Animal food	23.5	24.2	22.8	27.4	21.2	19.6	25.8	23.9	26.3	21.6	1.0	
Electronics	18.9	19.0	18.9	8.3	30.3	19.6	18.2	9.3	17.0	2.5	11.3	
- Computer	47.1	13.0	79.1	2.2	24.0	88.8	71.2	21.0	67.5	-18.0	0.2	
- Computer parts & accessories	20.9	14.4	27.3	-5.0	37.1	26.0	28.7	1.2	15.1	-10.1	5.0	
- Integrated circuits & parts	19.0	19.1	18.9	13.9	24.2	19.2	18.7	13.4	17.7	9.4	3.1	
Electrical appliances	19.9	27.3	13.1	14.1	44.3	14.4	12.0	3.5	7.8	-0.8	8.5	
- Air conditioning machines	22.5	26.2	18.1	9.5	52.5	9.3	25.8	3.5	5.6	1.0	2.0	
- Refrigerators	13.3	34.0	-3.1	19.3	50.9	-6.0	-0.2	1.6	6.8	-3.2	0.8	
- Parts of electrical appliances	11.4	16.4	6.6	7.0	27.7	8.8	4.5	5.0	6.2	3.8	2.1	
Metal & steel	46.5	42.5	50.2	24.8	64.6	57.7	43.6	21.0	19.8	22.2	6.0	
Automotive	35.7	51.9	22.3	21.0	111.9	20.8	23.6	-4.7	-5.6	-3.6	12.8	
- Passenger car	6.7	39.8	-20.8	12.9	88.7	-26.7	-15.7	-48.7	-49.1	-48.3	1.7	
- Pick up and trucks	60.0	83.8	40.3	44.9	190.6	18.7	62.2	-20.8	-28.9	-9.6	2.2	
- Vehicle parts & accessories	30.0	47.4	16.1	17.3	102.0	25.3	8.4	2.7	3.5	2.0	6.2	
Machinery & equipment	20.1	27.3	13.8	16.2	41.2	17.8	10.3	6.3	5.6	7.0	7.6	
Chemicals & Petro-chemical Products	37.6	35.5	39.6	21.1	51.3	43.6	36.0	11.4	18.7	4.9	8.8	
Petroleum products	64.3	31.0	102.3	-6.0	92.7	101.5	103.0	45.4	23.3	63.4	4.6	
Medicinal and surgical equipment and supplies	18.8	32.5	7.8	13.8	58.2	6.6	8.9	5.8	3.5	8.0	0.7	
Toiletries and cosmetics	2.4	-0.1	4.9	-4.7	5.1	-1.9	12.2	11.5	8.7	14.3	1.1	
Furniture and parts	20.2	34.1	9.7	21.3	49.6	6.9	12.4	11.8	18.1	5.7	0.6	
Fishery	8.8	3.0	14.5	-8.1	13.5	16.9	12.3	2.9	14.1	-5.7	0.6	
Crustaceans	15.8	7.4	23.3	-3.2	16.1	25.0	21.8	-3.7	8.4	-11.9	0.3	
Fish	-0.3	-5.6	5.4	-9.4	-2.1	10.5	1.0	4.8	14.7	-4.1	0.2	
Other Exports	-71.5	-79.1	-58.7	-88.2	-69.7	-74.5	59.9	165.1	556.5	7.9	2.0	
Non-monetary gold (excl. articles of goldsmiths)	-70.7	-77.8	-60.5	-88.3	-67.3	-75.8	67.9	177.9	681.8	-0.8	1.7	
Total Exports (Customs basis)	17.4	15.6	19.3	2.1	31.9	15.4	23.1	12.7	14.8	10.8	100.0	
Exports, f.o.b. (BOP basis)	19.2	19.2	19.2	5.1	36.5	16.1	22.3	12.0	14.4	9.7	98.6	
Export Value (exclude gold)	24.9	26.7	23.2	11.6	45.5	24.6	21.8	9.8	9.6	9.9	96.9	

Source: Bank of Thailand

Export markets: Exports to the main markets continually expanded while exports to China, Hong Kong, and Australia decreased. Exports to the US expanded by 17.8 percent following a growth in exports of automatic data processing machines and parts, fax machine telephone equipment and parts, and iron, steel and products. Exports to Japan grew by 1.6 percent, mainly due to a growth in exports of copper and articles thereof, fax machine, telephone equipment and parts, and polymers of ethylene. Exports to EU (27) excluding the UK, increased by 5.7 percent following an acceleration in exports of iron, steel and products, electronic integrated circuits, and machinery and parts. Exports to ASEAN (5) grew by 23.1 percent as a result of the growth in exports to Malaysia, Singapore, Indonesia, and the Philippines. Exports to CLMV rose by 14.1 percent, in line with an increase in exports to Vietnam, Cambodia, and Myanmar. In addition, exports to the Middle East (15) increased by 29.0 percent supporting by the growth in exports of rice, air condition machines, as well as woods and wood products. However, Exports to China fell by 1.9 percent mainly due to the reduction in exports of automatic data processing machines and parts, chemical products, and rubber. Exports to Australia dropped by 3.3 percent due to a decrease in exports of motor cars and parts, and prepared or preserved fish.

Exports to the main markets continually increased while exports to China, Hong Kong, and Australia decreased.

Export Value to Key Markets in US Dollar Term

%YOY	2021										Share Q2/22 (%)
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Total Exports (Mil US\$) (Customs basis)	272,006	132,355	139,651	64,118	68,237	67,733	71,918	149,185	73,601	75,583	100.0
(%YoY)	17.4	15.6	19.3	2.1	31.9	15.4	23.1	12.7	14.8	10.8	
United States	21.9	21.4	22.4	13.1	30.4	19.6	25.2	20.5	23.3	17.8	16.0
Japan	9.6	12.4	6.9	5.9	20.0	15.2	-0.2	1.4	1.2	1.6	8.2
EU (27) Excluding UK	22.8	26.9	18.9	10.8	49.9	16.3	21.3	5.7	5.7	5.7	7.4
United Kingdom	13.0	18.5	7.5	-9.3	65.6	0.3	14.5	8.3	19.4	-2.1	1.2
China	25.0	25.0	25.0	19.7	29.5	32.2	17.8	0.8	4.2	-1.9	13.4
ASEAN (9)	17.5	10.9	24.4	-5.9	33.3	18.6	30.0	18.1	17.0	19.1	25.7
- ASEAN (5)*	19.9	5.6	35.6	-10.8	27.0	27.1	44.1	24.9	26.9	23.1	14.7
- CLMV**	14.5	18.1	10.8	0.6	42.1	7.9	13.6	9.8	5.5	14.1	11.0
Middle East (15)	20.5	12.1	29.5	-5.1	37.8	22.0	36.4	22.6	16.4	29.0	3.6
Australia	11.5	23.4	1.3	19.7	27.7	-12.6	16.9	-2.8	-2.4	-3.3	3.4
Hong Kong	2.7	-2.8	8.5	-19.3	15.7	7.8	9.1	-1.9	5.0	-7.3	3.9
India	56.0	54.5	57.3	7.4	181.1	65.3	50.6	46.6	33.1	60.4	4.0
South Korea	38.8	35.8	41.8	17.5	56.0	51.2	33.1	17.9	22.7	13.9	2.4
Taiwan	23.1	22.2	23.9	9.8	35.5	27.0	21.2	8.8	9.7	8.1	1.8

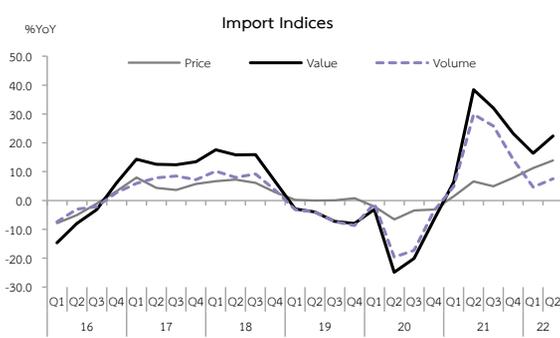
Note: * ASEAN (5) consist of Brunei, Indonesia, Malaysia, the Philippines, and Singapore

** CLMV consist of Cambodia, Laos, Myanmar, and Vietnam

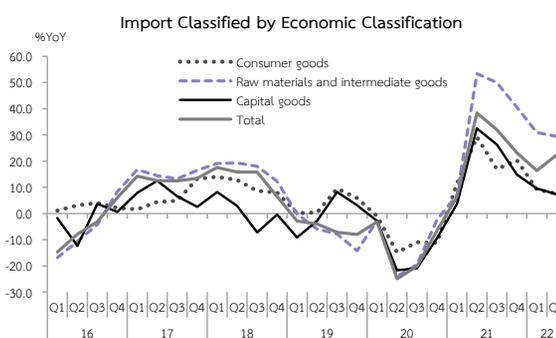
Source: Bank of Thailand

Import value in US dollar terms was recorded at 69.3 billion US dollars, increasing by 22.4 percent and accelerating from a 16.3-percent increase in the previous quarter due to an acceleration of import volume and import price. Import volume rose by 7.5 percent, compared with a 4.6-percent increase in the previous quarter. Import volume of raw materials and intermediate goods, capital goods, and consumer goods rose by 8.4 percent, 3.3 percent, and 1.7 percent, respectively. Import price rose by 13.9 percent, compared with an 11.2-percent increase in the previous quarter, following the import price of raw materials and intermediate goods, consumer goods, and capital goods which rose by 19.4 percent, 5.7 percent, and 3.8 percent, respectively. Import values excluding the non-monetary gold (excluding articles of golds) expanded by 20.7 percent. **In Thai Baht terms**, the import value stood at 2,387.0 billion Baht, increasing by 34.4 percent, compared with a 27.0-percent increase in the previous quarter.

In the first half of 2022, import value was recorded at 133.4 billion US dollars, increased by 19.4 percent. Quantity and import price increased by 6.0 percent, and 12.5 percent, respectively. In Thai Baht terms, import values was recorded at 4,503.0 billion Baht, increased by 30.8 percent.



Source: Bank of Thailand



Source: Bank of Thailand

By categories, the import value of all categories increased. **Import value of raw materials and intermediate goods** expanded by 29.4 percent, continually from a 30.9-percent growth in the previous quarter. Import volume and import price rose by 8.4 percent and 19.4 percent, respectively. **Import value of capital goods** rose by 7.3 percent, compared with a 9.6-percent growth in the previous quarter. Import volume and import price expanded by 3.3 percent and 3.8 percent, respectively. **Import value of consumer goods** increased by 7.5 percent, compared with a 9.2-percent growth in the previous quarter. Import volume and import price increased by 1.7 percent and 5.7 percent, respectively. **Import value of other goods** expanded by 51.9 percent, compared with a 42.1-percent decrease in the previous quarter due to an increase in imports of the non-monetary gold.

Import value in US dollar terms increased by 22.4 percent, compared with a 16.3-percent expansion in the previous quarter.

Import Value of Major Product in US Dollar Term

%YoY	2021								2022			Share Q2/22 (%)
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2		
Consumer goods	19.2	19.7	18.7	11.5	29.2	16.9	20.3	8.3	9.2	7.5	10.8	
Food, beverage & dairy products	5.7	5.2	6.1	1.0	9.9	7.8	4.6	15.0	13.8	16.3	2.3	
Medicinal and pharmaceutical products	46.9	12.7	84.6	3.6	21.4	89.2	79.6	29.5	53.3	10.4	1.3	
Cellular phone	39.0	48.2	31.8	85.5	14.3	3.6	51.5	-4.0	-12.3	8.1	1.2	
Animal & fishery products	24.0	29.3	19.1	13.1	47.3	21.7	16.8	1.6	9.4	-5.1	1.1	
Raw materials and intermediate goods	36.2	27.5	45.0	7.1	53.4	50.0	40.5	30.1	30.9	29.4	69.2	
Crude oil	45.7	16.9	80.3	-23.3	110.2	62.9	96.8	101.9	86.2	115.2	14.8	
Parts of electronics and electrical appliances	20.4	18.8	21.9	13.9	23.8	24.9	19.1	17.6	20.4	14.9	14.3	
Chemicals & petro-chemical products	39.1	32.0	46.6	18.4	46.4	60.6	34.4	16.6	19.1	14.5	10.4	
Materials of base metal	60.9	52.2	69.8	26.5	83.7	89.3	53.5	16.0	19.0	13.4	10.1	
Natural gas	43.7	-11.6	118.0	-31.4	8.2	44.1	203.3	171.4	262.4	113.8	3.1	
Petroleum products	57.3	43.6	71.1	4.3	123.5	53.9	91.2	39.5	39.3	39.7	2.6	
- Exclude Fuel	33.5	30.7	36.2	16.2	47.3	47.9	25.9	14.0	16.8	11.6	47.7	
Capital goods	18.4	16.5	20.2	3.6	32.5	26.3	14.8	8.4	9.6	7.3	15.9	
Other machinery and mechanical appliances & parts	16.4	14.4	18.4	0.4	32.2	27.6	10.3	5.8	8.9	2.7	6.9	
Transformers, generators, motors and accumulators	20.9	24.9	17.3	19.6	30.9	29.8	6.9	9.3	8.5	10.1	1.6	
Aircrafts, ships, floating structures, and locomotive	20.4	1.7	39.7	-35.5	94.3	-9.7	81.6	49.5	27.1	68.1	1.5	
Measuring, checking and precision instruments	16.8	23.7	10.5	10.6	40.4	30.5	-4.9	-1.3	-3.9	1.2	1.2	
Other Imports	19.7	36.7	2.1	24.7	74.7	23.4	-10.7	-13.3	-42.1	51.9	4.1	
Non-monetary gold (excl. articles of goldsmiths)	68.6	139.9	13.8	135.5	156.6	67.2	-6.7	-18.8	-54.1	103.6	3.0	
Other imports, n.i.e.	-27.5	-38.0	-13.0	-61.3	27.5	-7.9	-18.3	2.3	14.4	-8.1	1.1	
Total Imports (Customs basis)	29.5	24.8	34.1	8.2	46.4	39.4	29.5	21.0	18.4	23.4	100.0	
Imports, f.o.b. (BOP basis)	23.9	20.5	27.3	6.4	38.4	32.0	23.1	19.4	16.3	22.4	85.7	
Import Value (exclude gold)	22.7	17.6	27.7	1.9	37.1	31.3	24.4	21.3	22.0	20.7	82.8	

Source: Bank of Thailand

Import Volume Indices by Economic Classification

Volume indices %YoY	2021								2022		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Consumer goods	14.8	15.6	14.0	8.3	24.0	12.6	15.2	3.1	4.6	1.7	
Raw materials and intermediate goods	16.1	11.1	21.1	-1.7	26.9	26.8	15.9	9.3	10.3	8.4	
Capital goods	16.2	14.7	17.6	2.1	30.3	24.0	11.8	4.7	6.0	3.3	
Total Imports	17.9	16.0	19.7	4.9	29.8	25.8	14.2	6.0	4.6	7.5	

Source: Bank of Thailand

Import Price Indices by Economic Classification

Price indices %YoY	2021								2022		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Consumer goods	3.8	3.5	4.1	2.9	4.1	3.9	4.4	5.1	4.4	5.7	
Raw materials and intermediate goods	17.3	14.7	19.8	9.0	20.9	18.3	21.2	19.0	18.6	19.4	
Capital goods	1.9	1.6	2.2	1.5	1.7	1.8	2.7	3.6	3.3	3.8	
Total Imports	5.2	3.9	6.4	1.4	6.6	4.9	7.9	12.5	11.2	13.9	

Source: Bank of Thailand

Term of trade decreased as import price expanded by 13.9 percent, faster than the growth of export price which grew by 5.1 percent. Thus, the term of trade decreased from 109.2 in the same quarter last year and 102.7 in the previous quarter to 100.8 in the second quarter of 2022.

In the first half of 2022, term of trade stood at 101.7, comparing with 106.8 in the second half of 2021 as import price increased by 12.5 percent, faster than the growth of export price which grew by 4.6 percent.

Term of trade

%YoY	2021								2022		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Term of trade*	108.1	109.5	106.8	109.9	109.2	107.9	105.8	101.7	102.7	100.8	
%YOY	-1.8	-0.8	-2.8	0.7	-2.4	-1.7	-3.8	-7.1	-6.5	-7.7	

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

Term of trade decreased.

Trade direction and opportunities of Thai products in major trade partners (US and China)

The United States and China are renowned important trading partners of Thailand. In the first half of 2022, exports to the US market and the China market accounted for 16.1 percent and 12.4 percent of total exports of Thailand, respectively. The export to US grew by 20.5 percent, while exports to the China market grew only 0.8 percent due to the impact of strict lockdown measures. Considering the details of 15 main product groups that are exported to both major markets, a change in the direction of the trade structure of the major product groups in both major markets was identified as follows:

1) Product groups that are clearly changing direction from other countries to the US and China (groups with expanding export value and the proportion of exports to the US and China also increased): **In the US market**, there were 10 product groups such as computer and parts, telephone and parts and air conditioners and parts, etc. **In the China market**, there were 5 product groups, such as fresh frozen and dried fruit, rubber, and wood and products, and etc. This shows the demand for products and the opportunity to promote Thai exported products in the US and China markets in the next period.

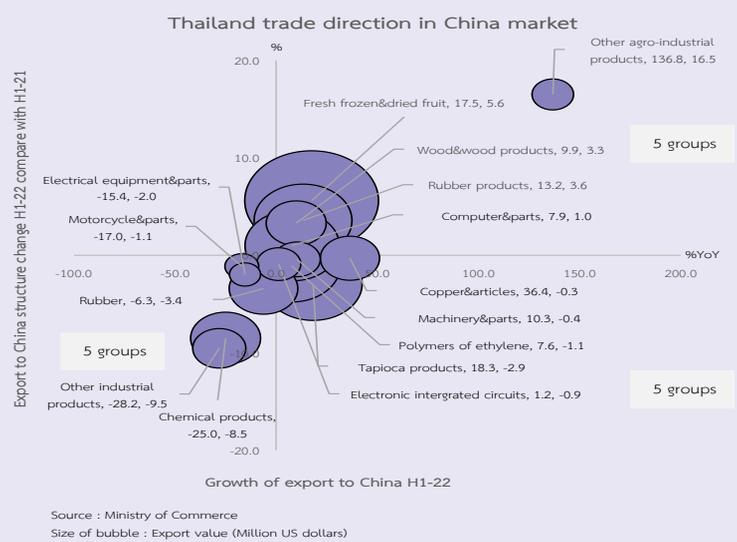
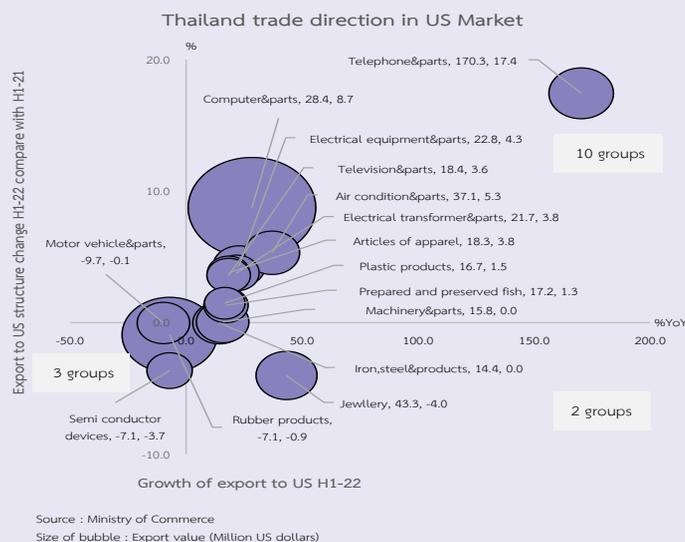
2) Product groups with growth in both the US and China, but lower growth than in other markets (groups with export value in the US market and China expanded, but the proportion of exports to the US and China decreased): **There were two product groups in the US market**, jewelry, and iron steel and products. While, **there are 5 product groups in the China market**, such as copper and articles thereof, machinery and parts, and electronic integrated circuits, etc. These groups of products had a higher rate of export growth to other markets than in the US and China markets meaning that there were opportunities for these groups both inside and outside the US and China markets, however they were not a group that could change direction to both markets easily.

3) Product groups to be monitored in the US market and China market (The group in which the export value of goods and the proportion of exports have decreased, or signal to be a sunset product): **In the US market, there are 3 product groups**, including rubber products, semiconductor devices, and motor vehicle and parts. Meanwhile, **in the China market, there are 5 product groups to be monitored** such as chemical products, rubber, and electrical equipment and parts, etc. These products required to be closely monitored in order to maintain country competitiveness in the next phase.

Trade direction of key products in US and China market

Product groups changing direction from other countries to the US and China clearly		Product groups with growth in both the US, China and other markets, but the growth rate in other markets was greater	
US	China	US	China
Computer and parts (4,284 Million US dollars)	Fresh frozen and dried fruit (3,095 Million US dollars)	Jewelry (989 Million US dollars)	Tapioca products (1,679 Million US dollars)
Telephone and parts (1,106 Million US dollars)	Rubber products (1,671 Million US dollars)	Iron steel and products (751 Million US dollars)	Polymers of ethylene (1,655 Million US dollars)
Air condition and parts (807 Million US dollars)	Computer and parts (1,557 Million US dollars)		Copper and articles (619 Million US dollars)
Machinery and parts (732 Million US dollars)	Wood and products (639 Million US dollars)		Machinery and parts (387 Million US dollars)
Electrical equipment and parts (721 Million US dollars)	Other agro-industrial products (310 Million US dollars)		Electronic integrated circuits (349 Million US dollars)
Electrical transformer and parts (550 Million US dollars)			
Prepared and preserved fish (529 Million US dollars)			
Television and parts (508 Million US dollars)			
Articles of apparel (485 Million US dollars)			
Plastic products (441 Million US dollars)			
Product groups have begun to be monitored in the US market and in the Chinese market		Product groups that export value in the US and China market reduced, while export share increased	
US	China	US	China
Rubber products (2,369 Million US dollars)	Chemical products (862 Million US dollars)	-	-
Semi conductor devices (549 Million US dollars)	Rubber (830 Million US dollars)		
Motor vehicle and parts (736 Million US dollars)	Other industrial products (502 Million US dollars)		
	Motorcycle and parts (210 Million US dollars)		
	Electrical equipment and parts (176 Million US dollars)		

Source: Ministry of Commerce



The role of products from ASEAN6 countries in the world's major markets: comparing before and during the COVID-19 pandemic

During the COVID-19, imports from ASEAN6 to many markets grew at a higher rate compared to imports from other countries outside the group. Examples of major markets that imported more from ASEAN6 during the outbreak are the United States, China, the European Union, South Korea, Japan and India (meanwhile imports from ASEAN6 to Australian market declined in this period as imports from others increased). In Details, it was found that imports from Vietnam had the highest growth rate during the outbreak. This reflected the growing importance of Vietnam products in many of the world's major markets. This was consistent with the results of econometrics analysis showing that Vietnam's market share during the pandemic and post-pandemic increased in all countries. Meanwhile, the proportion of Thai exports during the pandemic increased in China and the US yet decreased in Australia and the European Union. However, Thailand's market share increased in the US and India, and declined in Australia and the European Union after the pandemic. In addition, considering the number of product groups with an increasing proportion of imports compared to many markets, it was found that the proportion of products from Vietnam in the product group has increased. For example, in the US market, there were 17 groups of imported products from Vietnam with increasing proportion, while 15 products from Thailand were increasing. In the Chinese market, there were 15 groups of imported products from Vietnam with an increasing proportion, there were only 7 product groups from Thailand having an increasing proportion. In addition to products from Vietnam, it was also found that products from Malaysia played a greater role than products from Thailand in many markets, including the US, China, and the EU, noticing from the increased proportion of imports and the number of product groups having an increased proportion of imports from Malaysia in those markets.

Market	Import growth rate in Covid-19 period (2020/2021 compared with 2018/2019) (Percent)								
	Import from world	Import from Thailand	Import from Vietnam	Import from Malaysia	Import from Indonesia	Import from Philippines	Import from Singapore	Import from ASEAN6	Import from other countries
USA	2.7	30.1	57.1	25.6	15.5	-0.5	13.9	31.5	0.3
China	13.4	20.6	44.6	28.1	48.3	8.1	2.7	28.3	11.3
EU	0.8	3.0	10.4	22.5	3.5	0.6	-14.4	6.1	0.5
Japan	-4.3	-0.6	3.3	-2.7	-11.8	-4.0	-0.9	-2.7	-4.6
South Korea	4.3	12.0	9.4	-0.7	-8.3	-3.4	30.7	6.7	4.0
Australia	2.3	-1.3	9.2	-3.2	-4.3	-0.0	-7.3	-2.1	3.1
India	-5.4	-5.7	-13.9	-7.0	-9.0	5.1	4.0	-5.3	-5.5

Source: Global Trade Atlas calculated by NESDC

Table above indicates that Thai exports of goods continued to expand during the COVID-19 outbreak (2020-2022). However, compared to countries in the same region such as Vietnam and Malaysia, it was found that Thailand still had a lower share in many markets. This reflects export competitiveness of Thailand, which is still inferior to that of Vietnam and Malaysia. One of the factors was that the two countries have signed more Free Trade Agreements (FTAs) than Thailand (Vietnam, Malaysia and Thailand have signed 15 FTAs, 14 FTAs and 12 FTAs, respectively). However, it is also crucial to focus on other supporting elements affecting the competitiveness and help in getting the products to satisfy the markets need, for instance, the technology level of the product as well as quality standards. Therefore, in order to develop Thailand's international trade capacities at a strategic level, pertinent agencies should consider conducting a detailed benchmarking between products of Thailand and the competitors in the same markets as it will support in formulating strategies, measures and guidelines for enhancing the competitiveness of international trade in a practical and appropriate manner.

Market	Import share before Covid-19 (2018-2019) compared with epidemic period (2020-2021) (percent)													
	From Thailand		From Vietnam		From Malaysia		From Indonesia		From Philippines		From Singapore		From ASEAN6	
	Epidemic period	Change	Epidemic period	Change	Epidemic period	Change	Epidemic period	Change	Epidemic period	Change	Epidemic period	Change	Epidemic period	Change
USA	1.6	0.3	3.5	1.2	1.9	0.4	0.9	0.1	0.5	0.0	1.2	0.1	9.7	2.1
China	2.3	0.1	3.6	0.8	3.6	0.4	2.1	0.5	0.9	0.0	1.5	-0.2	14.1	1.6
EU	1.0	0.0	1.9	0.2	1.4	0.2	0.8	0.0	0.4	0.0	0.8	-0.1	6.3	0.3
Japan	3.6	0.1	3.2	0.2	2.5	0.0	2.5	-0.2	1.4	0.0	1.2	0.0	14.5	0.2
South Korea	1.1	0.1	4.1	0.2	1.8	-0.1	1.7	-0.2	0.6	-0.1	1.8	0.4	11.1	0.3
Australia	4.7	-0.2	2.1	0.1	3.7	-0.2	1.5	-0.1	0.2	-0.0	3.2	-0.3	15.5	-0.7
India	1.5	-0.0	1.3	-0.1	2.1	-0.0	3.0	-0.1	0.1	0.0	3.2	0.3	11.2	0.0

Market	Number of product groups with import share (group) (23 product groups)*													
	From Thailand		From Vietnam		From Malaysia		From Indonesia		From Philippines		From Singapore		From ASEAN6	
	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
USA	15	8	17	6	16	7	14	9	7	16	12	11	18	5
China	7	16	15	8	12	11	13	10	11	12	6	17	16	7
EU	7	16	15	8	12	11	10	13	7	16	10	13	11	12
Japan	9	14	15	8	11	12	10	13	10	13	7	16	13	10
South Korea	9	14	12	11	8	15	9	14	6	17	11	12	8	15
Australia	10	13	16	7	10	13	17	6	8	15	7	16	14	9
India	11	12	12	11	11	12	10	13	13	10	13	10	12	11

Source: Global Trade Atlas calculated by NESDC

Note: 23 product groups namely 1. Live animal (HS CODE01-05) 2. Vegetation (HS CODE06-14) 3. Fat and oil (HS CODE15) 4. Flavored food and beverages (HS CODE16 -24) 5. Mineral products (HS CODE25-27) 6. chemical industry (HS CODE28-38) 7. Plastic (HS CODE39) 8. Rubber (HS CODE40) 9. leather goods (HS CODE41-43) 10. Wood products (HS CODE44-46) 11. Paper (HS CODE47-49) 12. Textile (HS CODE50-63) 13. Shoes (HS CODE64-67) 14. Plaster Cement (HS CODE68-70) 15. Accessories (HS CODE71) 16. Common metal (HS CODE72-83) 17. Machinery (HS CODE84) 18. Electrical equipment (HS CODE85) 19. Vehicle (HS CODE86-87) 20. Aircraft (HS CODE88-89) 21. Optical devices (HS CODE90-92) 22. Weapon (HS CODE93) 23. Miscellaneous products (HS CODE94-99)

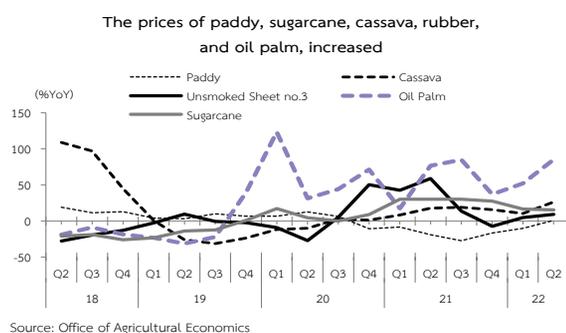
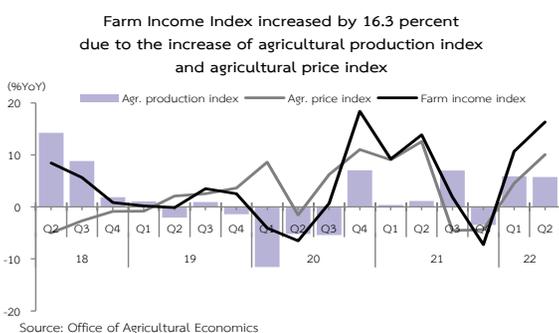
Trade balance in the second quarter of 2022 recorded a surplus of 5.2 billion US dollars, lower than a surplus of 9.3 billion US dollars in the previous quarter and a surplus of 11.2 billion US dollars in the same quarter last year. **In Baht terms**, trade balance recorded a surplus of 178.4 billion Baht, lower than a surplus of 306.6 billion Baht in the previous quarter and a surplus of 352.7 billion Baht in the same period last year.

In the first half of 2022, trade balance recorded a surplus of 14.5 billion US dollars, compared to a surplus of 19.6 billion US dollars in the second half of 2021 and a surplus of 20.3 billion US dollars in the same period last year. **In Baht terms**, trade balance recorded a surplus of 485.0 billion Baht, compared to a surplus of 649.8 billion Baht in the second half of 2021.

Production Side:

Agriculture, forestry, and fishing sector continued to increase for the second-consecutive quarter by 4.4 percent. The expansion was mainly supported by favorable weather conditions and sufficient water for cultivation. This was in line with a growth of **Agricultural Production Index** of 5.7 percent. Major agricultural products with production expansion included: (i) **paddy** (35.6 percent), due to favorable weather condition along with sufficient water supply, (ii) **fruits** (26.9 percent), especially durian which increased by 30.9 percent due to the durian price incentive which inducing farmers to manage efficiently durian orchard, (iii) **sugarcane** (7.6 percent) following increase in crop yields as a result of favorable weather conditions, (iv) **maize** (6.7 percent), as yield per Rai increased in response to the price incentive which caused farmers to take good care of their crops, and (v) **poultry** (1.0 percent), owing to rising in both domestic and foreign demands. On the other hand, major agricultural products with production contraction included swine (-9.0 percent), oil palm (-8.9 percent), cassava (-9.6 percent), white shrimp (-10.0 percent), and rubber (-0.7 percent), etc. **Agricultural Price Index** rose by 10.1 percent, following an increase of main agricultural products such as **swine** (28.9 percent) caused by a decline in live pig production and an increase in domestic demand, **oil palm** (85.1 percent) following increase of palm oil price in global market and rising demands in both domestic and global levels, **poultry** (22.9 percent) due to rising production costs and higher poultry consumption in both domestic and global demands, **sugarcane** (15.4 percent) caused by the higher minimum price of canes, and **rubber** (9.4 percent), due to the demand upsurge in automotive and rubber glove industries, combined with the higher crude oil prices in the global market. In contrast, major agricultural price index with the contraction included fruits (-23.4 percent), etc. Rising in both agricultural production index and agricultural price index thus led to **Farm Income Index** grew for a second consecutive quarter by 16.3 percent.

In the first half of 2022, agriculture, forestry, and fishing sector increased by 4.6 percent, compared with a 0.5-percent growth in the second half of 2021. In details, Agricultural Production and Price Indexes expanded by 5.8 percent and 7.3 percent respectively, and leading to Farm Income Index rose by 13.2 percent.



Manufacturing sector declined by 0.5 percent, compared to a 2.0-percent growth in the previous quarter according to the decrease in all production groups. The contraction was partly caused by the ongoing global supply disruption. This was in accordance with the decrease in the Manufacturing Production Index of 0.7 percent. **Manufacturing Production Index of the industries of the export-oriented industries (with export share of more than 60 percent to total production)** continued to decline by 2.0 percent from a 0.2-percent contraction in the previous quarter. The contraction was caused by the decline in several industries including manufacture of computers and peripheral equipment for the fourth quarter by 29.6 percent, partly due to technological changes. Furthermore, manufacture of furniture decreased by 20.2 percent, as a result of the slowdown in demand among trading partners especially the US. Nonetheless, manufacture of other rubber products expanded by 12.2 percent, especially block and sheet rubbers, due to adequate rainfall which resulted in high yields. **Manufacturing Production Index of the domestic-oriented industries (with export share of less than 30 percent to total production)**

Trade surplus was at 5.2 billion US dollars, lower than that of the previous quarter and the same period last year.

Accommodation and food service activities, wholesale and retail trade; repair of motor vehicles and motorcycles, and transportation and storage sectors expanded at an accelerated pace. Agricultural and Electricity, gas, steam and air conditioning supply sectors slowed down. Meanwhile, manufacturing and construction sectors decreased.

Agriculture, forestry, and fishing sector expanded by 4.4 percent, mainly supported by favorable weather conditions, adequate water supply, and higher agricultural prices. Altogether, Farm Income Index increased for a second consecutive quarter.

Manufacturing sector decreased by 0.5 percent following the decline in all production groups.

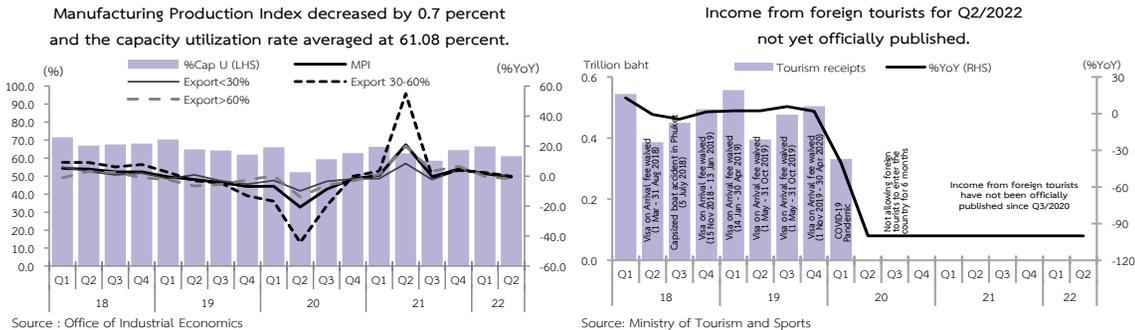
The average capacity utilization rate stood at 61.08 percent, lower than 66.53 percent in the previous quarter and 62.65 percent in the same quarter of the previous year.

decreased by 0.3 percent, compared to a 2.2-percent growth in the previous quarter. This was mainly driven by the decline in manufacture of plastics and synthetic rubber in primary forms by 11.6 percent as some factories closed for refurbishment. Likewise, a continued decline in manufacture of basic iron and steel by 10.6 percent, as a result of a shortage of raw materials (steel) due to major countries such as China, India and Japan reducing their primary steel production. Nevertheless, manufacture of refined petroleum products expanded by 14.6 percent in response to domestic demand upsurge as economic activities continue to recover. **Manufacturing Production Index of the industries (with 30 - 60 percent export share to total production)** declined slightly by 0.1 percent, compared to a 2.3-percent expansion in the previous quarter. This was mainly caused by manufacture of plastics articles dropped by 6.7 percent because of some factories were temporarily closed for maintenance. Besides, manufacture of motor vehicles decreased by 12.6 percent as a result of orders from trading partners declined, especially China and Belgium. However, manufacture of motor vehicles rose by 1.6 percent, slowed down from a 3.5 percent growth in the previous quarter, according to the shortage of key auto parts. **The average capacity utilization rate** stood at 61.08 percent, lower than 66.53 percent in the previous quarter and also 62.65 percent in the same period last year. In details, there were five industries having capacity utilization rate above 80 percent, namely manufacture of plastics and synthetic rubber in primary forms (86.48 percent), refined petroleum products (86.36 percent), vegetable oils (86.15 percent), parts and accessories for motor vehicles (81.19 percent), and pulp, paper and paperboard (80.26 percent), respectively.

Manufacturing production index with negative growth included computer and peripheral equipment (-29.6 percent), plastics and synthetic rubber in primary forms (-11.6 percent) and basic iron and steel (-10.6 percent) furniture (-20.2 percent) and domestic appliances (-14.5 percent), etc.

Manufacturing production index with positive growth included refined petroleum products (14.6 percent), motor vehicles (1.6 percent), other rubber products (12.2 percent), electronic components and boards (5.2 percent) and jewellery and related articles (16.9 percent) etc.

In the first half of 2022, manufacturing sector increased by 0.7 percent compared to a 1.6 percent decline in the second half of last year. Manufacturing Production Index (MPI) increased by 0.5 percent. The average capacity utilization rate stood at 63.81 percent.



Accommodation and food service activities sector continued to expand by 44.9 percent, owing to the stronger in domestic tourism and the acceleration in foreign tourist arrivals. In the second quarter of 2022, **Thai tourism receipts** stood at 0.155 trillion Baht which rose for the two consecutive quarters by 85.5 percent due to the relaxation of COVID-19 containment measures as well as the stimulus packages to boost domestic tourism which named 'We Travel Together Phase 4'. Besides, the rising of vaccination rates resulted in tourism confidence improved. The top three most visited provinces (excluding Bangkok) by Thai tourists consisted of Chonburi (2.95 million visitors, share of 7.16 percent), Kanchanaburi (2.78 million visitors, share of 6.75 percent), and Prachuap Khiri-khan (2.26 million visitors, share of 5.48 percent). **The number of foreign tourists stood at 1,582,257 persons**, increased significantly from the previous quarter due to the low-base effect. The number was supported by the cancellation of Test & Go requirements, the faster-than-expected relaxation of border controls in Thailand and abroad, and the effective vaccination program. Top international travelers in this quarter mainly came from East Asia (718,845 visitors, share of 45.43 percent), Europe (334,850 visitors, share of 21.16 percent), and South Asia (252,402 visitors, share of 15.95 percent). **The average occupancy rate** was at 42.09 percent, increased from 36.15 percent in the previous quarter and higher than 8.24 percent in the same period last year.

In the first half of 2022, accommodation and food service activities sector expanded by 39.3 percent, improved from an 11.3-percent decline in the second half of 2021 and rebounded from a 17.5-percent decrease from the same period last year. The number of foreign tourists stood at 2.080 million people which improved from 0.387 million people in the second half of 2021, and higher than 0.040 million people from the same period last year. The average occupancy rate was at 39.12 percent.

Accommodation and food service activities sector continued to increase at high level by 44.9 percent, owing to the improvement in domestic tourism and the pickup in foreign tourists.

Average occupancy rate was at 42.09 percent, higher than 36.15 percent in the previous quarter and 8.24 percent in the same period last year.

Wholesale and retail trade; repair of motor vehicles and motorcycles sector continued to increase for the fifth consecutive quarter by 3.1 percent, accelerated from a 2.8-percent growth in the previous quarter, following the improvements of household expenditure along with the number of foreign tourists due to the relaxation of COVID-19 containment measures. This was associated with the increase of Wholesale and Retail Sales, and Repair of Motor Vehicles Composite Index. **Retail Sales Index (except motor vehicles and motorcycles) increased by 15.8 percent**, compared with a 10.6-percent growth in the previous quarter. This was mainly driven by a strong growth in retail sales of other goods such as jewellery. **Wholesales Index (except motor vehicles and motorcycles) increased by 7.3 percent** compared with a 6.9-percent growth in the previous quarter. This was mainly driven by a growth in wholesales of general goods. **Wholesale and Retail Sales, and Repair of Motor Vehicles Index increased by 8.5 percent**, due to an expansion in sale of motor vehicles such as commercial vehicles and passenger cars.

In the first half of 2022, wholesale and retail trade; repair of motor vehicles and motorcycles sector increased by 2.9 percent, the same level as the second half of 2021. Wholesale and Retail Sales, and Repair of Motor Vehicles Index rose by 12.1 percent, Wholesales Index (except motor vehicles and motorcycles) increased by 7.1 percent, and Retail Sales Index (except motor vehicles and motorcycles) grew by 13.2 percent.

Transportation and storage sector continued to expanded for the third consecutive quarter by 5.3 percent, accelerated from a 4.6-percent growth in the previous quarter, following the continued expansion at a higher pace of air transport, land transport and transport via pipelines. The expansion in transportation and storage sector was in accordance with a 27.1-percent growth in Transportation Services Composite Index which accelerated from a 10.5-percent increase in the previous quarter. This was attributed to (i) a 148.2-percent increase in Air Transport Services Index, owing to the continued rise in air passenger transport activities index at a higher pace while air cargo activities index grew at a slower pace; (ii) a 15.2-percent increase in Land Transport and Transport via Pipelines Services Index, due to the expansion in diesel consumption, rail-based public transport services activities, gasoline consumption, petroleum gas consumption, number of public transport users, number of registered trucks, and natural gas consumption for vehicles; and (iii) a 1.4-percent increase in Water Transport Services Index which continually expanded for the sixth consecutive quarter, following the slowdown of TEUs Volume Index and Thai international freight volume (water transport) index. Besides, warehousing and support activities for transportation rose for fifth consecutive quarter by 6.0 percent. Likewise, postal and courier activities continued to increase by 4.0 percent as a result of the expansion of entrepreneur revenue.

In the first half of 2022 Transportation and storage sector expanded by 4.7 percent, improved from a 1.0-percent growth in the second half of 2021. Transport services increased by 15.5 percent which was attributed to an 88.6-percent increase in Air Transport Services Index, a 7.5-percent increase in Land and Tube Transport Services Index, and a 1.7-percent increase in Water Transport Services Index. In addition, warehousing and support activities for transportation rose by 7.0 percent and postal and courier activities expanded by 3.2 percent.

Electricity, gas, steam and air conditioning supply sector increased for the third consecutive quarter by 1.4 percent, compared to a 2.1-percent growth in the previous quarter, in tandem with the slowdown in electricity, gas and air conditioning production index. This was mainly attributed to (i) the power generation index increased by 1.2 percent, according to the increase in electricity consumption of industrial and business sectors. Meanwhile, the demanded for household sector declined for the first time in four quarters, and (ii) the natural gas production index continued to decreased for the fourth consecutive quarter by 10.2 percent, according to the contraction in volume of liquefied petroleum gas production of all types, while the use of gas in the transportation sector increased.

In the first half of 2022, electricity, gas, steam and air conditioning supply sector increased by 1.7 percent, compared with a 0.3 percent decline in the second half of last. The power generation index increased by 3.2 percent and the natural gas production index declined by 6.9 percent.

Construction sector continued to decrease by 4.5 percent, compared with a 5.5-percent contraction in the previous quarter. This was in line with a decline in both public and private constructions. In this quarter, **Public construction** declined by 6.6 percent, compared with a 3.9-percent drop in the previous quarter. (Government construction decreased by 12.5 percent, compared with a 2.1-percent drop in the previous quarter whereas state enterprise construction increased by 6.8 percent, improving from a 6.9-percent decrease in the previous quarter.). **Private construction** continued to decline for seventh consecutive quarter by 1.3 percent, as a result of a contraction in other construction, especially urban railway construction. Meanwhile, construction of residential buildings rebound, and construction of non-residential buildings continued to expand for four consecutive quarters. **Construction Material Price**

Wholesale and retail trade; repair of motor vehicles and motorcycles sector increase by 3.1 percent, following the improvement of household expenditure and the number of foreign tourists due to the relaxation of COVID-19 containment measures.

Transportation and storage sector continued to grow for the third consecutive quarter by 5.3 percent, following the acceleration of air and land transports, and transport via pipelines.

Electricity, gas, steam and air conditioning supply sector increased by 1.4 percent, continually expanded for the third consecutive quarter.

Construction sector continued to decline for the fourth consecutive quarter. Public and private constructions decreased by 6.6 percent and 1.3 percent, respectively. Construction Material Price Index (CMI) continued to rise for the seventh consecutive quarter.

Index (CMI) continued to rise by 6.9 percent for the seventh consecutive quarter owing to an increase in the iron products (11.7 percent), cement (7.4 percent), and others (6.8 percent).

In the first half of 2022, construction sector decreased by 5.0 percent, compared with a 2.8-percent drop in the second half of 2021. Public construction decreased by 5.3 percent while private construction dropped by 4.5 percent.

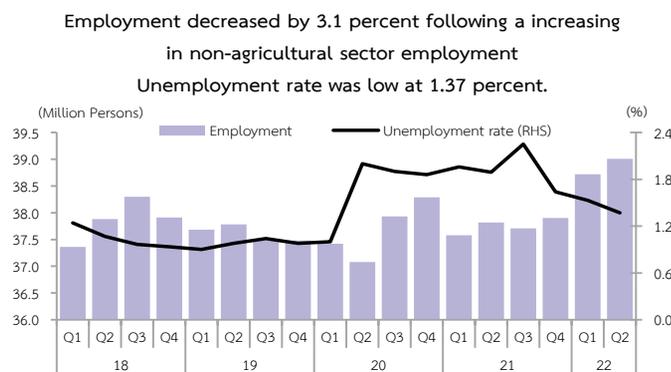
Employment rose for the second consecutive quarter following employment in non-agricultural sector while agricultural sector declined for the first time in seven quarters. The unemployment rate declined from the previous quarter and lower than the same quarter of the previous year.

In the second quarter of 2022, employment continued to grow by 3.1 percent, the similar level as the previous quarter. **Non-agricultural employment** (share of 70.12 percent) continued to expand for the second quarter by 4.9 percent, mainly due to the increase of employment in the wholesale and retail trade; repair of motor vehicles and manufacturing sectors. However, employment in construction and accommodation and food service activities sectors continued to decline for the fourth quarter by 5.4 percent and 2.6 percent, respectively. On the other hand, **agricultural employment** (share of 29.88 percent) declined for the first time in seven quarters by 0.8 percent, in line with the decrease in production of some key agricultural products such as swine, oil palm and cassava. **The unemployment rate** in this quarter stood 1.37 percent lower than 1.53 percent in the previous quarter, and it was also lower than 1.89 percent in the same quarter of the previous year. **The average number of unemployed** recorded at 5.5 hundred thousand people, lower than 6.1 hundred thousand people in the previous quarter and 7.3 hundred thousand people in the same period last year.

In the first half of 2022, employment increased by 3.1 percent compared to 0.8 percent contraction in second half of 2021. The unemployment rate stood at 1.45 percent.

Employment increased for the second consecutive quarter according to the acceleration of non-agricultural employment while agricultural employment declined for the first time in seven quarters.

The unemployment rate was at 1.37 percent, lower than 1.53 percent in the previous quarter and 1.89 percent in the same quarter of the previous year.



Source: National Statistical Office

Employed Persons by Industry

%YOY	Share	2021				2022					
		Q2/22	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1
Employed	100.00	0.2	1.2	-0.8	0.4	2.0	-0.6	-1.0	3.1	3.0	3.1
- Agricultural	29.88	1.8	2.6	1.1	2.8	2.4	1.0	1.3	1.0	3.0	-0.8
- Non-Agricultural	70.12	-0.6	0.6	-1.7	-0.6	1.8	-1.3	-2.1	4.0	3.1	4.9
Manufacturing	15.97	-0.9	-2.2	0.4	-2.2	-2.2	2.1	-1.2	4.3	2.6	6.1
Construction	5.61	-1.1	4.8	-7.1	4.5	5.1	-7.3	-6.9	-3.2	-1.1	-5.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	17.56	-0.4	-1.2	0.5	-1.0	-1.4	0.2	0.7	8.9	5.8	12.1
Accommodation and food service activities	7.34	-3.1	2.6	-8.6	-0.1	5.4	-9.3	-7.9	-1.9	-1.1	-2.6
Total labor force (Million persons)		38.7	38.8	38.6	38.7	38.8	38.6	38.6	39.7	39.6	39.8
Employed (Million persons)		37.8	37.7	37.8	37.6	37.8	37.7	37.9	38.9	38.7	39.0
Unemployment (Million persons)		0.75	0.75	0.75	0.76	0.73	0.87	0.63	0.58	0.61	0.55
Unemployment Rate (%)		1.93	1.93	1.95	1.96	1.89	2.25	1.64	1.45	1.53	1.37

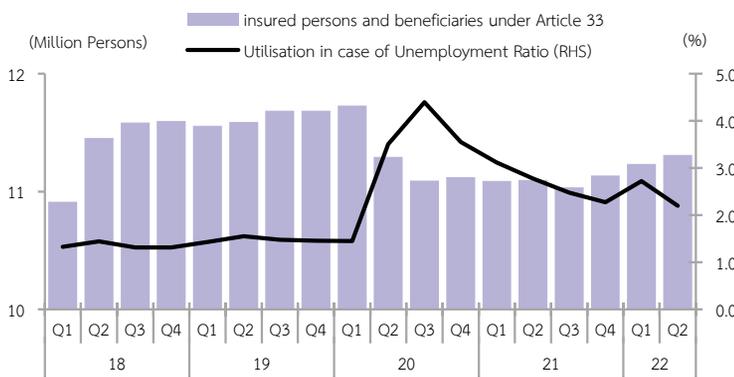
Source : National Statistical Office (NSO)

Labor in the Social Security System: The total number of insured persons in social security system continued to rise for the fifth consecutive quarter. The unemployment rate among insured persons under article 33 was decreased from the previous quarter and lower than the same quarter of the previous year. In the second quarter of 2022, the total number of social security beneficiaries continued to increase for the fifth consecutive quarter by 44.7 percent. This was mainly attributed to (i) an increase of voluntary insured persons under article 40 by 199.4 percent (partly due to COVID-19 relief measures for labours and entrepreneurs as required under article 9 of the Emergency Decree on Public Administration in Emergency Situation BE 2548 (No. 27) according to the cabinet resolution on July 13th, 2021), (ii) a rise of voluntarily insured persons under article 39 by 0.2 percent, (iii) an increase of compulsory insured person under article 33 by 1.9 percent accelerating from 1.3 percent in the previous quarter. The unemployment rate among insured person under article 33 in this quarter was 2.2 percent, lower than 2.7 percent in the previous quarter and 2.8 percent in the same quarter last year. The average number of unemployed was 2.45 hundred thousand people, lower than the number of 3.06 hundred thousand people in the previous quarter and the number of 3.08 hundred thousand people in the same quarter of the previous year.

The total number of insured persons in the social security system expanded for the fifth quarter by 44.7 percent, partly due to measures for insurers affected by the COVID-19 pandemic since the third quarter of 2021.

The unemployment rate among insured person under article 33 in the quarter was 2.2 percent, lower than 2.7 percent in the previous quarter and 2.8 percent in the same quarter last year.

There are 11.3 million insured persons and beneficiaries under Article 33 and 2.2 percent of them are receiving unemployment benefits



Source: The Social Security Office ,Ministry of labour

Number of social security beneficiaries

Registered Applicants (Thousand persons)	2021								2022		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Insured Persons (article 33) ^{1/}	11,137	11,098	11,137	11,091	11,098	11,037	11,137	11,313	11,234	11,313	
Insured Persons (article 39) ^{2/}	1,939	1,897	1,939	1,850	1,897	1,956	1,939	1,902	1,920	1,902	
Insured Persons (article 40) ^{3/}	10,665	3,612	10,665	3,576	3,612	10,449	10,665	10,812	10,767	10,812	
Total Insured Persons	23,741	16,607	23,741	16,516	16,607	23,442	23,741	24,027	23,920	24,027	
Utilisation in case of Unemployment	253	308	253	346	308	273	253	245	306	245	
Utilisation in case of Unemployment Ratio (%)	2.3	2.8	2.3	3.1	2.8	2.5	2.3	2.2	2.7	2.2	

Source : Social Security Office (SSO) , Ministry of labour

Note: ^{1/} Insured Persons (article 33) are employees of private enterprises that employ at least 1 employee. Those Insured Persons must be over 15 years of age, but under 60 years of age

^{2/} Insured Persons (article 39) are individuals who resigned from private enterprises (previously insured persons under article 33) but wants to maintain social security rights. Therefore, they voluntarily applied for social security rights under article 39

^{3/} Insured Persons (article 40) are neither persons who are currently employed by private enterprises (article 33) nor has never applied to be an insured person under article 39. Insured persons under article 40 must be a self-employed person or informal workers age who must be over 15 years of age, but under 60 years of age.

The impact of the shortage of semiconductor devices on the Thai automotive manufacturing industry

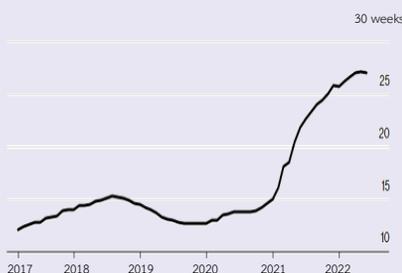
The ongoing global supply disruption has significantly impacted on manufacturing and exporting sectors in many countries, in particular the semiconductor scarcity. All of the top 5 exporters of semiconductor devices¹ including China (share of 35.00 percent), Japan (share of 9.35 percent), Malaysia (share of 8.47 percent), Germany (share of 6.13 percent), and Taiwan (share of 5.35 percent) facing the challenges due to; (1) the COVID-19 epidemic and natural disasters within their countries, (2) neon gas (Neon: Ne) shortage as a result of the Russia-Ukraine conflict, as Ukraine was a major neon gas producer and exporter (share of 71.50 percent). Thus, the shortage resulting in decrease of total supply of silicon wafer, the crucial part for semiconductor equipment, which require neon gas for its production, (3) duration of lead time for producing and exporting semiconductors surged from 12 weeks in the fourth quarter of 2020 to 27 weeks in the second quarter of 2022, and (4) rising manufacturing costs caused by higher transportation costs such as ocean freight fees in accordant with higher energy prices and demand of container, along with higher price of raw materials like silicon and copper. In addition, there was pent-up demand for semiconductors in many countries which is crucially used in making products such as data processing units (32.29 percent share of global demand for semiconductors), communication goods (share of 31.24 percent), appliances for the home (share of 12.03 percent), industrial goods (share of 12.01 percent), and government sector (share of 1.04 percent).

Exports of Semiconductor Devices (2020)



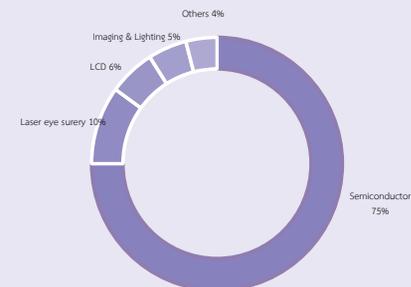
source : www.oec.world/en/profile/hs/semiconductor-devices

Lead times for semiconductors



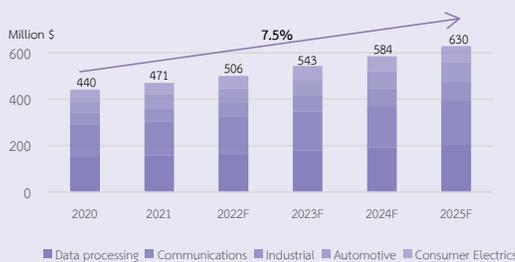
source : Susquehanna Financial Group

Global Neon Gas Market Shares by Application (2021)



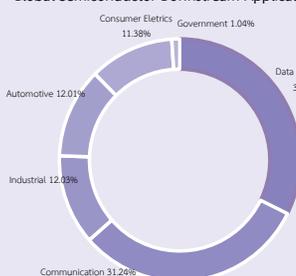
source : www.expertmarketresearch.com

Global Semiconductor Industry Market Size 2020-2025



source : Mordor Intelligence

Global Semiconductor Downstream Applications (2020)



source : Semiconductor Industry Association

Production of personal car 1,501-2,500 cc.



source : The Federation of Thai Industries

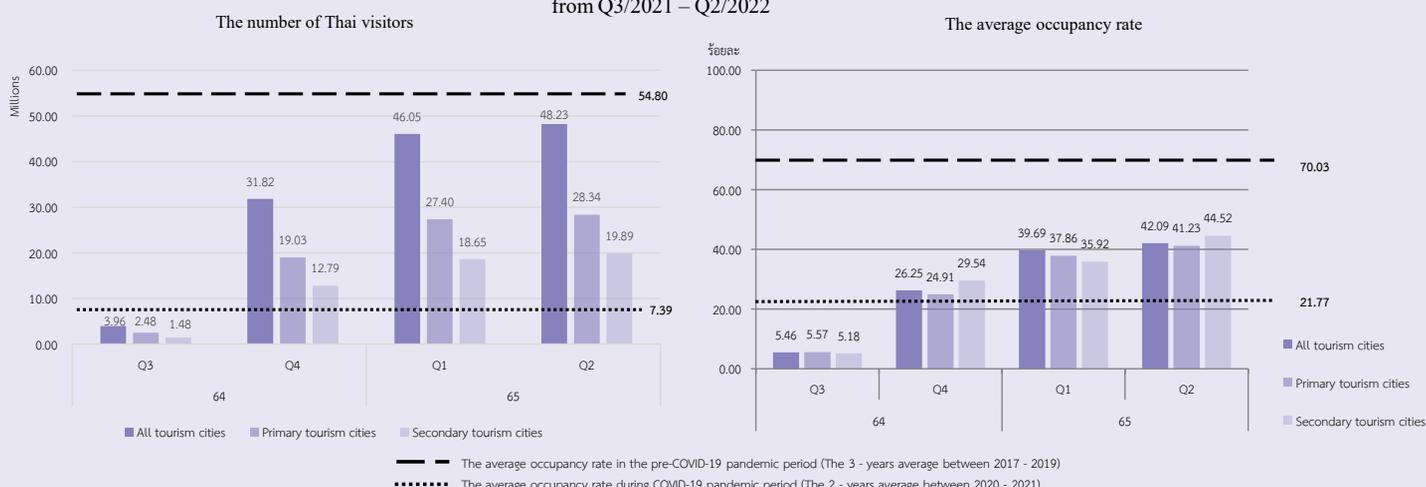
For Thailand, the ongoing shortage of semiconductors affected on downstream industries, for example, automotive manufacturing sector (13.20 percent share of all manufacturing) due to semiconductor components were crucial part for engine systems, fuel distribution, parking camera, and digital instrument panel system production, therefore, causing a negative impact on production of passenger motor vehicle, especially on vehicle with 1,500 - 2,500 cc engine size (23.69 percent share of the passenger car production volume). In the second quarter of 2022, production of passenger motor vehicle with the engine size of 1,500 - 2,500 cc was 26,860 units, a 2.7-percent decline from the same quarter in previous year, and a 44.5-percent decrease compared to quarterly average in pre-COVID levels (2017-2019) which stood at 48,398 units. In the first half of 2022, production of passenger motor vehicle with the engine size of 1,500 - 2,500 cc was 53,184 units, a 13.2-percent decline from 61,246 units in the same period last year. Thus, production of automotive in Thailand in 2022 might below its initial target of 1.80 million units for the year, consequently, Thailand could lose its competitiveness in global automobile export against background of the recovered global demand as the COVID-19 pandemic subsides.

Note: ¹ Diodes, Transistors, similar semiconductor devices; including Photovoltaic cells assembled or not in modules or panels, Light-Emitting Diodes (LED), Mounted Piezo-Electric Crystals

The internal tourism situation in Primary and Secondary Tourism Cities of Thailand¹

In the second quarter of 2022, there were 48.23 million visitors, a 399.9-percent increase from the previous quarter, and generating total tourism revenue of 155 billion Thai Baht, an 85.5-percent increase from the previous quarter. The average occupancy rate was at 42.09 percent, higher than 36.69 percent in the previous quarter, and 8.24 percent in the same period last year. Nevertheless, the number was still lower than a 70.03-percent of average occupancy rate compared to pre-COVID level (2017-2019). For primary tourism cities (consists of 22 provinces), there were 28.34 million visitors (share of 58.76 percent), generating tourism revenue of 111 billion Thai Baht (share of 71.82 percent), there were 591,903 bookable units (share of 73.45 percent). The average occupancy rate stood at 41.23 percent which still remained below pre-COVID levels (74.56 percent), even though the continued rising of the average occupancy rate since the fourth quarter last year. For secondary tourism cities (consists of 55 provinces), there were 19.89 million visitors (share of 41.24 percent), generating tourism revenue of 43 billion Thai Baht (share of 28.18 percent), there were 213,919 bookable units (share of 26.55 percent). The average occupancy rate was at 44.52 percent which closed to pre-COVID levels (59.01 percent). Overall, the figures indicated that tourism sector is showing signs of a stronger rebound as tourism activities in secondary tourism cities continue to recover; therefore, the government and tourism entrepreneurs should develop programs and activities focused on cultural and community-based tourism which would connect primary and secondary tourism cities into the clustered attractions. This can be done by enhancing existing travel routes, encouraging travel anytime as well as conceptualizing festival attractiveness.

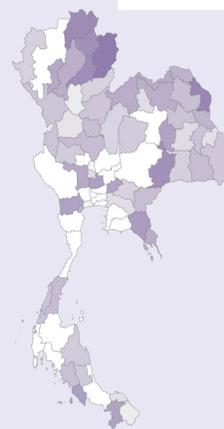
Thailand's internal tourism overview from Q3/2021 – Q2/2022



The average occupancy rate of primary tourism cities in Q2/2022



The average occupancy rate of secondary tourism cities in Q2/2022



— The average occupancy rate in the pre-COVID-19 pandemic period (The 3 - years average between 2017 - 2019)
 The average occupancy rate during COVID-19 pandemic period (The 2 - years average between 2020 - 2021)

— The average occupancy rate in the pre-COVID-19 pandemic period (The 3 - years average between 2017 - 2019)
 The average occupancy rate during COVID-19 pandemic period (The 2 - years average between 2020 - 2021)

¹ 22 primary tourist cities (provinces) included Bangkok, Phra Nakhon Si Ayutthaya, Saraburi, Nakhon Pathom, Nonthaburi, Pathum Thani, Samut Prakan, Samut Sakhon, Chachoengsao, Kanchanaburi, Phetchaburi, Prachuap Khiri Khan, Chonburi, Rayong, Phuket, Krabi, Songkhla, Phang Nga, Surat Thani, Chiang Mai, Khon Kaen and Nakhon Ratchasima.

55 secondary tourist cities (provinces) included Lop Buri, Chainat, Sing Buri, Ang Thong, Ratchaburi, Samut Songkhram, Suphan Buri, Chanthaburi, Trat, Nakhon Nayok, Prachin Buri, Sa Kaeo, Phatthalung, Trang, Ranong, Chumphon, Pattani, Yala, Nakhon Si Thammarat, Narathiwat, Satun, Kamphaeng Phet, Chiang Rai, Phichit, Nakhon Sawan, Tak, Phitsanulok, Phayao, Phetchabun, Phrae, Lampang, Lamphun, Mae Hong Son, Uttaradit, Uthai Thani, Sukhothai, Nan, Kalasin, Chaiyaphum, Nakhon Phanom, Buriram, Loei, Maha Sarakham, Mukdahan, Sisaket, Surin, Nong Khai, Bueng Kan, Udon Thani, Ubon Ratchathani, Sakon Nakhon, Yasothon, Amnat Charoen and Nong Bua Lamphu.

Fiscal Conditions:

On the revenue side, in the third quarter of the fiscal year 2022 (April – June 2022), the net government revenue collection stood at 768,977.3 million Baht, increasing by 6.2 percent compared with the same quarter last year due to **(1) a 16.0-percent increase in revenue collection of the Revenue Department** following: (i) a rise of corporate income tax collection which increased by 16.8 percent due to an improvement in both listed and unlisted companies’ overall business performance, (ii) an increase in VAT collection which rose by 14.4 percent due to an expansion of import value and crude oil price, (iii) an increase in petroleum income tax collection which rose by 32.2 percent following the expansion in global oil price and revenue of petroleum business entrepreneurs, and (iv) a rise of personal income tax collection which grew by 11.7 percent due to a recovery in overall economic and trade activities; **(2) an 18.0-percent rise in revenue submission from other government agencies** which mainly contributed by the telecommunications license fees (4G 900MHz and 5G 700MHz) by the Office of the National Broadcasting and Telecommunications Commission (NBTC), also as a result of low base in the same period last year as affected by the COVID-19 pandemic; and **(3) a 7.0-percent increase in revenue collection of the Customs Department** mainly due to an expansion of crude oil import value which grew by 115.2 percent. However, net revenue collection of the Excise Department declined by 12.6 percent compared with the same quarter last year in which: **(i) excise tax on oil and oil products decreased by 31.1 percent** due to the government measure to reduce the excise tax rate on diesel fuel to 3 Baht per liter from the 18th February - 20th May 2022, and 5 Baht per liter from 21st May - 20th July 2022, in order to alleviate burdens for households and the Oil Fuel Fund Office (OFFO) as affected by the rising of crude oil price in the global market, and **(ii) excise tax on cars dropped by 30.8 percent** following a drop in passenger car production as affected by the shortage of semiconductors.

For the first 9 months of the fiscal year 2022, the net government revenue collection stood at 1,857,525.8 million Baht, increasing by 6.4 percent from the same period last year, and was 6.4 percent higher than the revenue estimation stated in the 2022 Budget Bill. In details, a revenue collection of the Revenue Department, the Customs Department, and revenue submissions from state-owned enterprises (SOEs) were higher than the estimation by 14.3 percent, 7.5 percent, and 14.4 percent, respectively. On the other hand, a revenue collection of the Excise Department was lower than the estimation by 11.9 percent, partly due to the reduction of excise tax rate on diesel fuel. Also, the revenue submission from other government agencies was lower than the estimation by 9.1 percent.

On the expenditure side, the total budget disbursement in the third quarter of the fiscal year 2022 was at 791.4 billion Baht¹, decreasing by 13.2 percent from the same quarter last year. Classified by sources of funds, the government disbursements were as follows:

(i) The 2022 annual budget disbursement stood at 679.2 billion Baht, increasing from the same quarter last year by 0.3 percent. The disbursement rate was at 21.9 percent, greater than 19.6 percent in the previous quarter and 20.6 percent in the same quarter last year. The current expenditure disbursement amounted to 570.8 billion Baht, increasing by 3.1 percent from the same quarter last year. The disbursement rate was at 22.9 percent, higher than 20.6 percent in the previous quarter and 20.6 percent in the same quarter last year. Meanwhile, the capital expenditure disbursement was marked at 108.4 billion Baht, decreasing from the same quarter last year by 12.3 percent mainly due to an accelerated disbursement from the land and construction category in the fiscal year 2021. The disbursement rate was at 18.0 (greater than 15.1 in the previous quarter, yet lower than 20.5 compared with the same quarter last year).

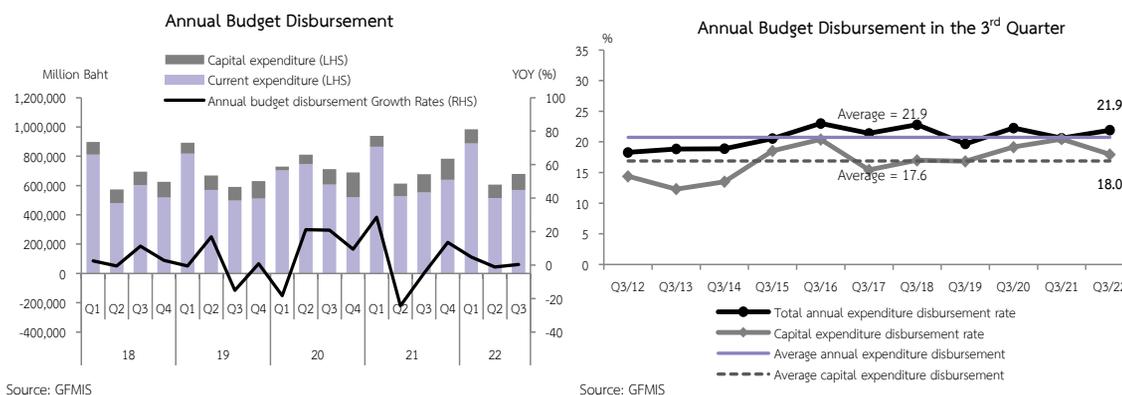
The net government revenue collection in Q3/FY2022 increased by 6.2 percent following a rise in revenue collection of the Revenue Department and the Customs Department as well as a revenue submission from other government agencies.

For the first 9 months of FY2022, the net government revenue collection was 6.4 percent higher than the estimation stated in the 2022 Budget Bill.

Disbursement in Q3/2022 decreased by 13.2 percent following a decline in a disbursement of the 1.5-trillion Baht COVID-19 loan.

Meanwhile, a disbursement from the 2022 annual budget disbursement, the carry-over budget, and the state-owned enterprises capital expenditure increased.

In Q3/FY2022, the 2022 annual budget disbursement increased by 0.3 percent. The total disbursement rate was at 21.9 percent, whereas the rate of current and capital expenditure disbursement stood at 22.9 percent, and 18.0 percent, respectively.



¹ The total budget disbursement includes the disbursement of (i) the grand total of annual budget, (ii) the carry-over budget, (iii) the State-owned enterprises’ capital expenditure budget allocated by the State Enterprise Policy Office (excluding PTT) and the State-owned enterprise’s capital expenditure allocated from the annual budget and the carry-over budget, and (iv) the COVID-19 loans (1.5-trillion-Baht).

(ii) **the carry-over budget disbursement** stood at 31.8 billion Baht, increasing from the same quarter last year by 18.8 percent, the disbursement rate was at 13.3 percent (lower than 24.1 percent in the previous quarter, yet greater than 12.4 percent in the same quarter last year); (iii) **state-owned enterprises capital expenditure budget** (excluding PTT) was disbursed for 55.9 billion Baht², increasing from the same quarter last year by 7.8 percent mainly due to a rise in a capital expenditure disbursement of the Electricity Generating Authority of Thailand (EGAT); (iv) **the COVID-19 loans B.E. 2563 - 2564 (1.5-trillion-Baht)** was disbursed for 28.7 billion Baht.

For the first 9 months of the fiscal year 2022, the total budget disbursement was at 2,914.7 billion Baht, decreasing by 3.6 percent from the same period last year, with the allowing details. **(1) The 2022 annual budget disbursement** stood at 2,269.2 billion Baht, increasing by 1.8 percent compared with the same quarter last year, the disbursement rate was at 73.2 percent (greater than 67.8 percent in the same period last year), including (i) 1,972.7 billion Baht in a disbursement of current expenditure, increasing by 1.4 percent from the same quarter last year with a disbursement rate at 79.0 percent (higher than 72.5 percent in the same period last year), and (ii) 296.5 billion Baht in a disbursement of capital expenditure, increasing by 4.6 percent from the same quarter last year, a disbursement rate was at 49.1 percent (higher than 46.9 percent in the same period last year). **(2) The disbursement of the carry-over budget** stood at 165.0 billion Baht, increasing by 2.6 percent, a disbursement was at 69.1 percent (lower than 74.5 in the same period last year). **(3) State-owned enterprises' capital expenditure budget (excluding PTT)** was disbursed by 164.5 billion Baht³, decreasing by 12.4 percent from the same period last year. **(4) The COVID-19 loan B.E. 2563 – 2564 (1.5-trillion-Baht)** was disbursed by 333.3 billion Baht.

As of 1st August 2022, the total budget disbursement from the COVID-19 loan accumulated at 1,326.0 billion Baht, including 192.6 billion Baht from Group 1 work plans or projects (Healthcare Services), 852.7 billion Baht from Group 2 work plans or projects (Financial Aid and Cash Handouts), and 280.7 billion Baht from Group 3 work plans and projects (Economic Rehabilitation).

Total budget disbursement from the COVID-19 loan (1.5 trillion Baht)

(Unit: million Baht)

Workplans/Projects	Total Budget	Actual Budget	Amount Budget	Disbursed as % of Allocation	Budget Balance
		Allocation	Disbursed		
Group 1 Workplans/Projects –	223,009	222,377.9	183,179.9	82.4	631.1
Healthcare Services					
Group 2 Workplans/Projects –	885,648	869,430.9	852,731.2	98.1	16,217.1
Financial Aid and Cash Handouts					
Group 3 Workplans/Projects –	391,343	328,351.8	280,010.4	85.3	62,991.2
Economic Rehabilitation					
Total	1,500,000	1,420,160.6	1,315,921.5	92.7	79,839.4

Source: Public Debt Management Office (1st July 2022)

Public Debt: at the end of June 2022, public debt was accumulated at 10.2 trillion Baht, equivalent to 61.1 percent of GDP, and remained under the fiscal disciplinary framework. The total public debt comprised 10.0 trillion Baht of domestic loans (98.3 percent of public debt), and 172.9 billion Baht of foreign loans (1.7 percent of public debt).

Fiscal Balance: in the third quarter of fiscal year 2022, the budgetary balance recorded a surplus of 62.5 billion Baht while non-budgetary balance recorded a deficit of 16.8 billion Baht. In the meantime, the government conducted a cash balance management through the borrowing of 181.4 billion Baht. Therefore, the cash balance after debt financing recorded a net surplus of 227.0 billion Baht. In addition, the treasury reserve at the end of the second quarter of the fiscal year 2022 stood at 360.8 billion Baht, thus the fiscal balance at the end of June 2022 equaled to 587.9 billion Baht.

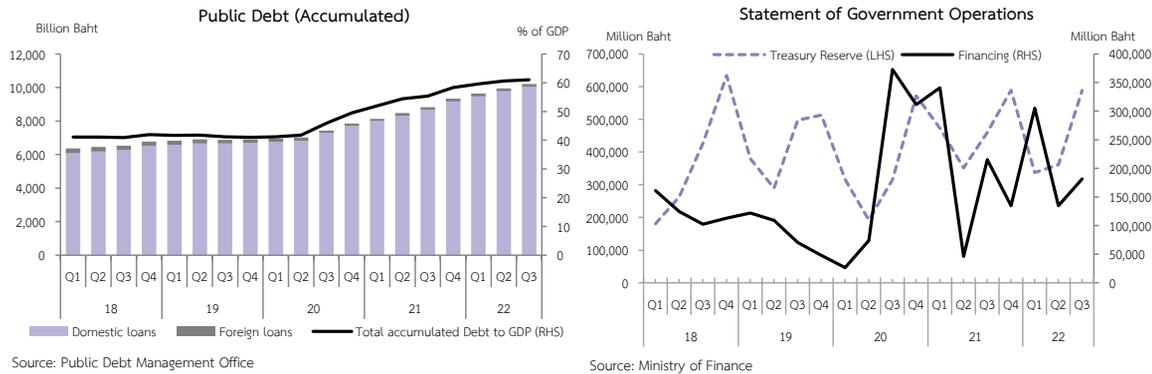
For the first 9 months of the fiscal year 2022, the budgetary balance and the non-budgetary balance recorded a deficit of 555.8 billion Baht, and 66.1 billion Baht, respectively. In addition, the government conducted a cash balance management through the borrowing of 621.0 billion Baht. Therefore, the cash balance after debt financing recorded a net deficit of 832 million Baht.

For the first 9 months of FY2022, the 2022 annual budget disbursement rate was at 73.2 percent in which the rate of current and capital expenditure disbursement stood at 79.0 percent and 49.1 percent, respectively.

At the end of June 2022, the government's fiscal statement remained at a strong level where the fiscal balance stood at 587.9 billion Baht.

² The number was included the 4.2 billion Baht of the capital spending allocated from the annual budget.

³ The number was included the 17.1 billion Baht of the capital spending allocated from the annual budget.



Financial Conditions:

In the second quarter of 2022, in the 3rd meeting on 8th June 2022, the Monetary Policy Committee (MPC) decided to maintain the policy rate at 0.50 percent per annum. The decision was made to ensure a continued recovery of Thai economy in the period ahead. The MPC assessed that the Thai economy will continue to grow owing to a recovery in private consumption, especially service sector, along with the pickup in foreign tourists. In addition, labor market and household income was showing signs of improvement as economic activities continue to pick up after containment measures were relaxed. On the other hand, the impact of COVID-19 and the conflict between Russia and Ukraine on the Thai economy would have been limited. However, the MPC would monitor inflation closely as there were upside risks to higher in both global crude oil prices and cost pass-through from businesses to customers. The monetary policy stance of Thailand was in line with some central banks in the region namely the central banks of Japan, Vietnam, and Indonesia kept the policy rate unchanged at -0.10 percent, 2.50 percent, and 3.50 percent per annum respectively. Meanwhile, major economies and regional economies implemented more aggressive in monetary policy tightening. Specifically, Federal Reserve (Fed), the central bank of England, India, Canada, South Korea, Australia, Philippines, Malaysia, and New Zealand increased the policy rate by 125 basis points, 50 basis points, 90 basis points, 100 basis points, 50 basis points, 75 basis points, 50 basis points, 25 basis points, and 100 basis points respectively. On the other hand, the central bank of Russia cut its policy rate by 1,050 basis points to 9.50 percent per annum.

In July 2022, the Fed, the ECB, the central bank of Canada, South Korea, Australia, Philippines, Malaysia, and New Zealand rose the policy rate by 75 basis points, 50 basis points, 100 basis points, 50 basis points, 50 basis points, 75 basis points, 25 basis points, and 50 basis points respectively.

Recently, in August 2022, the Bank of Thailand (BOT), the central banks of England, and Australia increased the policy rate by 25 basis points, 50 basis points, and 50 basis points respectively.

The BOT maintained the policy rate. Meanwhile, central banks in advanced economies tightened their monetary policy aggressively as well as several Asian central banks continued to raise their policy rate.

Policy Interest Rate

At the end of period	Policy Interest Rate (%)													
	2020		2021				2022							
	Year	Year	Q1	Q2	Q3	Q4	Q1	Q2	Apr.	May.	Jun.	Jul.	Aug.	
USA	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.25-0.50	1.50-1.75	0.25-0.50	0.75-1.00	1.50-1.75	2.25-2.50	2.25-2.50	
England	0.00	0.00	0.10	0.10	0.10	0.10	0.75	1.25	0.75	1.00	1.25	1.25	1.75	
India	0.50	1.50	0.00	0.00	0.00	0.00	4.00	4.90	4.00	4.40	4.90	4.90	4.90	
Canada	-0.10	-0.10	0.25	0.25	0.25	0.25	0.50	1.50	1.00	1.00	1.50	2.50	2.50	
Korea, South	4.35	4.35	0.25	0.25	0.25	0.25	1.25	1.75	1.50	1.75	1.75	2.25	2.25	
Australia	0.25	1.00	0.75	0.50	0.50	0.50	0.10	0.85	0.10	0.35	0.85	1.35	1.85	
Philippines	3.75	4.25	-0.10	-0.10	-0.10	-0.10	2.00	2.50	2.00	2.25	2.50	3.25	3.25	
Malaysia	2.00	3.00	4.50	4.25	4.00	3.75	1.75	2.00	1.75	2.00	2.00	2.25	2.25	
New Zealand	0.10	1.50	0.25	0.25	0.25	0.10	1.00	2.00	1.50	2.00	2.00	2.50	2.50	
EU	0.09	1.33	0.08	0.08	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.50	0.50	
China	3.85	3.80	3.85	3.85	3.85	3.80	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
Japan	0.10	0.50	4.40	4.00	4.00	4.00	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	
Indonesia	4.00	6.00	4.35	4.35	4.35	4.35	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
Thailand	1.75	3.00	0.75	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	
Vietnam	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
Russia	0.25	1.75	3.25	2.25	2.25	2.00	20.00	9.50	17.00	11.00	9.50	8.00	8.00	

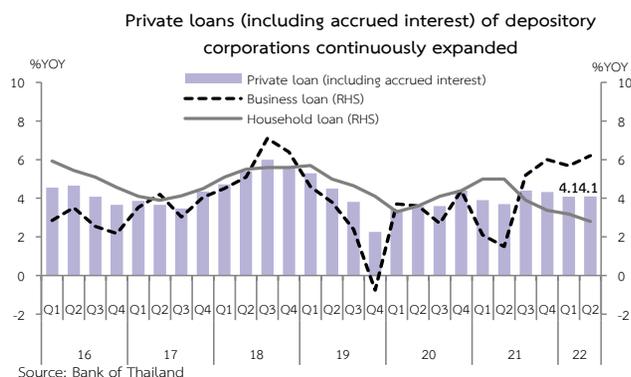
Source: Collected by NESDC as of 13th August 2022

Commercial banks maintained their deposit interest rate and lending rates. Meanwhile, specialized financial institutions (SFIs) remained their lending rate ,but cut their deposit interest rate. In the second quarter of 2022, large-sized commercial banks kept their Minimum Loan Rate (MLR) and the average 12-Month fixed deposit rate unchanged at 5.49 percent per year and 0.45 percent per year, respectively. Similarly, medium-sized bank remained MLR and the average deposit rate at 6.60 percent per year and 0.50 percent per year, respectively. On the one hand, SFIs maintained their MLR at 6.13 percent per year ,but reduced the deposit rate to 0.78 percent per year. The average real deposit rates and MLR stood as the low level due to the monetary policy stance of BOT as well as domestic inflation rising.

In July 2022, commercial banks and SFIs maintained their interest rates on both deposits and lending rates.

Private business loans outstanding continuously expanded. At the end of the second quarter of 2022, private loans outstanding by depository institutions grew by 4.1 percent, the same level as the pervious quarter. Business loans expanded by 6.2 percent, accelerated from 5.7 percent in the previous quarter. The expansion of business loans was mainly driven by the picking up trend of loan demand, especially businesses affected by higher cost of production. Besides, the soft loan facility for business (totaling 250 billion Bath) to support SMEs. On 25th July 2022, the soft loan was approved by 184 billion Bath which was approximately equal to 73.50 percent of total credit line. Additionally, household loans expanded by 2.8 percent, decelerating from 3.4 percent in the previous quarter The expansion of household loan was contributed by the LTV easing policy, lower property transfer fees along with loans demand for living expenses. **Specialized financial institutions (SFIs)** expanded by 3.4 percent, accelerated from 3.1 percent in the previous quarter. The expansion was mainly due to a 3.0 percent increase of household loans, comparing with 2.8 percent in the previous quarter. Likewise, business loans expanded by 6.8 percent which slowed down from 7.4 percent in the previous quarter. Meanwhile, **commercial bank loan** expanded at a slower pace by 4.5 percent, comparing with 4.7 percent in the previous quarter. In details, business loan expanded by 6.1 percent, accelerating from 5.5 percent in the previous quarter, while household loans expanded by 2.9 percent, slowed down from 3.8 percent in the previous quarter.

Major lending sectors with expansion consisted of public administration and defence (19.2 percent), manufacturing (10.4 percent), transport and storage (10.3 percent), construction (6.8 percent), personal consumption (3.0 percent), electricity gas steam and air conditioning supply (0.7 percent) and real estate activities (0.2 percent). On the one hand, major lending sectors with contraction included human health and social work activities (-10.6 percent), information and communication (-6.4 percent), and accommodation and food service activities (-4.1 percent). Besides, Loans for small and medium-sized businesses (excluding financial and insurance activities) indicated that outstanding loans expanded by 3.0 percent, slowed down from 5.7 percent in the previous quarter. Major lending sectors with expansion consisted of manufacturing, wholesale and retail trade, accommodation and food service activities, transportation and storage, construction and electricity gas steam and air conditioning supply. Meanwhile, major lending sectors with contraction consisted of real estate activities, agriculture forestry and fishing, administrative and support service activities and information and communication.



Thai Baht against US dollar depreciated from the previous quarter. In the second quarter of 2022, an average exchange rate was at 34.44 Baht per US dollar, depreciating by 4.14 percent from the previous quarter. The movement of Thai Bath had been devalued along the period in response to the soaring of US dollar against other currencies, the average US dollar index stood at 102.62, increasing from 96.87 in the previous quarter. The main factor of the US dollar’s strength was the Fed’s policy rate hikes to combat high inflation. Moreover, the risk-off sentiment prevails among investors resulted in a depreciation of Thai Bath owing to (i) prolonged conflict between Russia and Ukraine, (ii) the slowdown tendency of China economy due to the strict zero-COVID policy, and (iii) central banks in advanced economies tighten

Other depository corporations (ODCs) maintained their lending rate. However, SFIs lowered the deposit rates.

Private loans continuously expanded in tandem with the demanded for liquidity and higher cost of living.

Thai Baht against US dollar depreciated compared to the previous quarter in tandem with the appreciation of US dollar as a result of the Fed’s policy rate hike.

monetary policy. The depreciation of Thai Baht was correlated with regional currencies such as Japanese Yen, Taiwanese dollar, South Korea Won, Chinese Yuan, Malaysian Ringgit, Indian Rupees, Philippine Peso, Singapore dollar, Indonesian Rupiah and Hong Kong dollar. In contrast, Vietnamese Dong appreciated from the previous quarter. When comparing with trading partner/competitors, Thai Bath depreciated, reflecting by a decrease in average of Nominal Effective Exchange Rate (NEER) by 0.65 percent from previous quarter (an average of 115.99).

In July 2022, the monthly average of Thai Bath was at 36.33 Baht per US dollar, depreciating by 3.89 percent from the previous month. The depreciation was mainly caused by investor’s concern about the Fed’s monetary policy tightening.

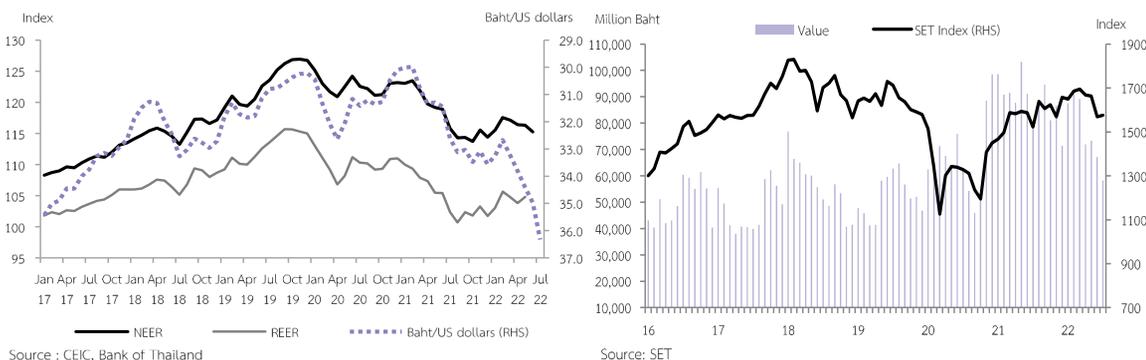
SET Index dropped from the previous quarter. Throughout the second quarter of 2022, SET index fluctuated and experienced a downward trend. This was mainly due to (1) Many central banks tightened their monetary policy to curb inflation, (2) China’s economic slowdown as a result of lockdowns in response to the COVID-19 situation, (3) the Russia - Ukraine conflict, (4) concern about the global economic slowdown, and (5) the outbreak of the Omicron variant. Nevertheless, the faster relaxation of border controls in Thailand and other countries resulted in a strong recovery in foreign tourist arrivals alongside services sector. Altogether, SET index at the end of the second quarter of 2022 closed at 1,568 points, declining by 7.49 percent from the previous quarter. Industrial groups with contraction were technology (-17.7 percent), consumer products (-14.4 percent), financials (-11.7 percent), and industrials (-6.4 percent). The movement of SET index was in line with other regional stock markets such as Taiwan (-16.2 percent), South Korea (-15.4 percent), Philippines (-14.5 percent), Singapore (-9.0 percent), and Malaysia (-9.0 percent). In contrast, major regional stock markets with expansion was China (4.5 percent).

In July 2022, SET index increased by 0.52 percent to 1,576 points from the end of June 2022. This was mainly supported by a significant increase in financial performance of listed companies on the Stock Exchange of Thailand (SET) for the second quarter of 2022, especially banking and technology sectors. Besides, investors less concerned about the Fed’s monetary policy as inflation has already passed the peak.

SET Index decreased from the preceding quarter in response to monetary policy stance of the Fed, China’s economic slowdown, and the Russia-Ukraine conflict.

Thai Baht depreciated against US dollars from

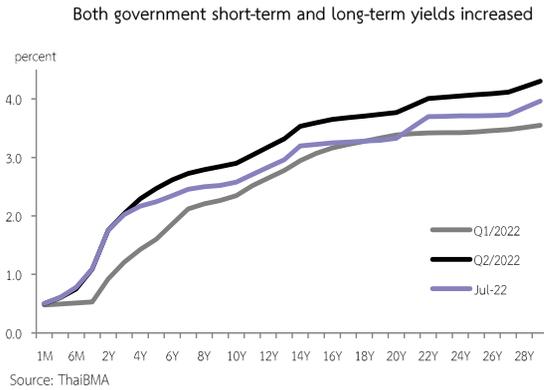
SET Index and turnover decreased in the second quarter of 2022



Government bond yields increased. In the second quarter of 2022, both short-term and long-term government bond yields shifted upward following the Fed’s monetary policy tightening as well as the expectations that Bank of Thailand (BOT) or the MPC will raise the policy rate sooner. At the end of the second quarter of 2022, 1-year government bond yield was at 1.09 percent, increasing from 0.53 percent at the end of the previous quarter. Likewise, 10-year government bond yield rose to 2.90 percent, compared to 2.35 percent at the end of the previous quarter. For net trading position, foreign investors registered a net sell of 28.9 billion Baht, as opposed to a net buy with 23.4 billion Baht in the previous quarter. Expired bond was at 52.7 billion Baht. Total new registered corporate bond was at 598.5 billion Baht, mainly attributed to property development, energy, finance and securities, and information and communications technology.

Government bond yields increased in both short-term and long-term.

In July 2022, short-term government bond yield continued to rise from the previous month. Meanwhile, long-term government bond yield declined in tandem with the US treasury yields as a result of concern about a global economic slowdown after many central banks are likely to tighten their monetary policy aggressively. As a consequence, 1-year and 10-year government bond yields stood at 1.10 percent and 2.58 percent respectively. In details, foreign investors recorded as a net sell of 6.2 billion Baht, continuing from a net sell of 41.5 billion Baht in the previous month.



Capital and financial account recorded a net inflow of 4.0 billion US dollars in the first quarter of 2022 which continued from 2.3 billion US dollars inflow in the previous quarter. This was mainly driven by a net inflow of foreign investors in term of both direct and portfolio investments, especially debt securities. Nevertheless, there was a continued net outflow in term of direct and portfolio investments of Thai investor.

Capital and financial account recorded a net inflow following a net inflow of foreign investors in term of both direct and portfolio investments.

Capital Flow

(Billion USD)	2020					2021					2022
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Q1
- Direct Investment	-23.8	-2.7	-5.7	-3.4	-12.2	-5.7	1.1	-1.7	-0.8	-4.3	1.6
Thai investor	-19.0	-5.3	-5.3	-3.7	-4.6	-17.8	-3.3	-3.1	-3.9	-7.6	-3.8
Foreign investor	-4.8	2.7	-0.3	0.3	-7.5	12.2	4.4	1.3	3.1	3.3	5.4
- Portfolio Investments	-12.1	-8.5	2.8	-2.5	-3.9	-11.5	-9.7	-3.8	0.2	1.8	2.6
Thai investor	-4.1	-1.2	4.2	-1.8	-5.3	-16.4	-10.1	-3.7	-0.0	-2.5	-1.0
Foreign investor	-8.1	-7.3	-1.5	-0.7	1.4	4.9	0.4	-0.1	0.2	4.4	3.6
- Others	24.0	1.6	8.9	-0.4	14.0	15.0	3.5	3.6	3.2	4.7	-0.2
Capital and financial account	-12.0	-9.6	6.0	-6.3	-2.0	-2.1	-5.1	-1.9	2.6	2.3	4.0

Source: BOT

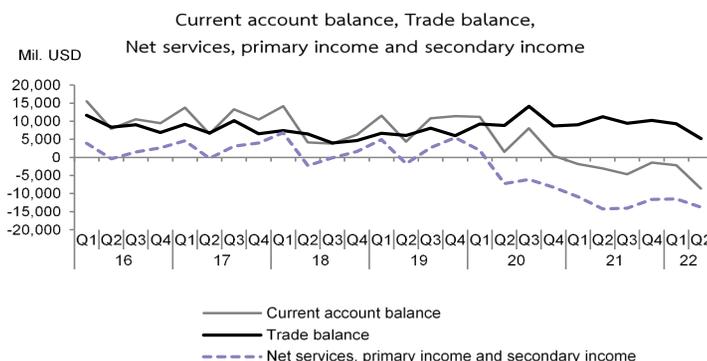
Current account in the second quarter of 2022 registered a deficit of 8.6 billion US dollars (296.7 billion Baht) compared to a 3.0 billion US dollars deficit (95.3 billion Baht) in the same quarter last year, and a 2.2 billion US dollars deficit (72.4 billion Baht) in the previous quarter. This was a result of a 13.8 billion US dollars deficit in services, and primary and secondary income, lower than a 14.3 billion US dollars deficit in the same period last year, and was recorded a deficit for nine quarters consecutively. Meanwhile, trade balance recorded a surplus of 5.2 billion US dollars, lower than an 11.2 billion US dollars surplus in the same quarter last year.

Current account recorded a deficit for the sixth consecutive quarter.

In the first half of 2022, current account registered a deficit of 10.8 billion US dollars (369.2 billion Baht), compared with a 6.1 billion US dollars deficit (202.8 billion Baht) in the second half of 2021 and a 4.9 billion US dollars deficit (151.3 billion Baht) in the same period last year.

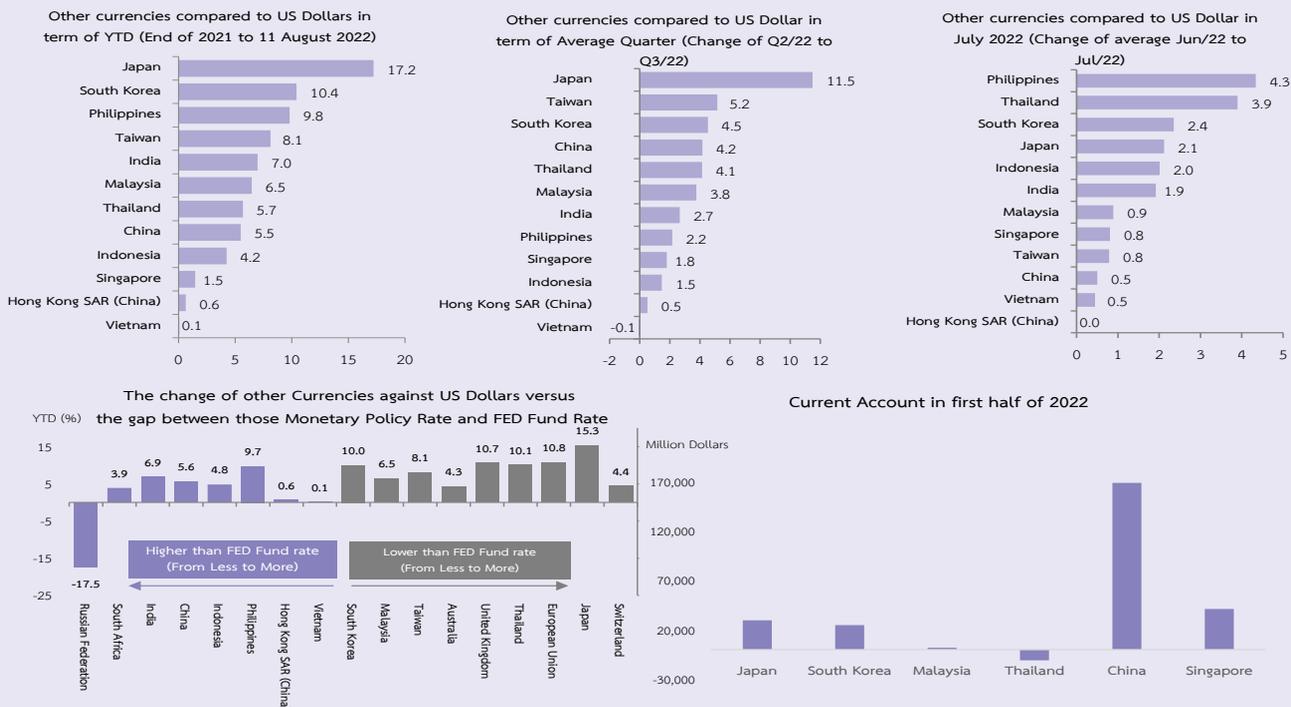
International reserve at the end of June 2022 stood at 222.3 billion US dollars, decreasing from 246.5 billion US dollars at the end of June 2021. In Baht terms, international reserve at the end of June 2022 stood at 7,844.0 billion Baht, lower than 7,901.2 billion Baht at the end of June 2021.

International reserve at the end of June 2022 stood at 222.3 billion US dollars.

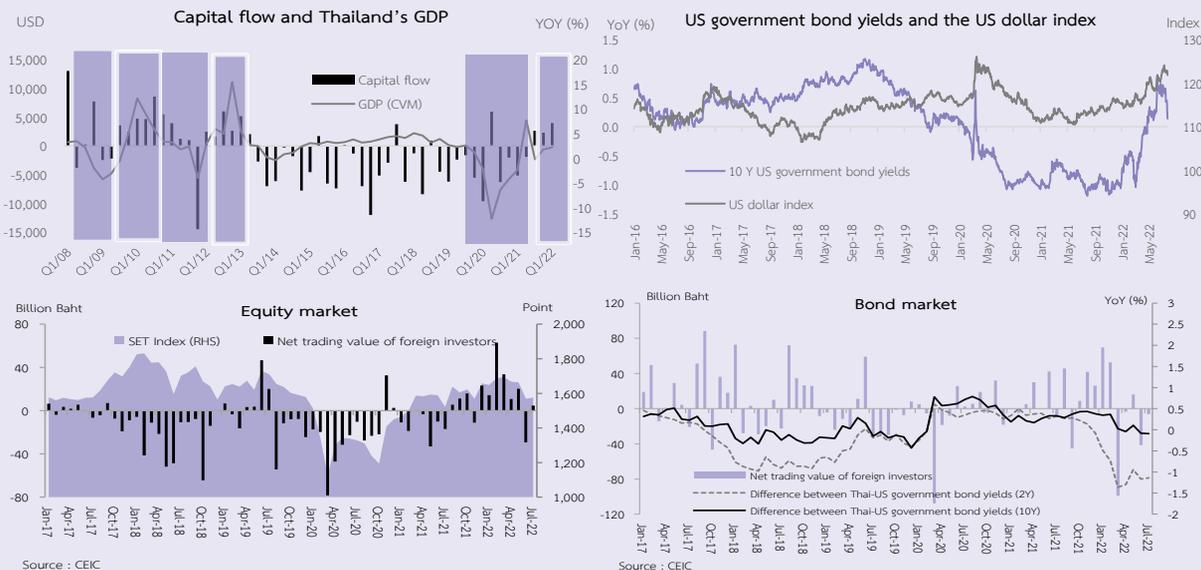


Direction of Thai Baht

Thai Baht against US Dollar is likely to depreciate from the previous year. At the end of July 2022, Thai Baht depreciated by 10.1 percent from the end of 2021. In the second quarter of 2022, Thai Baht depreciated by 4.1 percent (QoQ) compared to the previous quarter. Besides, the nominal effective exchange rate (NEER) for July 2022 averaged 112.66, comparing with 114.41 in December 2021, reflected a depreciation of Thai Baht when compared with trading partners. Meanwhile, at the end of June 2022, the real effective exchange rate (REER) stood at 104.06, increased from 101.64 in December 2021. Thai Baht depreciated in line with regional currencies due to the Fed's policy rate hike. However, there are many other factors that correlated with the movement of Thai Baht, the short-term volatilities including policy rate gap, stock market return, and exchange rate forecasting. For long-term volatilities, concerning over current account balance, inflation of Thailand compared to the US, and manufacturing technology, etc. In the first six months of 2022, Thailand's current account deficit was 10,835.74 million US Dollars.

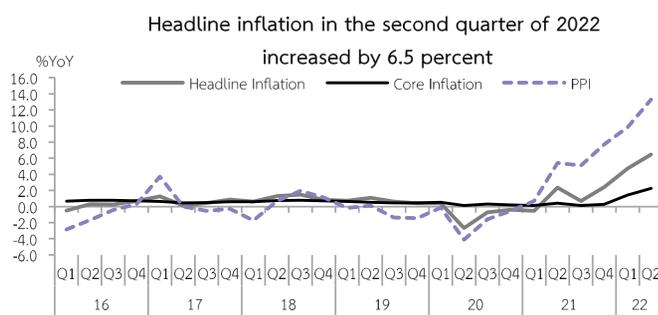


In addition, key direction of capital flow consists of direct investment and Thai securities which play a crucial role in the Thai economy and financial conditions as well as the movement of Thai Baht. In details, net trading position of foreign investors in Thai securities was a net inflow as reflected by a continuous inflow of capital into the stock market, along with domestic capital flows are likely to flow more into risky assets. In the first half of 2022, foreign investors registered a net buy position of 112.6 billion Baht in term of equity securities, continued from 27.7 billion Baht in the latter haft of 2021 and improved from a net sell of 76.3 billion Baht in the first half of 2021. On the contrary, in the first half of 2022, foreign investors registered as net sell position of 5.5 billion Baht in terms of debt securities, compared to a net buy positions of 69.0 billion Baht and 72.5 billion Baht in the latter half of 2021 and the first half of 2021, respectively. Altogether, this reflects more confidence over the Thailand's economic recovery in the period ahead.



Headline inflation: In the second quarter of 2022, headline inflation was averaged at 6.5 percent compared with a 4.7-percent headline inflation recorded in the previous quarter. **Food-and-beverage** price index increased by 5.8 percent accelerating from a 3.8-percent increase in the previous quarter. This was partly due to an increase in price of meats, seasoning & condiments, and eggs and dairy products, which expanded by 18.8 percent, 10.3 percent, and 8.2 percent, respectively. **Non-food and beverage** price index increased by 6.9 percent accelerating from a 5.4-percent increase in the previous quarter, following an increase in price of electricity, fuel, water supply, and vehicle & vehicle operation which increased by 21.6 percent, and 19.0 percent, respectively, associated with a rise of energy price index which continuously increased by 32.6 percent compared with a 26.9-percent increase in the previous quarter. Core inflation was averaged at 2.3 percent compared with a 1.4-percent in the previous quarter.⁴

In the first half of 2022, headline inflation was averaged at 5.6 percent compared with a 1.6-percent in the second half of 2021 and core inflation was averaged at 1.9 percent compared with a 0.2-percent in the second half of 2021.



Source: Ministry of Commerce

Producer Price Index (PPI): In the second quarter of 2022, Producer Price Index increased by 13.3 percent compared with a 9.8-percent rise in the previous quarter. **The price of mining products** increased by 68.1 percent compared with a 61.5-percent increase in the previous quarter, following an increase in price of petroleum & natural gas which continuously rose by 88.7 percent compared with an 82.2-percent increase in the previous quarter. **The price of manufactured** products rose by 12.1 percent compared with an 8.8-percent increase in the previous quarter, associated with an increase in price of petroleum products, and chemicals & chemical products which grew by 92.9 percent and 13.5 percent, respectively. **The price of agricultural & fishery products** increased by 7.7 percent compared with a 4.7-percent increase in the previous quarter, associated with an increase in price of agricultural products and fisheries product, which grew by 7.7 percent and 7.1 percent, respectively.⁵

In the first half of 2022, Producer Price Index increased by 11.6 comparing with a 6.4-percent increase in the second half of 2021.

Headline inflation was averaged at 6.5 percent compared with a 4.7-percent headline inflation recorded in the previous quarter.

The price index of food-and-beverage and non-food-and-beverage increased at a higher pace.

Producer Price Index (PPI) increased by 13.3 percent compared with a 9.8-percent increase in the previous quarter.

⁴ In July 2022, Headline inflation was 7.6 percent, Core inflation was 3.0 percent.

⁵ In July 2022, Producer Price Index (PPI) rose by 12.2 percent.

2. Crude oil price in Q2 of 2022

The crude oil price in the global market was higher than the same period last year and highly rose from the first quarter of 2022. In the second quarter of 2022, the average crude oil price in four major markets (WTI, Brent, Dubai, and Oman) stood at 108.8 US dollars per barrel, rose by 60.6 percent from 67.7 US dollars per barrel recorded in the same period last year. Also, the price increased by 13.1 percent from the 96.2 US dollars per barrel on average recorded in the previous quarter.

Key reasons leading to an increase in the global crude oil price in this quarter were (i) concern towards Russia economic sanction measures from the European countries, (ii) a decrease of the U.S. commercial crude oil inventories in the second quarter of 2022 (the U.S. commercial crude oil inventories in the second quarter was average at 417 million barrels, decreasing by 13.1 percent compared with 481 million barrels in the same period last year), and (iii) an investors' concern towards oil supply tightness as the production plan of the OPEC+ anticipated inability to offset a decrease in production capacity from Russia, moreover, production problems in some member countries led to a delayed plan for production capacity increasing.

In the first half of 2022, the average crude oil price in four major markets (Dubai, Oman, Brent, and WTI) stood at 102.1 US dollars per barrel, increased by 60.8 percent from the average at 63.5 US dollars per barrel recorded at the same period last year. Also, crude oil price increased by 36.0 percent from average at 75.1 US dollars per barrel recorded at in the second half of 2021.

The crude oil price in the global market continually increased compared with the same period last year, and also highly increased from the previous quarter.

Crude oil price

Year		USD per Barrel					(%YoY)				
		WTI	BRENT	DUBAI	OMAN	Average	WTI	BRENT	DUBAI	OMAN	Average
2019	Year	56.9	64.0	63.3	63.6	62.0	-12.6	-10.9	-9.0	-8.9	-10.3
2020	Year	39.6	43.4	42.4	41.9	42.0	-30.4	-32.2	-33.0	-34.2	-32.3
	Year	68.1	70.9	69.5	69.3	69.4	72.1	63.4	63.8	65.5	65.4
	H1	62.0	65.1	63.7	63.1	63.5	65.9	53.1	55.1	58.4	56.5
	H2	73.8	76.4	75.0	75.1	75.1	76.7	72.8	71.2	71.6	73.1
2021	Q1	58.0	61.2	60.3	59.0	59.6	25.6	20.1	18.7	19.0	20.0
	Q2	66.5	69.4	67.5	67.5	67.7	135.9	107.0	118.3	119.3	119.5
	Q3	70.5	73.2	71.8	71.9	71.9	72.5	69.0	67.0	67.8	69.1
	Q4	77.1	79.7	78.4	78.5	78.4	80.8	76.6	75.6	75.7	77.2
	H1	101.4	104.7	101.9	100.8	102.1	63.5	60.7	60.0	59.7	60.8
	Q1	94.7	97.9	96.1	96.4	96.2	63.3	59.8	59.4	63.3	61.3
	Q2	109.0	112.3	108.5	105.4	108.8	63.9	61.9	60.7	56.2	60.6
2022	Apr	101.0	105.1	102.6	103.5	103.1	63.1	60.5	62.6	64.3	62.6
	May	109.8	112.3	107.9	106.0	109.0	68.6	64.4	61.8	59.2	63.5
	Jun	114.0	117.5	113.3	106.0	112.7	59.5	59.8	57.7	47.2	56.1
	Jul	100.2	105.4	103.2	106.0	103.7	37.9	41.8	41.3	44.9	41.5
	7M	101.3	104.8	102.1	101.6	102.3	59.3	57.6	56.9	57.3	57.7

Source: Thairoil Plc and EPPO.

3. The World Economy in Q2 of 2022

The world economy in the second quarter of 2022 exhibited a decelerated growth from the previous quarter, following the slowdown in the major economies, particularly the US, the Eurozone and China. Rising uncertainties from conflicts between Russia and Ukraine which led to sanctions imposed on Russia from several major economies have resulted in the sharp hikes in energy and commodity prices and contributed to multi-decade high inflation rates in many countries.⁶ Moreover, the conflict also intensified global supply chain disruption and raw material shortages in both agricultural and manufacturing sectors. Amid increasing inflationary pressure from economic recovery and high energy price, major central banks have continuously tightened their monetary policy⁷ while the driving force from fiscal policy in response to COVID-19 measure has faded. On the other hand, the Chinese economy slowed down due to the strict implementation of the Zero COVID policy that led to the lockdowns in key cities while credit problems in the real estate sector tend to be prolonged.

The US economy increased by 1.6 percent (advance estimate), decelerating from 3.5 percent in the previous quarter. After seasonal adjustment, the economy contracted for two consecutive quarters by 0.9 percent (%QoQ saar), compared with a 1.6 percent drop in the last quarter, reflecting a technical recession. The slowdown in this quarter was due to decelerated domestic consumption amid rising inflationary pressure at a 40-year high rate.⁸ Meanwhile, the contribution from government spending declined as a result of completion of government measures during COVID-19. Private investment also slowed down, following a decrease in housing investment for three consecutive quarters. Nonetheless, labor market remained tight. The unemployment rate in June remained at a low level of 3.6 percent for the fourth consecutive month. This was in line with increasing wages which were higher than the pre-pandemic levels.⁹ Against the rising inflationary pressure, the US Federal Reserve (Fed) increased its policy interest rate for two time in row during the May 3rd – 4th and June 14th – 15th meetings to be at 1.50 - 1.75 percent (a 0.50-percent increase) and 2.25 - 2.50 percent (a 0.75-percent increase) respectively, accounted for the highest hike since 1994.

The Eurozone economy grew by 4.0 percent (%YoY), decelerating from a 5.4-percent growth in the previous quarter. The slowdown was observed in key members such as Germany, France, and Italy. This was due to the slowdown in domestic demand and manufacturing, which were undermined by the ongoing Russia-Ukraine conflict and its subsequent sanctions, especially the embargo seaborne imports of Russian crude oil within 2022.¹⁰ Simultaneously, the natural gas nomination of the pipeline that runs under the Baltic sea connecting Germany and Russia declined by 59.8 percent during the latter half of June 2022 when compared with the average level during April to May, and 58.1 percent from the same period of 2021. The conflict also hindered the consumer confidence index to its historical lowest level. Moreover, the business and industrial confidence indices declined to their 4-quarter and 5-quarter lowest levels, respectively. Besides, the second quarter headline inflation registered at 8.0 percent, rising from the previous 6.1 percent and is the highest since data collection started. To suppress this inflationary pressure, the European Central Bank (ECB) at the June 9th meeting opted to continue its tightening stance.¹¹ However, the fiscal measures are continually implemented.¹²

The US economy, after seasonal adjustment, declined by 0.9 percent (%QoQ saar.), which was the second consecutive quarter of negative growth

The Eurozone economy expanded by 4.0 percent, accelerated by enhanced domestic demand which was recovering from the COVID-19 pandemic.

⁶ US inflation (CPI) is at its highest in 40 years, while the eurozone inflation is at its highest since the data was collected.

⁷ The US Federal Reserve, at the meeting on June 14th - 15th, 2022, raised the policy interest rate by 0.75 percent, the highest rate hike since 1994. The Bank of England, at the meeting on June 15, 2022, voted to raise its benchmark rate by 0.25 percent to 1.25 percent, the fifth consecutive hike. Meanwhile, the Reserve Bank of Australia, at the meeting on June 7th, 2022, agreed to raise the policy interest rate from 0.35 percent to 0.85 percent, the second consecutive hike.

⁸ The inflation rate (CPI) in June 2022 was at 9.0 percent, accelerated from 8.5 percent in May 2022 and was the highest level since December 1981, bringing the average inflation rate in the second quarter to 8.6 percent.

⁹ The average weekly wage in June 2022 grew by 4.2 percent, compared with 3.1 percent in the pre-pandemic level in 2019, but still less than the inflation rate.

¹⁰ On June 3rd, the European Union announced a partial embargo on Russian oil, where the members will ban seaborne imports of Russian crude oil as of December 5th, 2022, and ban petroleum product imports from Russia as well as insurance on Russian oil ships, as of February 5th, 2023.

¹¹ In its June meeting, the ECB decided to hold its key policy interest rate at 0.0 percent but also announced that the rate will be increased to 0.25 percent in its next meeting in July 2022 as well as a further hike in September. The ECB also retained its plan to discontinue its Asset Purchase Programme (APP) on July 1st, 2022, and to reinvest principals from matured securities under the Pandemic Emergency Purchase Programme (PEPP) at least until the end of 2024.

¹² For progressions under the Next Generation EU Recovery and Resilience Facility 672.5 billion Euros funds have progressed as follows: the European Commission has disbursed 26 billion Euros under the Recovery and Resilience.

The Japanese economy grew by 1.1 percent (%YoY), improving from 0.7 percent in the first quarter, due to improved pandemic situation, which led to a recovery of domestic demand as illustrated by 2.8-percent growth of retail trade index, accelerating from 0.4 percent in the previous quarter, along with the service Purchasing Managers' Index (PMI) to be at 52.4, increasing from 47.1 in the first quarter of 2022. Meanwhile, export volume in US dollar terms declined by 2.3 percent, compared with a 4.4-percent growth in the previous quarter, due to a prolonged supply disruption. Inflation rate rose from 0.9 percent to 2.4 percent in this quarter, reaching the Bank of Japan's 2-percent inflation target. Nevertheless, despite the accelerated inflation, the BOJ's meeting on June 16th - 17th, still maintained their short-term policy rate at -0.1 percent and 10-year Japanese government bond yield at zero percent (Yield curve control) in order to keep their inflation rate above 2 percent and continually stimulate the economy.

The Chinese economy grew by 0.4 percent, decelerating from 4.8 percent in the prior quarter, the slowest pace in 9 quarters, owing to the impacts of the Zero-tolerance COVID-19 policy led to strictly lockdowns in several major economic areas.¹³ Hence, manufacturing production, export sector, and domestic demand had significantly affected, thus, the Caixin's Purchasing Manager Index for manufacturing and service sectors in the second quarter decreased to 48.6 and 44.0, respectively, the lowest levels in 9 months. Furthermore, the domestic retail sale declined for the first time in six quarters by 4.6 percent, compared to an expansion of 3.3 percent in the last quarter. Similarly, the consumer confidence index declined to the historical low level at 87.5 For the real estate sector, the liquidity crisis had continually intimidated investment to decline for the first time in nine quarters by 5.4 percent, compared to an expansion of 0.7 percent in the prior period. Besides, the unemployment rate was 5.83 percent, the highest rate since the third quarter of 2021. Against a slowdown economic prospect, the Chinese government continues to implement economic stimulus measures.¹⁴

The Newly Industrialized Economies (NIEs) continued to grow attributed to expansions in domestic demand and export sectors, illustrated by the continual increases in the retail sales index and export value.¹⁵ Hence, the economies of Singapore, South Korea, and Taiwan in the second quarter grew by 4.4 percent, 2.9 percent, and 3.1 percent, compared to 3.8 percent, 3.0 percent, and 3.7 percent in the last quarter, respectively. Meanwhile, Hong Kong's economy declined by 1.3 percent, compared with a decline of 3.9 percent in the last quarter, due to the strict Covid-19 control measure, the impact of the slowdown in the Chinese economy, as well as the supply chain disruption. After seasonally adjusted, the economies of Singapore, and South Korea grew by 0.0 percent, and 0.7 percent, compared to 0.9 percent, and 0.6 percent in the previous quarter, respectively. While Taiwan's economy declined by 0.8 percent, compared to 1.1 percent in the last quarter, and Hong Kong's economy expanded by 0.9 percent, compared to 2.9 percent in the last quarter. Meanwhile, the NIES had also been affected by increasing inflationary pressure hence several central banks began to tighten their monetary policy stance.¹⁶

The Japanese economy expanded 1.1 percent in the second quarter thanks to an improvement of domestic demand while the BOJ continued their expansionary monetary policy despite inflation reaching their target.

The Chinese economy expanded by 0.4 percent, decelerating from 4.8 percent in the previous quarter, due to the Zero-tolerance COVID-19 policy, which notably affected manufacturing production and domestic demand, as well as the prolonged liquidity crisis in the real estate sector.

The NIEs continued to expand in line with stronger domestic demand and export growths, Except for the Hong Kong economy which continues to decline due to the impact of the outbreak control measures and the supply chain disruption.

¹³ Chinese government has already imposed lockdowns in 45 cities with total population of 373 million people, including major cities such as Beijing, Shanghai, and Shenzhen

¹⁴ After the meeting on April 26th, 2022, the Central Committees for Financial and Economic Affairs (CCFEA) announced that there would be a new economic stimulus measures through investing in the modern infrastructure, in which would be a new pillar for economic and social development in the next period. Then, on May 31st, 2022, China's State Council introduced the Policy Measure Package to Stabilize the Economy ("the policy package") including 33 measures, targeting the private investment and consumption such as credit return on value added tax (VAT), speeding up fiscal spending as well as releasing special bond for local government. At the same time, the People's Bank of China (PBOC) decided to further loosening monetary policy. On April 25th, 2022, the PBOC lowered the Required Reserve Ratio (RRR) from 8.4 percent to 8.1 percent, injecting 5.30 billion Yuan of liquidity into the system as well as adding liquidity by another 1 billion Yuan by launching re-lending program for supporting coal development as well as use and enhance coal reserve capacity. Moreover, the PBOC also introduced the special central bank lending for supporting small businesses, Sci-Tech innovation as well as elderly care services.

¹⁵ Retail sales index for Singapore, South Korea, and Taiwan in the second quarter grew by 15.5 percent, 8.0 percent, and 9.8 percent, accelerating from 6.2 percent, 7.6 percent, and 4.1 percent in the first quarter, respectively. Meanwhile, export value expanded by 20.9 percent, 13.0 percent, and 15.4 percent, compared to 17.1 percent, 18.4 percent, and 23.5 percent in the previous quarter, respectively.

¹⁶ The central bank of NIEs increased the policy rate in the second quarter of 2022 as follows; the Monetary Authority of Singapore increased the policy rate from 0.64 percent to 1.56 percent, and the Hong Kong Monetary Authority increased the policy rate from 2.00 percent to 2.75 percent, and the Central Bank of the Republic of China (Taiwan) increased the policy rate from 1.38 percent to 1.50 percent.

The ASEAN economies continued to expand in accordance with the growth of manufacturing and export sectors. The economies of Indonesia, Philippines, Malaysia and Vietnam grew by 5.4 percent, 7.4 percent, 8.9 percent, and 7.7 percent, compared with 5.0 percent, 8.2 percent, 5.0 percent, and 5.1 percent in the previous quarter, respectively. Export value showed strong expansion¹⁷ while the PMIs remained in the positive territory. In addition, the unemployment rate dropped close to the pre-outbreak levels. However, domestic demand was constrained by increasing inflationary pressures.¹⁸ Thus, the Bank Negara Malaysia and the central bank of the Philippines raised the policy interest rates.¹⁹ On the contrary, the central banks of Indonesia and Vietnam still hold their benchmark rates at a low level.

The ASEAN economies continued to expand supported mainly by the growth of manufacturing and export sectors. However, domestic demand was constrained by accelerating inflationary pressures

Real GDP Growth, Exports of Goods Growth, and Inflation Rates of Key Economies

(%YoY)	GDP					Exports of Goods					Headline Inflation						Highest in (Months)
	2020		2021		2022	2020		2021		2022	2021		2022				
	Year	Q4	Year	Q1	Q2	Year	Q4	Year	Q1	Q2	Year	Q1	Q2	May	Jun	Jul	
US	-3.4	5.5	5.7	3.5	1.6	-13.5	22.9	23.3	18.6	22.9	4.7	8.0	8.6	8.5	9.0	8.5	487 (Jun)
Eurozone	-6.3	4.8	5.4	5.4	4.0	-7.1	7.5	17.9	8.8	6.9 ^{1/}	2.6	6.1	8.0	8.1	8.6	8.9	307
United Kingdom	-9.3	6.6	7.4	8.7	2.9	-12.2	10.1	9.8	11.0	1.6	2.6	6.2	9.2	9.1	9.4		402
Australia ^{2/}	-2.2	4.4	4.8	3.1		-7.4	27.2	37.3	23.3	27.4	2.9	5.1	6.1				84 (Q)
Japan	-4.5	0.4	1.7	0.4		-9.1	6.4	17.9	4.4	-2.3	-0.2	0.9	2.4	2.4	2.3		87 (Apr)
China	2.2	4.0	8.1	4.8	0.4	4.0	22.7	29.7	15.6	12.8	0.9	1.1	2.2	2.1	2.5	2.7	24
India	-6.6	5.4	8.3	4.1		-14.8	41.0	43.1	29.2	24.5	5.1	6.3	7.3	7.0	7.0		95 (Apr)
South Korea	-0.7	4.2	4.1	3.0	2.9	-5.5	24.5	25.7	18.4	13.0	2.5	3.8	5.4	5.4	6.0	6.3	284
Taiwan	3.4	5.3	6.6	3.7	3.1	4.9	26.0	29.3	23.5	15.4	2.0	2.8	3.5	3.4	3.6	3.4	166 (Jun)
Hong Kong	-6.5	4.7	6.3	-3.9	-1.3	-0.5	23.2	26.0	2.8	-3.3	1.6	1.5	1.5	1.2	1.8		6
Singapore	-4.1	6.1	7.6	3.8	4.4	-4.1	25.9	22.1	17.1	20.9	2.3	4.6	5.9	5.6	6.7		165
Indonesia	-2.1	5.0	3.7	5.0	5.4	-2.7	45.6	41.9	35.3	38.8	1.6	2.3	3.8	3.6	4.3	4.9	80
Malaysia	-5.5	3.6	3.1	5.0	8.9	-2.3	26.9	27.5	18.3	23.3	2.5	2.2	2.8	2.8	3.4		12
Philippines	-9.5	7.8	5.7	8.2	7.4	-8.1	5.2	14.5	9.9	4.4	3.9	3.4	5.5	5.4	6.1	6.4	45
Vietnam	2.9	5.2	2.6	5.1	7.7	6.9	19.0	18.9	13.3	21.3	1.8	1.9	3.0	2.9	3.4	3.1	23 (Jun)

Source: CEIC, compiled by NESDC

Notes: ^{1/} Data up to May 2022

^{2/} Australian inflation is reported on a quarterly basis.

¹⁷ The export value of Malaysia, Indonesia, the Philippines and Vietnam in the second quarter grew by 23.3 percent, 38.8 percent, 4.4 percent, and 21.3 percent, compared with 18.3 percent, 35.3 percent, 9.9 percent and 13.3 percent, respectively.

¹⁸ The average inflation rates in the second quarter of Malaysia, Indonesia, the Philippines and Vietnam were at 2.8 percent, 3.8 percent, 5.5 percent, and 3.0 percent, accelerating from 2.2 percent, 2.3 percent, 3.4 percent, and 1.9 percent, respectively.

¹⁹ The Bank of Malaysia raised its policy interest rate by 0.25 percent to 2.00 percent in May. Meanwhile, the Philippines' central bank increased the policy interest rate to 3.00 percent, the 0.25-percent increase consecutively in May and June, respectively.

4. The World Economic Outlook for 2022

The world economy in 2022 is expected to decelerate from the previous year with a slower-than-expected recovery due to softened growth in major economies, particularly the US, the Eurozone, Japan, and China which have been affected by spillovers from the conflict between Russia and Ukraine that leads to the prolonged sanctions. As a result, energy and commodity prices tend to stay high, pressuring the cost of production and inflation rate. This is also expected to curtail the recovery of economic activities and domestic demand in several countries amidst notable monetary policy tightening particularly in major economies which have led to higher borrowing costs and weakening financial condition of businesses and households. Also, the conflict tends to amplify the global supply chain bottlenecks, especially scarcity of key materials predominantly produced and exported by Russia or Ukraine. Meanwhile, countries in the European region that highly depend on Russian energy resources, are facing the uncertainty of energy security regarding the plan to embargo crude oil from Russia by the end of 2022. In the meantime, the risk to the global outlook also include the slowdown in Chinese economy following the Zero COVID policy led to the strict lockdown in key economic cities which continued to affect production and transportation sectors and tends to pose subsequent impacts to several countries especially those highly dependent on trade with China, including emerging economies in Asia and ASEAN. Furthermore, the conflict between China and the US in regard to Taiwan's position will weigh on global economic outlook if they impose trade and investment barriers more broadly which could significantly alter the global supply chain's structure. Nevertheless, the world economic growth for the remainder of the year will be supported by the expansion of domestic demand and recovery in service sectors following easing containment measures and the robust labor market recovery.

Notwithstanding, key underlying assumptions for this baseline projection include: (i) the geopolitical conflicts between Russia and Ukraine and the US and China will not escalate to more intensified warfare and thus more intense and widespread sanctions; (ii) the global energy market can reallocate both in term of production and international trade, and will thus not significantly destabilize global energy market; (iii) the volatility in financial and capital markets from increasing policy interest rate from major central banks will not significantly suppress economic growth and lead into recession while the economic crisis in emerging markets and low-income countries with vulnerable economic stability will have limited impact on overall global economy; (iv) there will be no severe outbreaks from new COVID-19 variants and also monkeypox disease which could lead to reimplementations of stringent containment measures and restrictions on international travel. Under this baseline scenario, the global economy and trade volume in 2022 are projected to expand by 3.3 percent and 4.3 percent, decelerating from the 5.3 percent and 10.1 percent growths in 2021 and downwardly revised from 3.5 percent and 4.7 percent in the last projection, respectively. Prospects on key economies are as follows:

The US economy is expected to grow by 2.2 percent, decelerating from 5.7 percent last year, and downwardly revised from 3.6 percent in the last prediction. The adjustment was mainly due to the impact of increasing inflationary pressure and prolonged supply chain disruptions which restrain domestic spending and private investment. The manufacturing and service PMIs in July dropped to 52.2 and 47.3, respectively, the lowest level in 24 and 25 months. Meanwhile, the consumer confidence index hit the 17-month-low level of 95.7. In addition, the real estate sector has been affected by the rising mortgage rates.²⁰ However, the labor market remains strong as the unemployment rate continues to decline, and non-farm payrolls has reached the pre-pandemic level.²¹ Aiming to tame the inflationary pressure amidst the fairly strong labor market, the Fed has raised its policy rate and reduced the amount of its holding assets²², while the government introduces the Inflation Reduction Act²³ of 2022 and Chips and Science Act into laws in order to bolster the economy.

The Eurozone economy is expected to grow by 2.6 percent in 2022, a downward adjustment from 2.8 percent. Despite favorable performance in the first half of the year, it is expected that the Eurozone will continue to be affected by the prolonged Russia-Ukraine conflict which leads to additional sanctions on Russia, including the exclusion of Russian banks from the SWIFT system, and the agreement to introduce embargoes on crude oil import from Russia by 2022. These factors inevitably result in higher prices of imported goods and threats to energy security of many countries in the region. At the same time, domestic demand has also been constrained by the subsequent inflation, with the latest rate in July registering a historical high at 8.9 percent. Furthermore, the consumer confidence index declined to a record low of (-27.0) in July, along with the confidence indices of the business, industrial, and services sectors, which were at 15-month, 17-month, and 14-month lows, respectively. Moreover, both manufacturing and services PMIs in July decreased to 49.8 and 51.2, which are the lowest levels in 25 months and 7 months, respectively. Due to the higher inflationary pressures, the ECB at the July 21st's meeting announced further monetary tightening by raising the policy rate for the first time in

²⁰ Mortgage loan interest rates rose to an average of 5.4 percent in July compared to 3.9 percent at the end of 2021. Meanwhile, the Housing Market Index dropped to 55.0 – the 8th consecutive drop and the lowest level in the last 25 months. According to this, the real estate sector has benefited from the low interest, resulting in an increasing house price. This is in line with the rising Freddie Mac House Price Index in June to 281.2 (17% YoY), indicating the possible risk of a growing bubble in the US housing market as in the 2007 incident.

²¹ The unemployment rate in June 2022 remained at 3.6 for the 4th consecutive month, while the cumulative non-farm payrolls in June 2022 was at 151,980 persons, higher than 151,789 persons in December 2019, yet it was a bit lower than 152,504 persons in February 2020. Considering the differential terms, non-farm payrolls in June 2022 increased by 372,000 persons, decreasing from 384,000 persons, and was lower than the first quarter average at 538,667 persons per month.

²² On 26th - 27th July 2022, the Fed raised the policy rate by 0.75 percent for the second time in a row from the previous month, reaching the range of 2.25 - 2.50 percent – the fastest rate hike since 1995. In our base case scenario, the policy rate is expected to be continually hiked for the rest of the year and to be in the range of 3.50 – 3.75 percent by the end of 2022.

²³ The Chips and Science Act (worth about 280 billion US dollars) is meant to reduce dependency on US semiconductor imports and support related technological investment.

11 years by 0.50 percent.²⁴ Notwithstanding, the Eurozone economy during the rest of 2022 will be supported extensively from the continual relaxation of measures regarding the pandemic as well as the major European Union medium-term fiscal policy.²⁵

The Japanese economy is expected to grow by 1.7 percent in 2022, continuing from a similar growth in 2021 and a downward revision from the previous estimation of 2.2 percent. This is mainly due to inflationary pressure intensifying by the continual depreciation of Japanese Yen which will curb a recovery of manufacturing and domestic consumption. Meanwhile, domestic demand tends to be impacted by the pandemic. According to the data on July 29th, 2022, the number of COVID-19 new cases dramatically rose to 230,055 cases, specifically within the Tokyo metropolis.²⁶ This led to a decline in service PMI from 54.0 in June to 50.3 in July. Additionally, the new domestic traveling stimulus packages (Go to Travel) which has been introduced since November 19th, 2021²⁷, do not include Tokyo. This will thus put on some limitations to the tourism recovery. Manufacturing sectors also fell sharply due to the impact of supply disruption with manufacturing PMI dropping to 52.1 which is the lowest in ten consecutive months. Moreover, export volume in terms of US dollar declined by 2.3 percent, a sharp fall from 4.4-percent growth in the past quarter. Nevertheless, BOJ's expansionary monetary policy²⁸ along with government expenditure especially the 56-trillion-yen additional stimulus packages and prevention measures from sharp rise in oil price²⁹ will become the main drive for the economy over the rest of the year.

The Chinese economy is projected to expand by 3.3 percent in 2022, significantly decelerating from 8.1 percent in 2021 and downwardly adjusted a 4.3-percent in the previous projection. This revise is mainly attributable to impact of the zero-tolerance COVID-19 policy³⁰, which has significantly affected major economic areas such as Beijing, Shanghai, and Shenzhen. This containment has significantly affected production and domestic demand, thus, the retail sales in the first quarter decreased by 0.7 percent. Besides, the export sector tends to decelerate due to the prolonged supply chain disruption as well as the conflict between Russian and Ukraine. In addition, domestic investment has been constrained from the high debt and unliquidated problem in the real estate sector. Nonetheless, the economic activity has gradually recovered after the pandemic control measures in Shanghai and in other major cities was lifted at the beginning of June. Henceforth, the Chinese economy is expected to be able to grow moderately for the latter half of the year. The Caixin's PMIs for both manufacturing and service in July 2022 climbed up to 50.4 and 55.5 respectively, standing above 50 for the second consecutive month. To facilitate the economic recovery, the PBOC decided to continue its expansionary monetary stances³¹ and introducing the damage control measures for real estate and financial sectors.³² Moreover, on July 25th, 2022, the government also launched a real estate fund, up to 300 billion yuan, to help property developers to resolve a crippling debt crisis and restore confidence in the industry. In addition, the government also provides the budget for infrastructure development worth 7.2 trillion yuan.

²⁴ In the ECB's July 21st, 2022, meeting, it was agreed that: (i) the policy rate will be increased to 0.50 percent, the first hike in 11 years and larger than the pre-specified pace of 0.25 percent in the June meeting, to control inflation to be within the middle-term goal of 2.0 percent; (ii) the Transmission Protection Instrument (TPI) will be used, which allows the ECB to purchase bonds from countries with high level of debt, such as Italy, to prevent spikes in government treasury yield, which consequently lessen risks to member economies; (iii) the securities from the APP will be reinvested in full continually; (iv) the principal payments from the maturing PEPP assets will be reinvested until at least the end of 2024; and (v) the third series of targeted longer-term refinancing operations (TLTRO III) is to be continued.

²⁵ Key fiscal policies are consisted of: (i) long-term expenditure budget of the EU 2021 - 2027 worth 1.2109 trillion Euros; (ii) the "Next Generation EU" economic recovery plan for 2021 - 2023 worth 0.8069 trillion Euros; (iii) EU4Health, which is the EU's attempt to uplift the union's public health capabilities to combat future public health threats and pandemics, worth 5.75 billion Euros; and (iv) the 94.4 billion Euros in financial support for 19 member states under the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE).

²⁶ On July 14th, 2022, the Japanese government increased the pandemic situation alert into emergency level, the highest level out of four levels, warning people to be careful about the new wave of BA.5 sub variants which has accounted for 96 percent of new cases. For the monkeypox situation, the government also declared a level 1 alerting level on July 26th, 2022, after the first case was found.

²⁷ The new Go to Travel package has its content altered from its predecessor in order to support traveling in secondary destinations and SMEs within tourism sectors as well as equally distribute income on weekdays. For its context, the government reduced the subsidy amount from 35 percent to 30 percent of payment, limited to 10,000 yens for staying, 7,000 yens for one-day trip including traveling fare, and 3,000 yen for one-day trip only. Also, a sub-regional travel coupon that was able to save 15 percent of the payment has been changed to 3,000 yens for weekdays and 1,000 for weekends. Moreover, vaccination proof and traveling track are required in order to prevent further spreading of COVID-19 in case that traveler is infected. The government is considering reducing the subsidy amount to 20 percent in the near future.

²⁸ In the latest meeting on July 20th - 21st, 2022, 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 0.0 percent. The BOJ also persistently continues with easing monetary stance by maintaining qualitative and quantitative easing (QQE), aiming to achieve the inflation target of 2 percent. Moreover, other financial support will be continued to mitigate the economic impact of COVID-19.

²⁹ On November 19th, 2021, the Cabinet of Japan decreed a "Economic Measures for Overcoming COVID-19 and Opening Up a New Era" under the 56-trillion-yen budget framework. Then on April 26th, 2022, the Cabinet decreed an emergency measure in order to prevent and mitigate the effect of rising oil price and cost of living under 6.2-trillion-yen budget framework, which is consisted of (1) rising oil price prevention (1.5 trillion yens) (2) supply security in energy, food, and raw materials (0.5 trillion yens) (3) Supports for SMEs (1.3 trillion yens) (4) Improving livelihood of afflicted people (1.3 trillion yen) (5) Uncertain contingency and others (1.5 trillion). Also, the economy got a driving force from FY2022 (April 2022 - March 2023) current budget disbursement under the 107.6-trillion-yen budget framework which increased by 4.5 percent from FY2021.

³⁰ After the meeting on 28th July 2022, the Politburo agreed to still utilizing the zero-tolerance COVID-19 policy for the rest of the year, but with less strict in some areas.

³¹ The PBOC will take proactive measures to boost market confidence, enhance support for the real economy, and safeguard the overall stability of the macroeconomy by keeping liquidity adequate at a reasonable level as to ensure that the growth of money supply is generally in line with the nominal GDP growth. The PBOC will increase support for micro and small businesses (MSBs) through inclusive MSB loan as well as implement the special central bank lending for sci-tech innovation, inclusive elderly care services, and the transport and logistics sectors. As for the real estate sector, the PBOC will protect the legitimate rights and interests of housing consumers and better meet the reasonable demands of homebuyers.

³² There are mortgage strikes in 22 cities threatening to stop paying mortgage of unfinished projects. It is expected that the total credit involved in those delayed projects are around 1.5 trillion yuan or 4 percent of the total loan for housing in China.

The Newly Industrialized Economies (NIEs) tend to decelerate following slowdown in exports due to the sluggish economic recovery of major trading partners, especially China, and also the high base effect from the previous year. However, the economies will be supported by the recovery in domestic demand due to the continual relaxations of the COVID-19 control measures. As a result, the economy of South Korea is expected to expand by 2.6 percent, the same as the previous projection, but decelerating from 4.1 percent in 2021. Amidst the rising inflationary pressure, during the meeting on July 13th, the Bank of Korea (BOK) increased the policy rate from 1.75 percent to 2.25 percent, the sixth hike since the second half of 2021, and the highest interest rate in 94 months, in order to temper the inflation rate to the target level. Meanwhile, the economy of Singapore is expected to expand by 4.1 percent, compared with a 7.6-percent growth in the 2021, and upwardly revised from a 3.6-percent growth in the previous projection, due to the strengthening recovery in domestic demand resulting in higher-than-expected growth in the first half of 2022. The economy of Hong Kong is likely to decline by 0.4 percent, compared with a 6.3-percent growth in the previous year, and downwardly revised from a 0.3-percent expansion in the previous projection, due to the strict COVID-19 control measures in both Hong Kong and China, and prolonged supply chain disruptions. Meanwhile, the Taiwanese economy for the rest of the year is likely to be affected by trade and investment restriction measures from China, especially, the embargo on imports of Taiwanese capital and intermediate goods which will thus severely affect Taiwan's manufacturing and exports. As a result, the economy of Taiwan is expected to expand by 2.6 percent, decelerating from 6.6 percent in 2021, and downwardly revised from a 2.8-percent growth in the previous projection.

The ASEAN economy is expected to expand continuously due to a recovery in domestic demand and tourism sector. Nevertheless, there remains a limitation from the economic slowdown of major trade partners especially the US, Eurozone, and China. Meanwhile, inflationary pressure from a surge in energy and raw food prices led to a series of policy rates hike by the central banks of Malaysia and the Philippines.³³ For the year 2022, the economies of Indonesia, Malaysia, the Philippines, and Vietnam are expected to grow by 4.8 percent, 4.8 percent, 6.4 percent, and 6.5 percent, compared to 3.7 percent, 3.1 percent, 5.7 percent, and 2.6 percent in 2021, respectively. These are upwardly revised from previous predictions at 4.2 percent, 4.5 percent, 5.0 percent, and 5.2 percent, respectively, owing to the favorable economic growths in the first half of the year.

³³ The central bank of Malaysia has decided to increase its policy rate to 2.25 percent on July 6th, 2022, from its previous 2.0-percent rate. The central bank of the Philippines also raised its policy rate from 2.5 percent to 3.25 percent in its latest meeting on July 14th, 2022. On the other hand, the monetary policy committee of the central bank of Indonesia still kept its policy rate at 3.5 percent on July 20th – 21st, 2022.

The Inflation Reduction Act Of 2022

The US Congress has passed the Inflation Reduction Act Of 2022, aiming to control inflation by reducing the fiscal deficit through raising government revenues, including: increasing corporate income tax rate to 15 percent for large businesses with revenues of more than 1 billion US dollars; restructuring drug pricing structure which will reduce the price of prescription drugs; increasing the budget for the Internal Revenue Service to intensify the audit and enforcement of tax collection; and imposing a 1 percent tax on stock buybacks fee. Likewise, such revenues will be used for investing in energy infrastructure, promoting clean technology, addressing climate change, as well as extending the budget for the Affordable Care Act. The bill is expected to reduce the fiscal deficit by approximately 306 billion US dollars. The US Senate has approved the bill on August 7th, 2022 while the US House of Representatives has also passed this bill on August 12th, 2022. Later, the bill will be sent to the President to sign into law.

Estimates of revenue raised, investments, and deficit reduction of Inflation Reduction Act of 2022

Revenue raised:	
15 percent Corporate Minimum Tax (for corporate with revenue more than 1 billion US dollars)	222
Prescription Drug Pricing Reform	265
IRS Tax Enforcement	124
1 percent Stock Buybacks Fee	74
Loss Limitation extension	52
Investments:	
Affordable Care Act Extension	64
Energy Security and Climate Change	369
Western Drought Resiliency	4
Deficit reduction:	
	300+

Unit: in billion US dollars
Source: Senate Democrats, Joint Committee on Taxation, Congressional Budget Office

5. Thai Economic Outlook for 2022

The Thai economy in the second half of 2022 is likely to improve from the first half of the year. The main supporting factors are: (i) the acceleration in private consumption; (ii) the recovery of the tourism sector; and (iii) the expansion of the agricultural sector. Nonetheless, the Thai economy may be affected by several key risk factors, which could result in slower-than-expected growth and needed to be closely monitored, including: (i) the volatility of the global economy and financial market; (ii) the flood situation; and (iii) the uncertain situation of COVID-19 and monkey pox outbreaks.

Supporting factors for the economic growth:

- 1) **The acceleration in private consumption**, the economic activities and domestic consumption tends to improve and return to pre-pandemic level after the continual relaxation of COVID-19 containment measures and progress in vaccination.³⁴ Furthermore, household and business income bases are also strengthened, specifically in agriculture and tourism-related sectors. Moreover, the labor market has steadily recovered. The unemployment rate gradually decreased to 1.37 percent in the second quarter, compared to 1.53 percent in the previous quarter, while the number of employees utilizing unemployment benefits under section 33 in June 2022 was 245,000 people, declining from 307,833 people and 395,693 people in June 2021 and 2020, respectively.
- 2) **The recovery of the tourism sector** due to a relaxation of international travel restriction. In particular, the cancellation of the Thailand Pass registration system since July 1st, 2022, a border reopening with neighboring countries³⁵, and a relaxation of travel restriction of major origin countries³⁶ contribute to a drastic improvement of international tourists. In July, the number of inbound tourists escalated to 1,070,353 people and thus the cumulative number from January 1st to July 31st was 3,150,303 people, compared with only 416,160 people in 2021. The majority of the tourists come from India, Malaysia, Singapore, Vietnam, and the US. Consequently, the number of inbound tourists is expected to continually increase for the rest of this year particularly during the high-season period in the fourth quarter. Moreover, the domestic tourism is also expected to expand favorably attributed to support from the relieved containment measure and the government's domestic tourism support scheme.
- 3) **The favorable condition of the agricultural sector;** agricultural production increased by 9.8 percent in the first half of the year 2022, compared with a 6.3-percent in 2021. Major agricultural products with production expanding were paddy, sugarcane, soybeans and fruits. Moreover, the price of agricultural products also increased in accordance with the global market, particularly sugarcane, maize, rubber, oil palm, and cassava. Consequently, the overall farmer income remarkably increased by 13.2 percent in the first half of the year 2022, compared with a 2.2-percent growth in the same period of 2021. For the rest of this year, it is expected that agricultural products will expand continually, owing to the favorable weather conditions and sufficient water levels. According to the data on July 31st, 2022, the amount of usable water in major dams in the area of Chao Phraya River basin (Bhumibol Dam, Sirikit Dam, Kwaeng Noi Bumrung Dan Dam, and Pasak Jolasid Dam) was at 3,899 million cubic metres, higher than those in the same period of last year by 205.8 percent.

Risks and limitations to economic growth:

- 1) **The global economic slowdown and volatility in global financial market** could affect growth and stability of the economy as a result of following external risks that need to be closely monitored and assessed including: **(i) the uncertainty in geopolitical conflicts** especially (i) a prolonged conflict between Russia and Ukraine which might lead to a new set of sanction as well as the retaliated measures, particularly if European countries who depend on energy resources from Russia cannot import natural gas from Russia which could affect the energy security of the region and (ii) conflict between the US and China, regarding the Taiwan issue, which is still highly uncertain and might be intensified to execute additional trade and investment protection measures³⁷; **(ii) a more aggressive than expected of monetary policy tightening**, implemented by various central banks, especially the US Fed in order to alleviate inflationary pressure, however, this hawkish response will undermine economic activity and could cause the economic recession. At the same time, there are also risks stemming from fluctuations in global financial and capital markets, as well as in exchange rates, which could severely affect those with fragile economic structures and have not fully recovered from the pandemic of COVID-19, especially those countries with high proportion of foreign debt; and **(iii) the slowdown of Chinese economy**, owing to implementation of strict containment measures in important economic areas, which could worsening the global supply chain disruption and international logistics, together with the prolonged problem of debt in the real estate sector, which could delay the recovery of investment, and weaken financial stability.

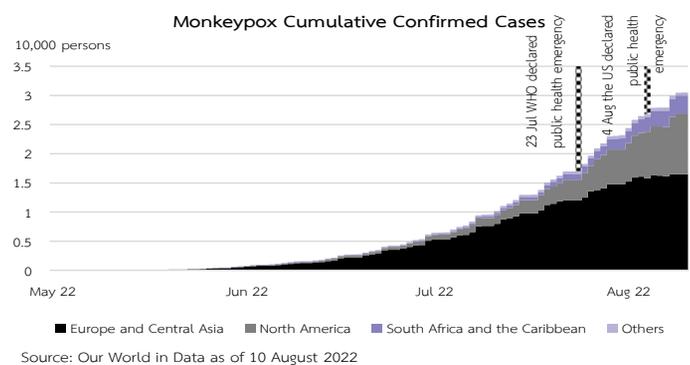
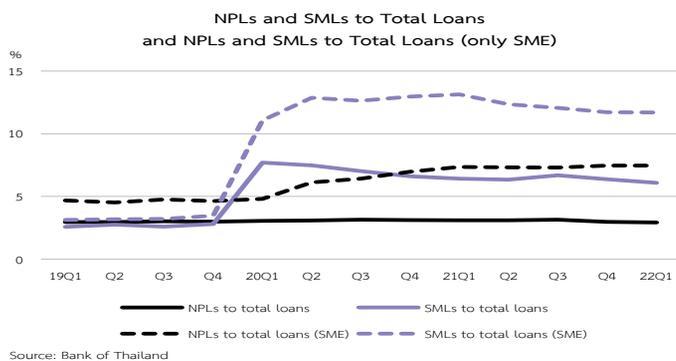
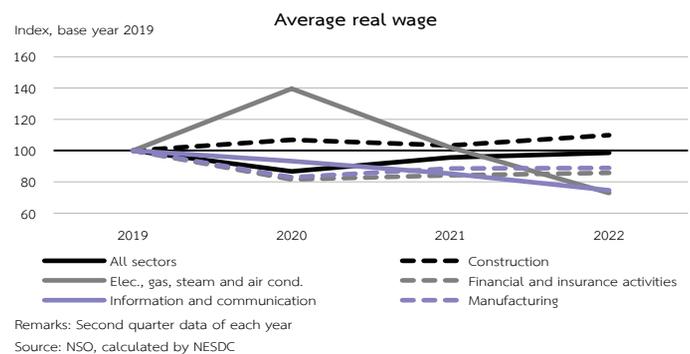
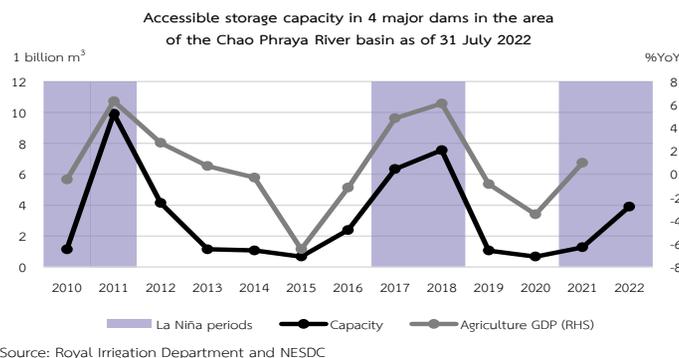
³⁴ The booster dose vaccination rate on August 10th, 2022, is 45.0 percent of population, improving from 33.5 percent on April 1st, 2022.

³⁵ In July, the number of tourists passing through the land border was 321,106, increasing from 133,114 (141.2 %MoM) in June. This can be mainly categorized into Malaysian, Lao, and Cambodian tourists with a figure of 170,092, 48,508, and 24,713 tourists, compared with 75,551, 18,579, and 9,840 tourists in June, respectively.

³⁶ The Indian government lifted its quarantine measure on March 27th, 2022, while the Malaysian and Singaporean governments lifted the same policy on April 1st, 2022.

³⁷ China has imposed import restrictions on Taiwanese citrus fruit, some types of fish, and other foods and exports to Taiwan restrictions on natural sand, which is the crucial raw material in semiconductor production.

- 2) **Weakened financial conditions of the households and business sectors** amid the high inflation and upward interest rates trend. For the financial condition of business sectors, the proportions of non-performing loans (NPLs) and special mention loans (SMLs) to total loans of SMEs in the first quarter of 2022 stood at 7.5 percent and 11.7 percent, significantly increasing from 4.7 percent, and 3.1 percent in the same quarter of 2019, respectively, as well as the household debt in the first quarter of 2022, was at 89.2 percent, compared with 78.4 percent in the same quarter of 2019. Amidst the upward trend of interest rate, the high private debt burden would aggravate both recoveries in domestic demand and debt payment capability, especially among SMEs and low-income households. Furthermore, the labor market has not yet fully recovered to the pre-pandemic level, reflected by the unemployment rate of 1.37 percent in the second quarter of 2022, although it declined from 1.53 percent in the previous quarter, but remained higher than 0.98 percent in the same quarter of 2019. In addition, the high inflationary pressure has depreciated purchasing power and hence the real wage in the second quarter of 2022 was still lower than 2019, the pre-pandemic level, by 1.4 percent.³⁸
- 3) **The uncertainty of the COVID-pandemic and the monkeypox outbreak** as the World Health Organization (WHO) declared the monkeypox pandemic to be a public health emergency on July 23rd, 2022. As of August 11th, 2022, a total of 32,373 confirmed cases reported in 85 countries³⁹, especially in Europe. Meanwhile, in Thailand as of August 11th, 2022, there are 4 confirmed cases. However, the risk of the pandemic tends to be increasingly more concerning if it becomes a human pathogen and infects serious illness risk groups, for example, young children and immunocompromised persons⁴⁰, which must be closely monitored.
- 4) **Risk from flood;** Although the water levels in major dams and reservoirs are supporting to the agricultural sector, there remains possible risk of storms during the end of the monsoon season. Excessive rainfall and flood, especially the impact from the La Niña, may cause damage to the agricultural and industrial productions, as well as residential areas. Considering the data from January 1st - August 7th, 2022, the average rainfall level was at 1,043.5 millimeters, higher than the normal value by 25 percent⁴¹, thus, the situation must be closely monitored.



³⁸ The real wage in the sectors of electricity, gas, steam and air conditioning supply, information and communication, financial and insurance activities, and manufacturing declined by 27.1 percent, 25.4 percent, 14.3 percent, and 11.1 percent, respectively. However, it increased in some sectors, for example, construction.

³⁹ According to Our World in Data (OWID) as of August 1st, 2022

⁴⁰ According to the World Health Organization as of May 29th, 2022

⁴¹ Normal value refers to the average number of 30-year periods between 1991 and 2020.

Conflict between US – China and impacts on the Thai economy

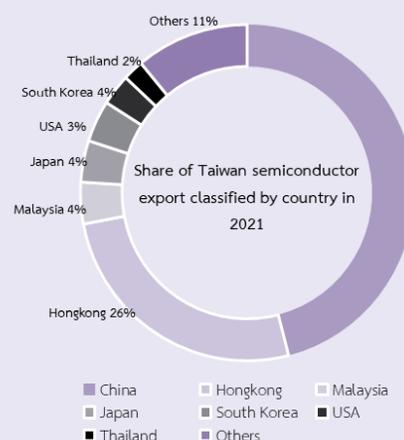
The conflict between the US and China has been intense after the US House of Representatives Speaker visiting to Taiwan during 2nd – 3rd August 2022. As a result, China immediately announced 8 countermeasures against the United States, including (1) Canceling China-US Theater Commanders Talk, (2) Canceling China-US Defense Policy Coordination Talks (DPCT), (3) Canceling China-US Military Maritime Consultative Agreement (MMCA) meetings, (4) Suspending China-US cooperation on the repatriation of illegal immigrants, (5) Suspending China-US cooperation on legal assistance in criminal matters, (6) Suspending China-US cooperation against transnational crimes, (7) Suspending China-US counternarcotics cooperation, and (8) Suspending China-US talks on climate change. The sanctions also include the US House of Representatives Speaker and her family. Moreover, China announced the one-month expansion of maritime exercise around Taiwan Island from 8th August to 8th September 2022, affecting the maritime trading route of several countries with Taiwan. China also suspended exporting of natural sand, which is the essential raw material to produce semiconductor which is one of the most significant Taiwan’s export products occupying more than 70 percent of the global market share. Moreover, China announced several sanctions to Taiwan such as suspension of imports of fruit products, fish products, biscuits, pastries cooking oil, instant noodles and soy sauce. In 2021, Taiwan export value to China was recorded as 133,109.5 million US dollars (11,815.3 million US dollars per month on average) or around 28.4 of total Taiwan’s export. The more intensified conflict between China and Taiwan will significantly affect Taiwan's production, exports, and the overall economy. This also tends to affect the global supply chains, especially products that Taiwan has high market share. In case of the Thai economy, the impact from the conflict could affect through 4 major channels, as follows.

- 1. Transportation and logistics systems:** In the event of a blockade of Taiwan's territorial waters, transport restrictions are imposed and will affect Thai exports to Taiwan to decrease. The value of Thai exports to Taiwan in 2021 was recorded at 4,673 million US dollars, accounting for 1.7 percent of total exports. Taiwan is considered the 10th largest trading partner of Thailand with key export products including electronic circuit boards, chemicals, air conditioners and components, and computers and components, etc.
- 2. Supply chain effects:** especially products related to raw materials imported from Taiwan, particularly electrical circuit boards which is a key part of electronic related production. The total value of Thailand's imports from Taiwan in 2021 is 10,513 million US dollars. Electrical circuit boards is the Thailand's top import from Taiwan in terms of value which recorded at 4,616 million US dollars, accounting for 30.5 percent of the overall value of electrical circuit board imports into Thailand and 43.9 percent of Taiwan's total import value. Problems regarding the importation of electrical circuits are anticipated to have a substantial impact on supply chains for goods that rely heavily on circuit boards, including electronic goods, electrical appliances, and Thai automobiles.
- 3. Impacts on Labor market:** As Taiwan is considered the most important oversea destination of Thai oversea labors, there are 48,542 Thai workers currently working in Taiwan, followed by Israel (20,555), South Korea (12,950), Japan (7,665) and Sweden (6,680). Therefore, the effects of Taiwan blockade might have impacts on Thai workers in Taiwan.
- 4. Impacts on Tourism:** During the first half of 2022, there were 8,060 visitors from Taiwan traveled to Thailand, accounting for 0.4 percent of the total number of foreign tourists and is likely to increase assuming the tension between China and Taiwan was not presented. In case where such conflict resulted in the slowdown in Taiwan economy and affecting travel out of Taiwan, the number of tourists from Taiwan during the rest of 2022 is anticipated to decline.

Given the uncertainty surrounding the conflict between two significant trading partners, it is imperative that Thailand constantly closely monitor the situation and be prepared for an escalation in violence. Crisis mitigation plan and economic supporting measures are necessary to cope with the crisis and find an opportunity, particularly to benefit from international trade by promoting the export of goods that Thailand has the potential to send to countries affected by conflict and trade barriers, for instance, prioritizing export to China for goods that previously imported from Taiwan, etc.

International trade between Taiwan and China

	Taiwan export to China in 2021 (million US dollar)	Share (Percent)
Electronic components	56,332.1	42.3
Plastic and products	9,624.1	7.2
Chemical products	9,158.9	6.9
Clock and various measuring instruments	10,267.4	7.7
Camera and equipment	8,371.6	6.3
Steel and products	7,038.2	5.3
Others	32,317.3	24.3
Total	133,109.5	100.0
	Taiwan import from China in 2021 (million US dollar)	Share (Percent)
Machinery and electric equipment	55,016.8	66.7
Chemical products	5,537.9	6.7
Steel and products	5,358.7	6.5
Plastic and products	2,743.9	3.3
Others	13,822.2	16.8
Total	82,479.4	100.0



Economic Instability in developing and emerging countries

After the COVID-19 pandemic situation has been ameliorated, many economies have begun to recover. However, the recovery is uneven (K-shape Recovery), with some countries having slower economic recovery. In particular, developing countries and low-income countries still face risks from uncertainty of pandemic amidst low vaccination rates, especially booster vaccination. It was also further affected by accelerating inflationary pressures. In fact, major central banks have to raise their policy interest rates, especially the US Federal Reserve, affecting liquidity and borrowing cost in the economy and then the US dollar to appreciate rapidly. Meanwhile, many developing and emerging economies are not fully recovered. Therefore, it is necessary to keep their interest rates at a low rate to support economic activities. This led to the widening interest rate gap with major economies, causing some capital outflows and significantly depreciating the exchange rates. Moreover, countries with a high proportion of foreign debts have encountered economic instability amid rising debt repayment costs both from rising interest rate and depreciating exchange rate. Therefore, many countries experience economic instability and may not be able to repay their foreign debt, such as Sri Lanka, Turkiye, Argentina, and Pakistan. Nevertheless, the Thai economy still had good economic stability, in particular, a high foreign reserve and a low percentage of foreign debt. However, it still has to be vigilant about the impact of global economic volatility and geopolitical conflicts that, if intensified, may affect the stability of the economy in the region and have a spillover impact on the Thai economy.

Major economic stability indicators of developing and emerging economies

Country	Unemployment rate			Public debt			10-year maturity government bond yield			NPLs to all credits			Capital adequacy ratio		Headline inflation rate					Foreign exchange reserves			Short term foreign debt		Foreign debt		Current account				
	2022			2021			2021			2021			2020		2022					2021			2020		2021		2021		2021		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021	All	Q1	Apr	May	Jun	Jul	2021	2021	(% of one month import volume)	(% of)	2020	2020	2020	2021	(% of total foreign debt)	2021	2021
Thailand	1.0	1.9	1.4	41.2	52.8	2.0	1.8	3.2	3.0	3.0	3.0	11.1	1.2	4.7	4.6	7.1	7.7	7.6	7.6	246.0	9.0	29.0	36.6	38.2	-2.2						
Malaysia	3.3	4.6	3.8	52.4	63.4	3.6	3.3	4.2	1.5	1.5	1.5	9.0	2.5	2.2	2.3	2.8	3.4	-	-	116.9	5.3	-	-	70.0	3.8						
Indonesia	5.2	6.5	5.8	30.2	40.7	7.6	6.5	4.2	2.5	3.0	3.0	12.6	1.6	2.3	3.5	3.6	4.3	4.9	4.9	144.9	6.8	32.7	10.7	35.1	0.3						
Philippines	5.3	6.4	5.7	39.6	60.4	4.5	4.8	6.9	2.0	4.0	4.0	9.7	3.9	3.4	4.9	5.4	6.1	6.4	6.4	108.8	9.6	12.9	14.4	27.0	-1.8						
Vietnam	2.2	3.2	2.3	48.0	57.6	3.3	2.1	3.3	1.6	1.5	1.5	7.2	1.8	1.9	2.6	2.9	3.4	3.1	3.1	109.4	3.7	28.1	21.3	47.9	-2.0						
Sri Lanka	4.8	5.2	4.3	81.9	99.5	6.2	3.2	15.4	4.7	4.5	4.5	6.8	7.0	18.6	33.8	45.3	58.9	-	-	-	-	148.2	14.9	57.7*	-3.7						
Pakistan	6.9	6.3	6.3	72.2	71.5	9.2	8.0	8.0	8.6	7.9	7.9	5.8	9.5	12.6	13.4	13.8	21.3	24.9	24.9	22.8	3.4	81.3	12.9	35.1	-0.8						
Bangladesh	4.4	5.2	5.2	16.4	19.2	7.8	5.6	8.0	9.3	7.9	7.9	4.8	5.5	6.1	6.3	7.4	7.6	7.5	7.5	46.2	6.3	25.4	16.2	19.6	-1.0						
Turkiye	13.7	12.0	10.6	32.6	42.0	12.4	6.5	19.0	5.4	3.0	3.0	10.5	19.6	54.8	70.0	73.5	78.6	79.6	79.6	109.5	4.3	148.0	31.8	52.5	-10.4						
Argentina	9.8	8.8	7.0	72.3	76.8	-	-	49.7	5.7	4.3	4.3	12.7	48.4	52.8	58.0	60.7	64.0	-	-	39.7	5.6	108.1	16.8	56.6	-0.8						
Brazil	12.1	13.5	9.8	74.4	80.3	6.2	4.8	13.2	2.9	2.3	2.3	9.7	8.3	10.7	12.1	11.7	11.9	-	-	362.2	11.5	19.4	12.6	35.3	-4.1						

Note: * The data is available as of 2020.

Source: CEIC and World Bank, accumulated by NESDC as of August 11th, 2022

Key assumptions for 2022 economic projection:

World Economic Projection and Other Key Assumptions

	Actual Data			Projection for 2022	
	2019	2020	2021	May 17, 2022	Aug 15, 2022
World Economic Growth (%) ^{1/}	3.0	-3.1	5.3	3.5	3.3
US	2.3	-3.4	5.7	3.6	2.2
Eurozone	1.6	-6.3	5.4	2.8	2.6
Japan	-0.2	-4.5	1.7	2.2	1.7
China	6.0	2.2	8.1	4.3	3.3
Global Trade Volume (%)	0.9	-7.9	10.1	4.7	4.3
Exchange Rate (Baht/US Dollar)	31.0	31.3	32.0	33.3 - 34.3	34.5 - 35.5
Dubai Crude Oil (US Dollar/Barrel)	63.3	42.4	69.5	95.0 - 105.0	95.0 - 105.0
Export Price (US Dollar) (%)	0.3	-0.8	3.3	3.3 - 4.3	4.0 - 5.0
Import Price (US Dollar) (%)	0.3	-3.8	5.2	7.0 - 8.0	8.5 - 9.5
Income from Tourism (Trillion Baht) ^{2/}	1.85	0.42	0.15	0.57	0.66

Source: NESDC as of 15th August 2022

Notes: ^{1/} World economic growth is a trade-weighted average of key economic partners in 2019 (15 economies)

^{2/} based on the Bank of Thailand's balance of payment data and forecasted by the NESDC

- 1) The world economy and trade volume in 2022 are expected to expand by 3.3 percent and 4.3 percent**, respectively, decelerating from 5.3 percent and 10.1 percent in 2021, and revised downwardly from 3.5 percent and 4.7 percent in the previous assumption. The adjustments were made in accordance with the descending revision of economic growth in major economies, particularly the US, Eurozone, and China, which exhibited lower-than-expected performance during the second quarter. Additionally, there are also limitations to global outlook due to the conflict between Russia and Ukraine and the uncertainty from the US and China conflict that possibly amplify the global supply chain bottlenecks. Meanwhile, major central banks have hastily tightened their monetary policy to curb high inflation pressures. Also, the slowdown of the Chinese economy resulting from the Zero-COVID policy and credit problems in the real estate sector may further undermine the world economy and global trade activity.
- 2) The average value of Thai Baht in 2022 is expected to be within the range of 34.5 – 35.5 Baht per US Dollar**, depreciating from 32.0 Baht per US Dollar in 2021 and revised from the range of 33.3 – 34.3 Baht per US Dollar in the last projection. This depreciated adjustment was in line with the recent tendency where a year-to-date average exchange rate until August 10th was at 34.2 Baht per US Dollar. This depreciation was in line with the appreciation of the US Dollar trade weighted index following the aggressive Fed fund rate hike and a deteriorated prospect of the world economy. Under this circumstance, the investors tend to reallocate their investment to safe haven assets. Nonetheless, the Thai Baht in the last quarter of 2022 is expected to be appreciated following improving current account due to increases in tourism receipts.
- 3) The average Dubai crude oil price in 2022 is expected to be within the range of 95.0 - 105.0 US Dollars per barrel, increasing from a 2021 average of 69.5 US Dollars per barrel.** The assumption remained unchanged from the previous projection, in line with a year-to-date (January 1st - August 10th) average price of 101.8 US Dollars per barrel. It is expected that the price already passed its peak during the second quarter, of which the average was 108.5 US Dollars per barrel, before declining to an average of 103.2 US Dollars per barrel in July. It continued to fall to 96.2 US Dollars per barrel during 1st - 10th August, returning to pre-Russia-Ukraine conflict level at an average of 92.0 US Dollars per barrel average in February. The price drop was associated with the concerns over the world economic deceleration, especially the major economies, in addition to the increases in oil rigs,⁴² accelerated rate of oil reserves released from the US and its allies, and the possibility of the US easing Venezuela sanctions. However, it is expected the oil price during the last quarter will increase slightly from the higher demand during the winter as well as a gradual increase in OPEC+ production.⁴³
- 4) The export and import prices in terms of US Dollars in 2022 are expected to rise by 4.0 - 5.0 percent and 8.5 - 9.5 percent, respectively**, accelerating from 3.3 percent and 5.2 percent in 2021, respectively. The price assumptions were upwardly revised from the previous projection of 3.3 - 4.3 percent and 7.0 - 8.0 percent respectively, to be in line with faster-than-expected price increases during the first half of the year. These were mainly a result of escalating commodity and material prices in the global market due to the prolonged Russia-Ukraine conflict and continued world supply chain disruption which further increased international freight cost.

⁴² The worldwide rig count continued to rise. In particular, it was the highest in 29 months in July 2022, the highest since the start of COVID-19 outbreak.

⁴³ At the August 3rd OPEC+ meeting, the group agreed to increase the monthly overall production by 101 thousand barrels per day in September, a slower pace compared with an increase by 648 thousand barrels per day in July and August 2022.

- 5) **The revenue from foreign tourists in 2022 is expected to be 0.66 trillion Baht, with the total number of 9.5 million foreign tourists**, increasing from 0.15 trillion Baht and 0.43 million tourists in 2021, and an upward revision from the previous projection assumption of 0.57 trillion Baht and 7 million tourists. This revision was due mainly to higher-than-expected number of inbound tourists after relaxing international travel restrictions along with reopening borders with neighboring countries and relaxation of international traveling in several tourist's countries of origin. Therefore, the number of inbound tourists increased to 1,070,353 persons in July (an average of 34,528 persons per day), compared with averages of 5,230 persons per day and of 17,387 persons per day during the first and second quarter respectively. Consequently, the year-to-date number of foreign tourism arrivals until July 31st, 2022, is 3.2 million persons. Moreover, in the latter half of the year, it is expected that the numbers will significantly increase, specifically during the high tourism season in the last quarter.
- 6) **The budget disbursement** is expected to be as follows: (i) The FY2022's annual budget disbursement rate of 92.5 percent of the overall budget, the same level as in the previous projection. The current budget and capital budget are expected to be disbursed by 98.0 percent and 70 percent, compared with 98 percent and 70 percent in the previous estimation, and 72.5 percent and 70.9 percent in FY2021, respectively. The adjustment was in line with the actual current budget and capital budget disbursement rate in the first 3 quarters of FY2022, which were at 79 percent, and 49.1 percent, respectively; (ii) The carry-over budget disbursement rate of 82.9 percent, the same level as in the previous estimation, and compared with 91.1 percent in FY2021 in line with the cumulative disbursement rate in the first 3 quarters of 69.1 percent; (iii) the state-owned enterprises' capital budget disbursement of 65.0 percent of total budget, or approximately 305 billion Baht, which was downwardly revised from 70 percent in the previous assumption; (iv) The budget under the 1 trillion Baht loan decree which was disbursed by 950 billion Baht (95 percent of the total budget) as of August 1st, 2022, is expected to be fully disbursed by the end of FY2022; and (v) The budget under the 500 billion Baht loan decree which was disbursed by 376 billion Baht (75.3 percent of the total budget) as of August 1st, 2022 is expected to be disbursed by 420 billion Baht by the end of FY2022 (or 84.0 percent of the total budget), increasing from 390.2 billion Baht in the previous projection.

The Thai economic outlook 2022

The Thai economy in 2022 is projected to expand in the range of 2.7 - 3.2 percent (with a midpoint of 3.0 percent), accelerating from a 1.5-percent growth in 2021. Headline inflation is expected to be within 6.3 - 6.8 percent and the current account is projected to record a deficit of 1.6 percent of GDP, compared with a deficit of 2.1 percent in 2021.

In the August 15th, 2022, press release, the NESDC estimated that the Thai economy in 2022 is expected to expand by 2.7 - 3.2 percent, with a midpoint projection of 3.0 percent, accelerating from a 1.5-percent growth in 2021. The forecast was adjusted to be narrower from the range of 2.5 - 3.5 percent from the previous projection released on May 17th, 2022. The corresponding revisions to the key growth components to be consistent with changing conditions and revised assumptions are as follows:

- 1) **The revision on the global economy and trade volume assumptions** to be in tandem with the slower-than-expected growth of major trading partners compared with the previous projection. The revision was due mainly to the tightening monetary policies of major central banks, and the prolonged Russia-Ukraine conflict which has led to higher energy and commodity price and the global supply chain disruptions. In addition, the Chinese economy is also increasingly constrained from the spread of COVID-19 which severely weighed down on its second quarter economic performance over its manufacturing and transportation sectors, as well as over the global supply chains. Under such conditions, the world economy and global trade volume in 2022 are expected to grow by 3.3 percent and 4.3 percent, respectively, in contrast to the previous estimations of 3.5 percent and 4.7 percent, and hence will undermine growths of Thai export, private investment, and manufacturing production to be slower than previously anticipated.
- 2) **The revision of the number of foreign tourists and foreign tourism receipts assumptions** to be in line with the more-than-expected actual number of inbound tourists during the first 7 months of 2022. In particular, the first 7 months of 2022 registered 3,150,303 international tourists with 1,070,353 persons in July (an average of 34,528 persons per day), compared with 767,497 persons in June (an average of 25,583 persons per day). Latest data during 1 - 6 August registered 228,438 persons (an average of 38,073 persons per day) as a result of the relaxation of international travel restrictions⁴⁴, the reopening of land borders, and the easing of restrictions in neighboring countries, particularly Malaysia, India, Singapore, Vietnam, and Lao PDR. Hence, the increased number of foreign tourists will galvanize the recovery of export of services and tourism-related services to be a key drive to the overall economy.

⁴⁴ Especially after the termination of the Test & Go process after May 1st, which allows fully vaccinated inbound tourists to enter the country without a mandatory quarantine, and the cancellation of Thailand Pass system since July 1st. This concludes all measures restricting entry announced during the start of the COVID-19 pandemic.

Key components of Economic growth;

- 1) Total consumption:** **(1) Private consumption** is expected to grow by 4.4 percent in 2022, improving from 0.3 percent in 2021 and an upward revision from 3.9 percent in the previous prediction. The growth is mainly due to a higher-than-expected expansion of consumption in the first half of 2022 and the government stimulus measures in the latter half. **(2) Government consumption** is expected to decline by 0.2 percent, compared with a 3.2-percent growth in 2021 with no revision from previous prediction. This was in accordance with the unchanged assumption of disbursement rate under the FY2022 annual budget at 98 percent of total budget, and the disbursement of approved projects under the additional 500-billion bath loan decree budget.
- 2) Total Investment** is expected to increase by 2.8 percent in 2022, slower than 3.4 percent in 2021, and downwardly revised from a 3.5-percent growth in the previous projection. **(1) Private investment** is estimated to expand by 3.1 percent in 2022, slightly lower than 3.3 percent in 2021, and a downward revision from 3.5 percent in the last prediction. This is in line with the downward revision on the global economic outlook. **(2) Public investment** is expected to grow by 2.0 percent, compared with a 3.8-percent growth in 2021 and a downward revision from 3.4 percent in the previous estimation. The adjustment is in line with lower-than-expected the capital budget disbursement rate in the first three quarters of FY2022 as well as the downward revision of the SOEs budget disbursement rate.
- 3) Export value of goods in US dollar terms** is anticipated to increase by 7.9 percent, compared with a 19.2-percent expansion in 2021 and upwardly revised from 7.3 percent in the previous estimation. The revision is due to the upwardly revised assumptions on export prices from 3.3 - 4.3 percent in the prior projection to 4.0 - 5.0 percent. Nonetheless, volume of export goods is expected to increase by 3.4 percent, downwardly revised from 3.5 percent, following the adjustment of global economy and trade volume assumption. Together with the upward revision of export of services due to higher-than-expected inbound tourists. Thus, in 2022, the export of goods and services is estimated to increase by 9.0 percent, compared with an 8.3-percent expansion in previous estimation, and a 10.4-percent growth in 2021.
- 4) Import value of goods in US Dollar terms** is expected to increase by 12.4 percent, compared with 23.9 percent in 2021, and upwardly revised from 10.9 percent in the previous projection. This is due to the upward revision of import prices growth from 7.0 - 8.0 percent in the previous projection to 8.5 - 9.5 percent in this forecast. Meanwhile, the import of services has been accelerated by expected increasing outbound of Thai tourists. Overall, the import quantity of goods and services in 2022 is expected to expand by 5.6 percent, compare with a 5.1-percent growth in the previous projection and a 17.9-percent growth in 2021.
- 5) Trade balance** is estimated to register a surplus of 32.6 billion US Dollars, compared with a surplus of 39.9 billion US Dollars in 2021, and downwardly adjusted from 34.6 billion US Dollars in the last projection. This adjustment follows the revision of the import value growth assumption to be faster than the adjustment of the export value growth. Consequently, the current account is expected to register a deficit of 8.0 billion US Dollars (1.6 percent of GDP), following a deficit of 11.0 billion US Dollars (2.2 percent of GDP) in 2021, and is revised from 7.6 billion US Dollars (1.5 percent of GDP).
- 6) Economic stability:** headline inflation is expected to be in the range of 6.3 - 6.8, accelerating from 1.2 percent in 2021 and is upwardly revised from the range of 4.2 - 5.2 percent in the previous projection. The adjustment is mainly due to the more depreciated exchange rate, the phase-out of energy subsidies, and increase of the fuel adjustment tariff (FT) rate for electricity.

6. Economic Management for the Year 2022

The economic management for the rest of the year 2022 needs to prioritize on following issues:

- 1) **Monitoring and accommodating market mechanisms for domestic price to be in line with input costs**, along with providing targeted assistance for the low-income groups and those who are vulnerable to rising prices and higher debt burden. Moreover, measures should be ensured not to overlap with existing measures, to minimize the fiscal burden which tends to increase amidst the volatilities in the global financial landscape.
- 2) **Supporting agricultural production and farmers' income**, by: (i) assisting and supporting farmers from material shortages and rising input costs, especially chemical fertilizers and animal feed. The organic farming particularly organic fertilizers, and domestic materials should also be actively promoted together with improving productivity and reducing agricultural production cost. Moreover, the international cooperation has to be focused particularly on exchanging and acquiring agricultural inputs to strengthen supply chain security; (ii) preparing preventive and responsive measures in case of the flood, which may weigh down agricultural production; and (iii) increasing farmers' income share in the final product margin.
- 3) **Closely monitoring and resolving retail debts amidst the rising interest rate tendency**, of both households and small and medium enterprises (SMEs), to be more targeted and to be customized to match with each case's need. The focus should be on reducing existing debt burden, restructuring debt, and managing informal debt, to increase borrowers' capability to pay back and to relieve constraints on domestic demand recovery. The government should also prepare measures to accommodate businesses' transformation process.
- 4) **Maintaining momentum from export sector**, along with maintaining employment in manufacturing sector, to support continual economic recovery, by emphasizing on: (i) boosting exports to major markets with strong economic recovery coupled with expanding to new markets for potential products particularly those who benefit from rising energy and commodity prices as well as those impacted by the conflict and the consequent trade restrictions; (ii) improving quality of agricultural, food, and manufacturing products to achieve international standard; (iii) utilizing benefits from Regional Comprehensive Economic Partnership (RCEP), along with expediting the ongoing Free Trade Agreement negotiations and endeavoring for future negotiations with new potential trading partners, as well as accelerating the consideration process regarding the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) with focuses on the benefits of the country; and (iv) encouraging the business sector to appropriately manage risk of exchange rate fluctuation.
- 5) **Catalyzing the recovery in tourism and related service sector**, by: (i) promoting the development of high-quality tourism, as well as uplifting tourism's potential, to achieve sustainability. In particular, the emphasis should be placed on enhancing facilities and infrastructure, improving area and environment management, and ensuring security in both lives and assets of tourists; (ii) facilitating liquidity through loan measures and other measures for entrepreneurs in order to transform and operate their businesses; (iii) continually supporting the tourism promoting events in order to attract long-term residents with high potential and purchasing power; and (iv) promoting domestic tourism especially to attract Thai tourists who prefer travelling abroad to travel domestically.
- 6) **Stimulating private investment**, by: (i) speeding up projects already approved and obtained investment promotion certificates in 2019 - 2021 to start their actual investments, especially those in the targeted industries; (ii) solving difficulties and obstacles hindering investors and entrepreneurs from investing and conducting businesses, including labor shortages in manufacturing sector; (iii) implementing proactive investment promotions and facilitating investors in targeted industries to invest in Thailand as well as new investors with high potential; (iv) stimulating investments in Eastern Economic Corridor (EEC), other special economic zones, as well as the regional economic corridors; (v) supporting investment in the key economic areas and transport infrastructure to be in accordance with the prospected plan; and (vi) enhancing high-skilled labors to brace the growth of technology-and-innovation-intensive industries.
- 7) **Maintaining growth momentum from government expenditure and public investment** by: (i) expediting the FY2022's annual budget disbursement rate to be at least 92.5 percent of the total budget, state-owned enterprises' capital budget disbursement rate to be at least 65.0 percent of the total budget, and accelerating the projects under the 1-trillion-baht and the additional 500-billion-baht loan decrees; (ii) accelerating large-scale government infrastructure projects, in both economic zone development and transportation infrastructure, to be according as planned, especially key investment projects already approved; and (iii) prioritizing fiscal consolidation by focusing on increasing the efficiency of revenue collection and expenditure in order to maintain fiscal position to support economic recovery amid domestic and international uncertainties.
- 8) **Monitoring, scrutinizing, and preparing measures to cushion effects of the volatilities from global economy and financial market as well as highly uncertain geopolitical conflicts.**

Key economic measures to remedy and mitigate impacts from COVID-19 outbreak and measures to reduce the impact of rising product prices

Measures	Details
1. Measures to remedy households	<p>Measures to reduce the cost of living for people in the group who need continuous financial assistance from the government as follows;</p> <ul style="list-style-type: none"> the fifth phase of the Social welfare card holders and those in need of special help with additional allowance by 200 Baht per person per month for 2 months (Sep-Oct 22) the fifth phase of the “Kon-La-Kreung” or “Half-Half co-payment” scheme, a half subsidy for purchase at eligible stores, with a maximum spending of 150 Baht per person per day or 800 Baht per person during the program (Sep-Oct 22) “Shop-dee-mee-kuen” program, tax deduction in the tax year for individual income taxpayers who shopped (Maximum tax allowance of 30,000 Baht) (Jan 22 – Mar 23)
Soft loans by Specialized Financial Institutions (SFIs)	<ul style="list-style-type: none"> Credit for personal expenses for freelancers and employees affected by COVID-19 (totaling 25,000 million Baht) (GSB) Thai fight COVID- credit to mitigate the impact of a new wave of COVID- pandemic (totaling 20,000 million Baht) (BAAC and GSB) Credit for wage earners, freelancers, small farmers, and farm workers (totaling 20,000 million Baht) (BAAC)
Tax measures	<ul style="list-style-type: none"> Reduction in fees for the registration of a sale and mortgage of real estate by reducing the transfer fee from 2 percent to 0.01 percent, and the mortgage fee from 1 percent to 0.01 percent Decrease excise tax on jet fuel (Until 30 Jun 22) Import tax exemption for medicines, medical supplies, and medical tools to use against COVID-19 The penalty exemption for the government construction, which has delivered the final installment Exemption of license fees on businesses which sells liquor, tobacco, and cards
2. Measures to support the tourism sector	
We travel together	<p>The government subsidizes 40 percent for hotel accommodation per night, up to nights per person for a total of 2 million rooms with e-voucher up to 600 Baht per room per night and airplane ticket cashback up to 3,000 Baht. The program has been extended for additional 1.5 million room nights and extended program until the end of October 2022</p>
Tour Tiew Thai	<p>The government subsidizes 40 percent of tourist package costs up to 5,000 Baht per person for a total of 200 thousand persons, a limit of 5,000 million baht, which has been extended to the end of October 2022</p>
Measures to reopen for foreign tourists	<p>Cancel the mandatory quarantine for inbound traveling from June 1st, 2022, and then terminated the Thailand Pass Program on July 1st, 2022, for those who have been vaccinated according to the requirements to show proof of vaccination PCR or Professional ATK valid up to 72 hours prior to travel, including health insurance covering medical treatment in Thailand with a minimum limit of 10,000 US dollars.</p>
3. Measures to support businesses and SMEs	
Financial measures for SMEs	<ul style="list-style-type: none"> Debt restructuring through Asset Warehousing with Buy-Back options under the 2020 Soft Loan Emergency Decree (totaling 100 billion Baht) BOT’s policies for affected borrowers include; <ul style="list-style-type: none"> Providing financial institutions assistance to debtors by considering the appropriation of credit types and risk levels, such as (i) Debt restructuring, (ii) Providing working capital and additional liquidity, (iii) Consideration of postponed debt repayment, and (iv) Easing of other conditions as appropriate. Additional measures to support small business debtors with debt consolidation Utilizing Criteria for Classification and Flexible bank reserves Measures to support and mitigate debt for borrowers with multi-creditors (DR BIZ program) by the Bank of Thailand Reduction of interest rates and Financial Institutions Development Fund (FIDF) fee as well as the adjustment of default interest calculations for debt repayment The adjustment of default interest calculations for debt repayment Support Small and Medium Enterprises’ (SMEs) accessibility to public procurement Setting the new standard for credit term in Thailand (Trade debtors must settle within 3 - 45 days) Tax and fee measures to support debt restructuring with exemptions of Income tax, value-added tax (VAT), Specific Business Tax, and revenue stamp to debtors and creditors, as well as easing bad debt disposal from accounts receivable of creditors for debt restructuring of debtors under financial institutions, non-financial institution, and other creditors who have negotiated with financial institutions in accordance with the BOT regulations

Key economic measures to remedy and mitigate impacts from COVID-19 outbreak and measures to reduce the impact of rising product prices (cont.)

Measures		Details
3. Measures to support businesses and SMEs (cont.)		
Measures to support financial liquidity	<ul style="list-style-type: none"> Loans for businesses with Financial Rehabilitation measures (totaling 250,000 million Baht) under the 2020 Soft Loan Emergency Decree Loan for small entrepreneurs (SMEs Bank) (totaling 10,000 million Baht) Thai tourism recovery relief loan scheme by GSB (totaling 5,000 million Baht) Loan for the local economy (SMEs Bank) (totaling 50,000 million Baht) Land guarantee scheme for SMEs by GSB (totaling 10,000 million Baht) GSB SMEs to help SMEs entrepreneurs by GSB (totaling 5,000 million Baht) EXIM Biz Transformation Loan (totaling 5,000 million Baht) Loan for job creation, and career creation by GSB (totaling 5,000 million Baht) SMEs D Plus loans, SMEs D loans for investment, and SMEs D loans to enhance liquidity (totaling 15,000 million Baht) (SMEs Bank) Soft Loan for re-open accommodation businesses and the accommodation supply chain by GSB (totaling 5,000 million Baht) 	
Measures to support financial liquidity (credit guarantee)	<ul style="list-style-type: none"> SMEs portfolio guarantee scheme: Thai fight COVID-19 (Under portfolio guarantee scheme phase 9 worth 150 billion Baht) (Thai Credit Guarantee Corporation: TCG) (the budget of 5,000 million Baht) Micro portfolio guarantee scheme: Thai fight COVID-19 (Under portfolio guarantee scheme phase 4 worth 25 billion Baht) (TCG) Loan Guarantee scheme under the 2020 Soft Loan Emergency Decree Portfolio guarantee scheme Portfolio Guarantee Scheme special phase (Soft Loan Extra worth 90 billion Baht) 	
Long-Term Resident visa	The scheme to attract foreigners for long-term stay in Thailand, targeted high potential and wealthy people, aiming to stimulate the economy, investment, and employment by drawing 1 million long-term residents. This program is expected to increase 1 trillion Baht of domestic spending, boost domestic investment by 800 billion Baht, generate 250 billion Baht in tax revenue, as well as increase the number of experts in various fields for industrial and business sectors, open to foreigners to apply for rights from Sep 1, 2022.	
4. Measures to support affected workers		
Increasing unemployment benefits	<ul style="list-style-type: none"> Increasing unemployment compensation for the insured workers under section 33, receiving compensation by 50 percent of their wage up to 90 days in case they are laid off or resigned 	
Entrepreneurs and the section 33, 39, and 40 remedy schemes	<ul style="list-style-type: none"> Compensation support to insurers under section 33 in businesses affected by government measures in 13 dark-red zone provinces, Compensation support to entrepreneurs of 3,000 Baht per person, up to 200 persons, and compensation support to section 33 of 2,500 Baht per person by extending the period compensation until Mar 22 Compensation support to insurers under section 39, and section 40 in businesses affected by government measures in the maximum restriction areas, including: (1) Compensation support to section 39 of 5,000 Baht per person (2) Compensation support for insurers under section 40 as follows; (i) Compensation in 16 dark-red zone provinces of 5,000 Baht per person, (ii) Compensation in 13 dark-red zone provinces of 5,000 Baht per person, and (iii) Compensation in 3 additional provinces of 5,000 Baht per person by extending the period compensation until Mar 22 Compensation support insurers under section 39 and section 40, who are engaged in the entertainment business and self-employed persons that are still unable to work due to the temporary closure of businesses following the government's order, by 5,000 Baht per person for 1 month, starting the first round of transfer on Dec 29, 2021, and the next round on Jan 7 until Mar 31, 2022 	

Key economic measures to remedy and mitigate impacts from COVID-19 outbreak and measures to reduce the impact of rising product prices (cont.)

Measures	Details
<p>5. Measures to support expenses</p> <p>Measures of agricultural insurance programs</p>	<ul style="list-style-type: none"> ● Rice: rice farmers income insurance, the crop year 2021/22 (totaling 13,604 million Baht), and the additional first round crop year 2021/22 including, loan for the first crop of paddy rice storage (totaling 26,255 million Baht), a loan to incentivize to enhance value-added by agricultural institutions (totaling 15,562 million Baht), a compensation scheme for rice traders in keeping rice stocks (totaling 540 million Baht), and production insurance the crop year 2022 (totaling 1,925 million Baht) ● Maize: maize farmers income insurance, the crop year 2021/22 (totaling 1,863 million Baht), and the additional measures for the crop year 2021/22, loan to incentivize to storage production and enhance value-added by agricultural institutions, the crop year 2021/22 (totaling 1,030 million Baht), a compensation scheme for production storage, the crop year 2021/2022 (totaling 1,515 million Baht), and maize insurance, the crop year 2022 (totaling 224.44 million Baht) ● Cassava: cassava farmers income insurance, the crop year 2021/22 (totaling 6,811 million Baht), and the additional measures for the crop year 2021/22, increase the productivity of cassava cultivation, the crop year 2021/22 (totaling 41.4 million Baht), loan to incentivize to storage production and enhance value-added by agricultural institutions, the crop year 2021/22 (totaling 500 million Baht), a compensation for storage, the crop year 2021/2022 (totaling 225 million Baht), and program to increase productivity of cassava production, the crop year 2021/2022 (totaling 10 million Baht) ● Oil Palm: farmers income insurance for the year 2021/22 (totaling 7,660 million Baht) ● Rubber: loan for rubber processing (totaling 2,980.24 million Baht), farmer income insurance phase 1-3 (totaling 46,789 million Baht), promoting the use of rubber by government agencies (totaling 1.5 million Baht), supporting credit for rubber product entrepreneurs phase 2 (totaling credit 25,000 million Baht), credit line for farmers' institutions for collecting rubber (totaling 1,400 million Baht), and loan for rubber wood and products entrepreneurs (totaling 20,000 million Baht)
<p>Measures to support energy expense</p>	<ul style="list-style-type: none"> ● Reduction of excise tax on diesel by 3 baht per liter (until May 20, 22) ● Diesel price subsidies by the Oil and Fuel Fund ● Additional gas subsidy for 3.6 million LPG users who hold social welfare cards by 100 baht per 3 months (May - July 22) ● Discount of LPG cost by 100 baht per month for 1,500 street vendors with social welfare cards (May - Jul 22) ● Discount of gasohol by 5 baht per liter, totaling 50 liters, for 157 thousand motorcycle-taxi drivers (May - Jul 22) ● Maintain the diesel fuel price at 30 baht per liter until the end of May 22, and the NGV retail price at 15.59 baht per kg (May - Jul 22) ● Quota for purchasing LPG at a constant price of 13.62 baht per kg for taxi drivers who are in the "Giving Breath Project" for 10,000 baht per month (May - Jul 22) ● Electricity Discount by reducing FT fees for 4 months for 20 million households using less than 300 units of electricity (May - Aug 22) ● Reduction of contribution to Social Security Fund from 5 percent of monthly wage to 1 percent for 11.2 million employers and insureds under Section 33 (May-Jul 22) ● Reduction of contribution to Social Security Fund from 9 percent to 1.9 percent, or from 432 baht per month to 91 baht per month for 1.9 million insurers under section 39 (May - Jul 22)
<p>Living costs support scheme</p>	<p>The special discount stores with 700 locations across country, by the Ministry of Commerce, provide the essential goods for people with up to 62 percent lower than market price (Aug - Oct 2022)</p>
<p>Measures to reduce the cost of chemical fertilizers and animal feed materials</p>	<ul style="list-style-type: none"> ● Fertilizer; short-term measures (i) a fertilizer management project to support farmers experiencing high chemical fertilizer costs; (ii) promoting the organic production and using of organic fertilizers; (iii) developing community soil management and fertilizers; (iv) loan for local businesses through the BAAC; and (v) transferring knowledge to farmers about the proper and efficient use of fertilizers; short-term measures (2022 - 2024) by promoting the domestic fertilizer production particularly potash and negotiations on the exchange of fertilizer plants with Malaysia and other countries; and long-term measures (2022 - 2026) by establishing a chemical fertilizer price stabilization fund and negotiating the price of nitrogen-phosphorus fertilizer and potassium with Malaysia and China as the main fertilizer producer countries in the region. ● Animal Feed; Phase 1 Promoting domestic raw materials particularly husked rice, bran, broken rice, and cassava chips and also encouraging farmers to use more local ingredients, including adjusting animal feed formulas; Phase 2 introducing local recipes with lower cost and proactive accommodate farmers to be able to access to motor pool lending and other services of animal feed centers, and phase 3 advising farmer to utilize local materials and products as well as raw material analysis service for farmers.

Projection for 2022^{1/}

	Actual Data			Projection for 2022	
	2019	2020	2021	May 17, 2022	Aug 15, 2022
GDP (at current prices: Bil. Baht)	16,892.4	15,636.9	16,178.7	17,355.6	17,634.8
GDP per capita (Baht per year)	243,705.2	224,962.4	232,160.1	248,468.1	252,464.9
GDP (at current prices: Bil. USD)	544.1	499.7	505.6	513.5	503.9
GDP per capita (USD per year)	7,849.6	7,189.6	7,255.0	7,351.1	7,213.3
GDP Growth (CVM, %)	2.2	-6.2	1.5	2.5 - 3.5	2.7 - 3.2
Investment (CVM, %) ^{2/}	2.0	-4.8	3.4	3.5	2.8
Private (CVM, %)	2.6	-8.2	3.3	3.5	3.1
Public (CVM, %)	0.1	5.1	3.8	3.4	2.0
Private Consumption (CVM, %)	4.0	-1.0	0.3	3.9	4.4
Government Consumption (CVM, %)	1.6	1.4	3.2	-0.2	-0.2
Export volume of goods & services (%)	-3.0	-19.7	10.4	8.3	9.0
Export value of goods (Bil. USD) ^{3/}	242.7	227.0	270.6	289.2	291.8
Growth rate (%) ^{3/}	-3.3	-6.5	19.2	7.3	7.9
Growth rate (Volume, %) ^{3/}	-3.7	-5.8	15.5	3.5	3.4
Import volume of goods & services (%)	-5.2	-14.1	17.9	5.1	5.6
Import value of goods (Bil. USD) ^{3/}	216.0	186.1	230.7	254.6	259.3
Growth rate (%) ^{3/}	-5.6	-13.8	23.9	10.9	12.4
Growth rate (Volume, %) ^{3/}	-5.8	-10.5	17.9	3.4	3.4
Trade balance (Bil. USD)	26.7	40.9	39.9	34.6	32.6
Current account balance (Bil. USD)	38.0	21.2	-11.0	-7.6	-8.0
Current account to GDP (%)	7.0	4.2	-2.2	-1.5	-1.6
Inflation (%)					
CPI	0.7	-0.8	1.2	4.2 - 5.2	6.3 - 6.8
GDP Deflator	1.0	-1.3	1.9	3.8 - 4.8	5.8 - 6.3

Source: Office of the National Economic and Social Development Council, 15th August 2022

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 base on the Bank of Thailand's data.



www.nesdc.go.th